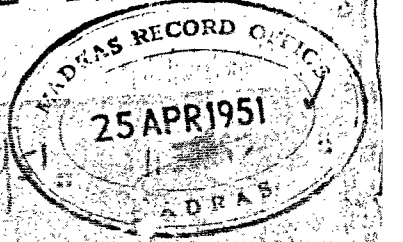
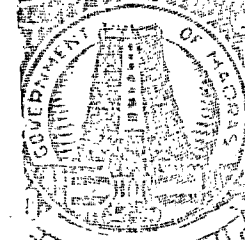


MADRAS INFORMATION



* செப்பனிடல் முடிந்தது *
* கொள்ளப்பட்ட *
* மார்ச்சு மாதம் 1988 வருடம் *
* செப்பனிடல் முடிந்த *
* மார்ச்சு மாதம் 1988 வருடம் *
* இராஜகோபால் தய்யாசாமி *
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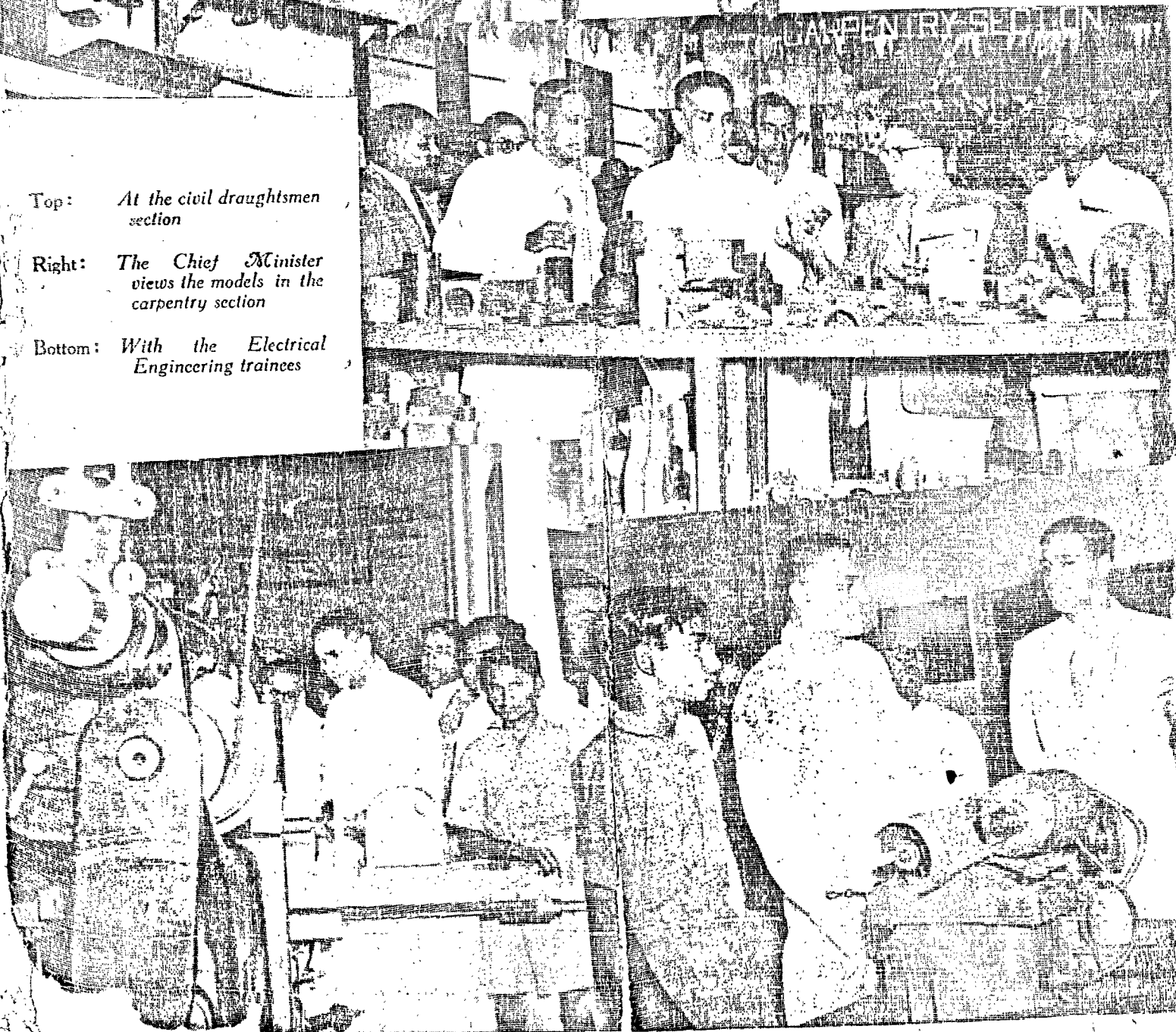


Vol. V, No. 1. January 1951. [Price, A]



CHIEF MINISTER VISITS TRAINING CENTRE

Sri P. S. Kumaraswami Raja, Chief Minister of Madras, recently inspected the Government of India Industrial Training Institute at Anantapur. A network of training centres in technical and vocational trades are now being run by the Ministry of Labour, Government of India, in Madras State. At Anantapur about 160 civilian adults are being trained



Top: At the civil draughtsmen section

Right: The Chief Minister views the models in the carpentry section

Bottom: With the Electrical Engineering trainees

PROFILE

3

MADRAS INFORMATION

Passing of A Valiant Soldier

Chief Minister Mourns Death of Sardar Patel

I am addressing a few words today,* when our country is overshadowed by the greatest calamity caused by the sudden demise of our revered Leader and Statesman, the Hon'ble Sardar Vallabhai Patel. I was shocked to receive the sad news of Sardarji's end this morning. Of late, he was in indifferent health. But the reports of his health, which we have been receiving till last night gave us assurances of his speedy recovery and also full hopes about his early return to Delhi to resume his work of our country's administration as the Deputy Prime Minister. But the harrowing news of his death came this morning as a shock, immersing the entire Nation into an ocean of grief.

Little did we foresee that today would be a day of universal mourning in India for the greatest loss we have suffered. It was only the other day that while celebrating the birthday of Sardarji, the entire country poured its prayerful blessings on him, praying to the Almighty to spare him for many years to come, in order that he might guide the destinies of our country ably and worthily in the future, as he did in the past. But the Divine Will seemed to be otherwise. Who can thwart the will of Fate! And today we are bereft of our beloved Sardarji, who has gone to his place of eternal rest. *

Life of Service and Sacrifice

There could hardly be anyone unaffected by the sad event of this day. Because there could hardly be anyone in our country who would be unacquainted with the service and sacrifice Sardarji made for our country's cause. Being his contemporaries, we all know well about his great services and great actions, which made him great among India's patriotic sons. The contributions he made for the success of our country's freedom struggle were so outstanding, that they have gained for him an uneffaceable fame, as one of the saviours of our Nation. A valiant soldier with dauntless spirit and indomitable courage that he was, he worthily occupied the place of a lieutenant to our revered Mahatmaji.

And to him Mahatmaji looked for the success of many a technique of the non-violent war he waged for our country's freedom. And it was Vallabhai Patel who won for Gandhiji the first laurels of success in his non-violent warfare in Bardoli; and Bardoli led the country. It was in admiration of the great determination, resoluteness and courage with which Vallabhai Patel led the Gandhian movement at Bardoli to its successful end, that Gandhiji himself chose to call him endearingly as Sardar, the great soldier. The soldierly part our Sardarji played for the attainment of our country's goal of independence was great. And the part he played after the attainment of independence was greater indeed.

Creator of United India

By his inestimable services to the Nation even subsequent to the independence of India, Sardarji won a unique place of distinction in the history of our country. His name will go down to posterity as the creator of a united and integrated India. His great work of unification of India is a thing which will never fade from the Nation's memory. The advent of freedom brought in

its wake several problems, the solution of which required superhuman skill, talents and energy on the part of our National leaders. And it must be said to the credit of Sardarji that he had all those qualities in abundance.

On the threshold of independence, India was not a united India. There were nearly 600 States within the territorial limits of our country, many of which were no bigger than our revenue firka or even a village. They were existing as obstacles against the unification of India; and they were preserved carefully by British Imperialism. By the preservation of so many States with independent existence, artificial barriers were imposed in our land, causing separation among the people, who are inseparable by virtue of ties of common habits, traditions and culture. The existence of so many States as independent units was a source of weakness to our country. So, consolidation was felt necessary by means of effecting a merger of all parts of our country into a Union. And our Sardarji worked at it. The achievement he had in the short span of two or three years in the field of merger and integration of States was something marvellous. The process of integration of States Sardarji planned with an amazing skill and he carried it into effect with a lightning speed. Today the whole of India is under one administration, regulated and guided by one central force at Delhi. For this great national achievement, the credit goes in no small measure to our revered Sardarji.

Man of Action and Courage

He was a man of action. His robust optimism and outspokenness, coupled with integrity of a high order, were rare gifts which Nature endowed him with. The messages given by him at the hour of slackness and weakness in our country's fight for emancipation, calling the Nation to resolute action, would remind us of the message of Lord Krishna to Arjuna, inciting him to fearless action, and inducing him to play his part in the battle in a spirit of devotion to duty. In the confusion and turmoil created by fanaticism and communal frenzy at about the time of partition of India, Sardarji's message inspiring courage and confidence in the people, was reverberating from one end of the country to the other. It infused courage in our people, which made them stand boldly, facing the events of unparalleled misery, all of which we surmounted with a will and determination. And Sardarji was the giver of strength—mental and moral—which enabled us to stand four-square to all the winds that blew. It is only such mighty men and born leaders that make the country's history a record of glory.

As a man, Sardarji, a strict disciplinarian with stern exterior though he was—his heart was as soft as that of an affectionate father. His great personal qualities were attractive, and none could go without being astounded by his extreme cordiality, politeness and kindness. My personal contact with him, which I had the fortune to have had several times, disclosed to me the great and attractive qualities treasured in him. He showed to me a fatherly kindness and affection, and also a patronising attitude, which is usually borne by elders towards youngsters. Each time I came out after conversation with

* December 15, 1950

him, I felt that I carried with me a fresh acquisition of spirit and energy. For such was the effect of the contact with his magnetic personality. My impressions about him are unforgettable.

Gentlemen! Our country is really faced by a great misfortune today. We can hardly afford to lose Sardarji at a time when he was needed most. We have yet to cover a long way towards the fulfilment of our national ambitions. And it is our misfortune that while the process of consolidation and reconstruction which our country is engaging itself in has not yet reached completion, our valiant leader and statesman, Sardarji, should be snatched away from us by the cruel hands of death. In his death, we have incurred an irreparable loss. May God give us sufficient strength to bear the loss. May the Departed Soul rest in peace shall be the prayer of every son and daughter of India, whom he served and saved. It needs no emphasis that the greatest homage that we would pay to the revered Soul is to follow his message—the message of unity among us, the message of service to the country!

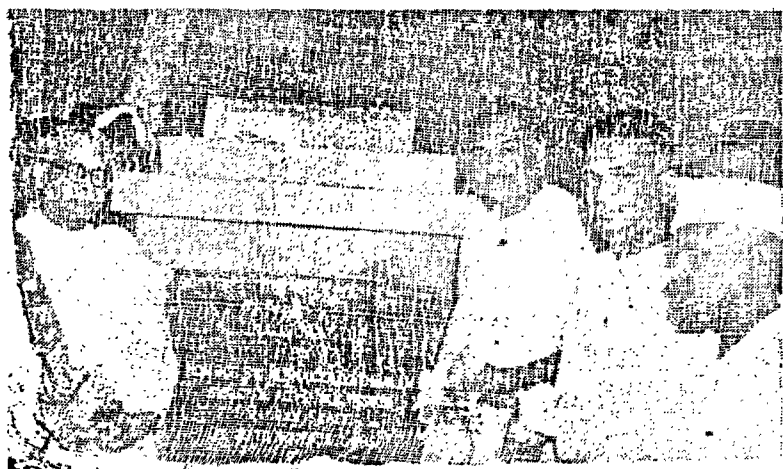
—By courtesy, A.I.R., Madras.

Correction in Entries of Electoral Rolls

The preliminary electoral rolls for the Madras Legislative Assembly and the Union House of the People have been published and the public were informed of the procedure to be followed for the filing of claims and objections to the electoral rolls in the Press Note dated 12th November 1950. It was stated therein that a person desiring correction of any entry in the roll relating either to himself or to any other person should apply in the same form as for objections (Form VIII).

In supersession of that instruction, the public are now informed that in cases where correction of any of the following kinds of entries in the roll is necessary, e.g., wrong information about father's or husband's names, house number, caste, age, spelling mistakes, printing error or clerical mistakes, it is sufficient if the voter concerned whose name is already on the roll, sends an informal application in writing for such corrections to the Electoral Registration Officer of the particular electoral unit, who will take necessary action for making the corrections. It is not necessary to make the application in any particular form; an ordinary letter will suffice.

Sri M. Bakthavatsalam, Minister for Public Works, laid the foundation stone of a proposed bridge across River Gatana, a tributary of the River Tamraparni on the Alungulam-Ambasamudram road. This bridge over a river which is impassable during flood seasons, will cost Rs. 3.50 lakhs. It will have a linear waterway of 400 feet, and the clear width of the roadway over the bridge will be 22 feet.



Fixation of Minimum Rates of Wages

The Government have constituted four committees to advise them in the matter of fixation of minimum rates of wages for five categories of the scheduled employments. It may be recalled that according to the provisions of the Minimum Wages Act, 1948, minimum rates of wages have to be fixed by the State Government in all the scheduled employments before 15th March 1951. The Act contemplates two courses for such fixation. The Government can either appoint a committee to hold enquiries and to advise them in the matter or publish their proposals straightaway and confirm them after considering the objections and suggestions of all concerned. The Government have decided to adopt the former course and to constitute committees for advising them in the matter of fixing minimum rates of wages for—

- (i) employment in any plantation, that is to say, any estate which is maintained for the purpose of growing cinchona, rubber, tea or coffee;
- (ii) employment on road construction or in building operations and employment in stone breaking or stone crushing;
- (iii) employment in any woollen carpet making or shawl weaving establishment; and
- (iv) employment under any local authority.

The chairman of the first committee which is required to advise Government regarding minimum wages for employment in any plantation is the Director of Agriculture. The other members are: Messrs. D. C. Kothari, C. F. Clark, N. A. Mehrban, K. Srinivasan, R. Venkataraman, C. E. Bharatan, M. Padmanabhan, M. Malli Chettiar, the Director, Cinchona Department, K. N. Raghavan Nayar and N. S. Varadachari.

The committee which is to go into the question of fixing of minimum wages for employments on road construction, building operations and in stone breaking or stone crushing is composed of Messrs. S. K. Subramanian, the Superintending Engineer (Highways), II Circle, Madras, S. Krishna Iyer, P. S. K. Lakshminipathi Raju, C. E. Bharatan, P. R. K. Sarma, V. Ramakrishna and M. C. Veerabahu Pillai. The Chief Engineer (Buildings) is the Chairman of the committee.

The Deputy Director for Cottage Industries, Madras, is the chairman of the committee which will advise the Government on the fixation of minimum rates of wages for employment in a woollen carpet making or shawl weaving establishment. The other members are Messrs. G. Thambuswamy, D. Hanumantha Rao, T. Subramanyam, V. Selvaraj and Sri Mothey Narayana Rao.

The Inspector of Municipal Councils and Local Boards is the chairman of the committee which will suggest the minimum wages that are to be fixed for employment under any local authority. The committee consists of the following members: The Commissioner, Corporation of Madras, Dr. Y. Sithapathi Rao, Chairman, Municipal Council, Kakinada, Messrs. R. Venkataraman and G. Rajamannar and the Director of Public Health.

The Present Food Situation

By SRI J. L. P. ROCHE VICTORIA, Minister for Food and Fisheries

In the statement circulated to the Hon'ble Members of the Madras Legislature early in August last,* a full picture of the general food situation in the State during the current year was given. It was mentioned therein that there was a sudden deterioration in the situation at the end of July 1950 owing to unexpected fall in procurement and to the paucity of imports under the basic plan. But thanks to the arrangements made by the Government of India to give us increased quotas and to move them expeditiously, we have been able to meet the ration requirements since then, but not without a breakdown in several rural areas. Such breakdown could not be avoided in view of the fact the buffer stock in each district has been very low and we have had to rush supplies to the deficit districts as soon as procurement was done in surplus districts or shipments arrived in ports.

Regarding the food position at present, the stocks of foodgrains with Government on the 25th of November 1950 and the period for which the stocks will last are given below:—

	Stocks	Period for which the stocks will last
	TONS	WEEKS
Rice	81,982	3.5
Wheat and wheat products .. .	8,778	2.0
Other grains .. .	5,765	2.0

The quotas allotted by Government of India under the basic plan for the year 1950, the quantity received up to 29th of November and the balance still due are as shown below:—

Grain	Quota allotted	Receipts up to 29th November 1950	Balance
	TONS	TONS	TONS
Rice	266,139	254,632	11,507
Wheat	200,000	163,195	36,805
Millets	120,000	130,774	Nil.†
Total	586,139	548,601	48,312

For the month of December, the Government of India have allotted 32,000 tons of foodgrains made up of 12,000 tons of rice, 12,000 tons of millets and 8,000 tons of wheat. The food budget for the rest of the year from the 25th of November will be as follows:—

	Rice	Wheat and wheat products	Millets.
	TONS	TONS	TONS
Stock on 25th November 1950	81,982	8,778	5,765

* Published in Madras Information, September 1950.

† The Government of India have already supplied 10,774 tons in excess of the original quota of 120,000 tons. They have promised a further quota of 6,025 tons for November, which is expected shortly.

	Rice TONS	Wheat and wheat products TONS	Millets TONS
Anticipated procurement in the rest of November and in December 1950.	70,000	...	6,000
Anticipated receipts from 29th November to 31st December 1950.	17,276	19,100	27,500
Total	169,258	27,878	39,265
Requirements from 25th November to 31st December 1950.	121,000	25,000	40,000
Buffer required on 31st December 1950	94,000	24,000	16,000
Total requirements.	215,000	49,200	56,000
Deficit	45,742	21,322	16,735

This statement will show that if we are to maintain a four weeks' buffer at the end of December, which is very necessary for a smooth working of rationing we shall be deficient to the extent of 46,000 tons under rice, 21,300 tons under wheat and wheat products and about 17,000 tons under millet. We have already told the Government of India about this unsatisfactory position and requested them to allot additional foodgrains to meet this deficit. But the indications are that the Government of India will not be able to meet this further demand on them beyond what

Sri B. Gopala Reddi, Minister for Finance, with the authorities of the Basic Training School and Sri Siddhavana Gurakula at Ujire in South Kanara District



they have already allotted to us for the month of December. It is understood that there has been a failure of the monsoon in the surplus States in India like Madhya Pradesh and Orissa, while Assam has had a major disaster in the shape of earthquake and floods. Bihar, always deficit, is said to have become more so this year on account of the failure of crops.

In the circumstances, it is inevitable that we will not have the required buffer and that the full demand under rationing could not be met in all parts of the State and that issues of one or other foodgrains is bound to fall short of the rationed scale. The position will therefore be that at the end of December, we shall have only about two weeks' stocks of rice with little or no wheat, while our millet stocks would have been exhausted already before the end of the month. I may mention in this connexion that in spite of the fact that our procurement during the Kharif year 1949-50 was only 11.1 lakhs tons against 14.3 lakhs in the previous year, we have distributed through our ration shops during the few critical months which we passed through, a quantity in excess of what was distributed during the corresponding period of the previous years as can be seen from the following statement:—

	Rice	Millets	Wheat and wheat products	Total
	TONS	TONS	TONS	TONS
Issues between 5th August and 18th November 1950.	355,386	139,350	106,777	601,513
Issues between 6th August and 19th November 1949.	478,570	71,358	31,412	581,340

This statement will show clearly that in spite of the failure of the monsoons and in spite of poor procurement, the Government have been able to distribute a larger quantity of all foodgrains put together, than in last year, during this period of crisis. The rice given was no doubt less but the rice shortage was more than made up by larger quotas under wheat and millets. If notwithstanding all this our rural rationing has broken down in several districts, as it undoubtedly did and if we could not give more than three or four days' rations in many centres, it is needless for me to say that it was mostly due to circumstances beyond our control. Successive failure of the monsoon during the last four years has affected our agricultural economy so seriously that our irrigation wells, more than eight lakhs in number, covering about 21 lakhs of acres, can hardly command 50 per cent of the ayacut. Needless for me to mention that the results of the Grow More Food Schemes will make themselves felt only when the additional production actually exceeds this loss due to poor seasonal conditions.

Failure of Monsoons

This year the south-west monsoon was below normal in all districts, except in the Circars and in the West Coast districts, while last year the same monsoon was almost normal throughout the State. The north-east monsoon has practically failed except in the three districts of Visakhapatnam, East Godavari and Bellary. Thus the rainfall this year has been worse than in the last year, the only difference between last year and this year being that we have not had any loss on account of cyclone this year. A forecast report

issued by the Statistical Department shows that the area under paddy up to September this year is less by 3.1 per cent than in last year and the area of millets less by 4 per cent. The production of rice this year on the basis of the reduction in area and taking note of the fact that there has been no damage by cyclone as in last year, is estimated at 41 lakhs of tons of rice against a normal of nearly 49 lakhs. The production of millets is estimated at 20 lakhs of tons against 26 lakhs normal. Based on the efficiency of procurement in previous years it is anticipated that procurement in next year will be 12.42 lakhs or 12.5 lakhs of tons of rice and 80,000 tons of millets.

Our requirements of rice at 8 oz. are estimated at 15.36 lakhs of tons and including a buffer of 92,000 tons at the end of December 1951, the total requirements work out to 16.28 lakhs of tons. Deducting 12.42 lakhs of tons expected to be procured next year, our deficit in rice will be 3.86 lakhs of tons. As regards wheat and millets on the basis of 4 oz. to make up the overall scale of 12 oz., we shall require 3½ lakhs of tons over and above the estimated procurement of 80,000 tons of millets. We have already requested the Government of India to allot these quantities totalling 7.36 lakhs of tons for the next year.

Future Policy on Rationing

In this connexion, the future policy to be followed with regard to rationing has to be considered. Procurement is becoming more and more difficult. The ryot is unwilling to part with his surplus and every grain that is now procured is practically forced out of him. There are, therefore, complaints of harassment against the officials, who in their turn level counter-allegations against the ryot. I have no doubt that there is some truth in both the complaints and counter-complaints. Elaborate enquiries have been conducted in several instances but lack of evidence due to various reasons has been a great handicap. Whatever that may be, there is very great difficulty in meeting our increasing rationing commitments when the procurement is going down year by year and with a restricted allotment from the Centre, which has got its own difficulties in securing larger imports, apart from availabilities in foreign countries particularly in regard to rice.

There is also a large volume of opinion both among the Hon'ble Members of this House and among other public bodies and private individuals, that Government should restrict rationing to municipal towns and industrial centres. They have been urging that there was no point in continuing rural rationing when we are unable to meet the commitments, that it involves intensive procurement which results in harassment to the smaller producers, that the incentive to production is lost on account of continuance of rural rationing and that if rural rationing is abolished and people are allowed to rely on themselves, they will give up the tendency to grow cash crop and produce more food crops. The Government consider in these circumstances that it will be expedient to accept this suggestion, and give up rural rationing in all districts except Malabar and Nilgiris. But there will be rationing in all municipal towns including those in surplus districts and industrial areas and the overall ration of 12 oz. (with 8 oz. of rice) will be maintained. In the event of rural rationing being given up as proposed, we will take adequate measures to see that the rural areas are not starved.

(Continued on page 35)

Food Offences and Punishments Awarded

During the fortnight ending 15th September 1950, 280 cases of prosecutions were disposed of in respect of food offences in the Madras State except in the districts of North Arcot, Chittoor, Chingleput, Madhurai and Tiruchirappalli. Of these one each was disposed of in the Nilgiris and Srikakulam Districts, two each in Anantapur, Cuddapah and Krishna Districts, six in Nellore District, seven each in Guntur and East Godavari Districts, nine in Visakhapatnam District, 12 each in South Kanara and Malabar Districts, 13 in Coimbatore, 17 in Bellary District, 21 each in West Godavari and Tanjore Districts, 23 in South Arcot District, 25 in Ramanathapuram District, 27 in Tirunelveli District, 31 in Salem District and 41 in Madras City.

Particulars of cases in which heavy punishments were awarded are described below:—

Krishna.—Adapa Gopaiah, sole contractor of Ramalingeswara Rice Mill, Ilur, was convicted and sentenced to pay a fine of Rs. 400, in default to simple imprisonment for four months, for storage of paddy in an unauthorised place.

Malabar.—P. N. Mohamed alias Mammad, merchant, was fined Rs. 200, with 1½ months rigorous imprisonment in default, for illegal possession of 42 edangalis of rice, 9 edangalis and 3½ nazhis of cholam and 6 edangalis of ragi.

Tirunelveli.—Nagamani was fined Rs. 200, with two months simple imprisonment in default, for attempted smuggling of cholam.

East Godavari.—K. Surya Rao, who was in possession of more than 15 maunds of rice, was sentenced to pay a fine of Rs. 200, in default to suffer rigorous imprisonment for one month.

Madras City.—Arumuga Naicker, cultivator, Bazaar Street, Theneri, Chingleput District, was fined Rs. 300, with three months rigorous imprisonment in default, for illicit import of 270 Madras measures of rice.

Nellore.—O. Venkateswara Reddy was fined Rs. 250, in default to suffer rigorous imprisonment for six months, for illicit transport of foodgrains.

During the fortnight ending 30th September 1950, 575 cases of prosecutions were disposed of in the State of Madras except in North Arcot, East Godavari, Krishna, Salem, Kurnool and Ramanathapuram in respect of food offences. Of these, three were disposed of in Anantapur District, four in Chittoor District, five in Visakhapatnam District, seven in Nellore District, nine in West Godavari District, ten in Bellary District, 21 in Malabar District, 22 in Madras City, 26 in Madhurai District, 27 in South Kanara District, 37 in Coimbatore District, 43 in Cuddapah District, 45 in Guntur District, 49 in Tanjore District, 54 in Tiruchirappalli District, 66 in each South Arcot and Chingleput District, 81 in Tirunelveli District, and nil in the Nilgiris and Srikakulam Districts.

Particulars in which heavy punishments were awarded in the districts are described below:—

Malabar.—M. K. Perumal alias Pathi, cultivator, who illegally transported 51 paras and 5 edangalis of paddy, was sentenced to pay a fine of Rs. 200, in default to rigorous imprisonment for two months.

Madras City.—Janab Syed Kasim Sahib, landlord, No. 7, Kannaiah Chetty Street, Aminjikarai, was convicted and sentenced to one day's simple imprisonment and fined Rs. 1,000, in default to suffer rigorous imprisonment for nine months, for illicit possession of 21 bags containing 986 measures of rice. The rice was confiscated.

West Godavari.—(i) Perumalla Venkatarao and Bonda Radhakrishnamurthy, Ganapavaram, were each fined Rs. 500, in default to undergo rigorous imprisonment for six months, for incorrect maintenance of accounts under the Madras Foodgrains Control Order.

(ii) Satti Venkatareddi of Gopalapuram who stored paddy without a licence, was fined Rs. 200, in default to rigorous imprisonment for two months.

Guntur.—(i) Gudibanda Venkatarameddy, cultivator, Kollipara, Tenali Taluk, was convicted and sentenced to pay a fine of Rs. 200 with two months' rigorous imprisonment in default, for working of huller without licence and without permits.

(ii) M. Venkatanarayana, businessman, was fined Rs. 300, with three months rigorous imprisonment in default, for illicit transport of paddy.

(iii) P. Rattayya, Annapparru, was fined Rs. 200, with four months rigorous imprisonment in default, for storing of rice in excess of requirements.

Tirunelveli.—(i) Arumuga Nadar was fined Rs. 250 with two months simple imprisonment in default, for illicit purchase of paddy.

(ii) Shunmuga Thevar who attempted to transport foodgrains, was fined Rs. 200, in default to suffer simple imprisonment for two months.

Tiruchirappalli.—(i) Vengam Padayachi was fined twice Rs. 200, on each occasion, in default to suffer rigorous imprisonment for three months, for illicit transport of foodgrains.

(ii) Panayadiyan Muthiriar was convicted and sentenced to pay a fine of Rs. 300, in default to rigorous imprisonment for one month, for illicit import of nine bags of rice.

(iii) Manickam Pillai who fed 390 persons at the time of his daughter's marriage without the sanction of the Government, was fined Rs. 200, in default to rigorous imprisonment for three weeks.

Co-operation in Andhra Desa

By Sri P. S. KUMARASWAMI RAJA, Chief Minister

The Andhras played a remarkable part in the political struggle which brought us our independence. Their contribution to art, literature and social reform are equally remarkable. They have taken a notable part in the organisation and development of the co-operative movement, and the contribution which the veterans like the late Sri V. Ramadoss Pantulu and Sri M. Ramachandra Rao made to the progress of the movement in the State is too well known to the co-operators to need mention.

In a country of conflicting political ideals, religious differences and economic inequalities, co-operation exercises a unifying influence. Though Mahatma Gandhi was not a co-operator, in one sense, it was his inspiration that led the Congress in its latest manifesto to recognise co-operation as the most suitable instrument for rural progress. The Congress has as its ideal a co-operative commonwealth. Co-operative movement is based on eternal human values such as honesty, fair-dealings, service, mutual help, goodwill. It transcends caste, creed, colour or religion. With

the achievement of political freedom the foremost task facing the Central and the State Governments today is the economic development of the country and the raising of the living standards of our people, and the co-operative method and technique can to some extent help us achieve this objective. The Madras Government are fully alive to the great utility and potentialities of the co-operative movement as an agency for promoting the economic well-being of the people and the policy of Government has been to utilise co-operative agencies as far as possible for carrying out some of those schemes which aim at this objective.

I shall now proceed to make a rapid survey of the movement in the Telugu districts.

Co-operative Credit

In the sphere of rural credit, village credit societies have made notable progress. There are at present 6,252 credit societies with over 4.5 lakhs of members in the Andhra districts. They cover 61.6 per cent of the villages and 17.70 per cent of the population. They issued loans to the extent of Rs. 3.36 crores during 1949-50. Two thousand eight hundred and fifty-two societies have undertaken multipurpose activities, such as, distribution of essential commodities, agricultural requisites, social and recreational activities, promotion of thrift, etc. Further, the Madras Government have launched a two-year scheme for the reorganisation of rural credit societies with a view to cover 50 per cent of the villages and 30 per cent of the rural population in the State and to make the societies undertake multipurpose activities. Government have given subsidies to central banks for the employment of additional supervisors to help them to implement the scheme. While fair progress has been recorded in carrying out the reorganisation plan in the Andhra Desa, much yet remains to be done. I appreciate the feeling among some of the co-operators that any forced or artificial expansion of rural credit societies is not healthy or desirable, that the successful execution of the plan needs adequate number of zealous men for management and trained personnel for supervision which is not always easy to find and that the work so far done during the last one and half years should be consolidated before further expansion is proceeded with. The Provincial Co-operative Advisory Council has, therefore, suggested that the scheme may be extended for three more years. This will receive the careful consideration of Government.

To the Rayalaseema, Government have given special facilities by way of subsidies to central banks to enable them to lend the ultimate borrower at a reduced rate of interest not exceeding five per cent, to write off bad debts in village societies amounting to Rs. 1.62 lakhs and make a fresh start and to employ additional supervisors for intensive supervision of rural credit societies at the rate of one supervisor for every 15 societies. This is a very generous measure of help which, I hope, will go a long way to help the banks in this area to reorganise and strengthen the co-operative rural credit structure. It is needless to

From the Chief Minister's speech inaugurating the 17th Andhra Provincial Co-operative Conference, and opening the Industrial Exhibition at Tenali, 26th November 1950.

emphasise that rural credit societies constitute really the backbone of the movement and that they should function not only as effective lending agencies and providers of cheap credit but also as units of social and economic progress.

Agricultural Finance

In this connection the Rural Banking Enquiry Committee has observed that in any scheme for a sound and efficient system of agricultural finance, sufficient emphasis must be laid on the building up of a sound structure of primary institutions whether co-operative credit societies or multipurpose societies. The weakness of the co-operative structure seems to lie mainly in those institutions and more thought and effort should be devoted to their development. The generally favoured plan now is the establishment of strong multipurpose societies able to employ competent paid staff for each group of contiguous villages.

Land mortgage banks have made steady progress. Some of the earliest banks were in fact formed in the Andhra districts, viz., Gudlavalluru, Vadlamannadu and Alamuru. They issued debentures until the formation of the Central Land Mortgage Bank. There are at present 54 mortgage banks with a paid-up share capital of Rs. 13 lakhs in the Andhra districts. They issued loans to the extent of Rs. 31.50 lakhs during 1949-50. Here again, Government have given special help for the promotion of land banks in the Rayalaseema. They have sanctioned a subsidy to the Central Land Mortgage Bank at 1-1/4 per cent on all loans to be issued during the five years from 1st July 1949 to enable the ultimate borrower to get his loan at 4 per cent rate. This rate, I may say, is the lowest for long-term loans in the whole of the Indian Union. The total Government subsidy on this account is Rs. 6.75 lakhs spread over 24 years.

The time has come when every effort should be made to utilise mortgage banks for the more constructive task of agricultural development. Government have been considering an amendment to the Co-operative Land Mortgage Banks Act of 1934 with a view to help large-scale efforts of land improvement such as irrigation, erecting engines and pumping sets, etc. This will help to step up food production. I do not see why the banks cannot render service to the ryots and the State by actively participating, subject of course, to the usual business safeguards, in the execution of irrigation schemes which need large capital. The demands on the State's finances are considerably on the increase and it seems to me that in future such irrigation schemes should be more in the nature of co-operative enterprise to which the State and the ryots should make their respective contribution. The ryots who stand to derive benefits from the schemes should come forward to finance in some measure the irrigation projects in their area. Recently the ryots in Tirunelveli District subscribed a crore of rupees for the Manimuthar Project, enabling the Government to undertake the execution of the project immediately. When ryots come forward to shoulder a part of the financial burden, it is only reasonable that priority should be given to such schemes. Land mortgage banks can be of great assistance to the ryots and advance the funds required by them. I believe the Central Land Mortgage Bank will address itself to this task with zeal and help the people.

Co-operatives and Food Production

The food problem is a major problem facing us today and the Government have launched various schemes to

increase food production. They have recently transferred to co-operative societies the work of distribution of chemical manures, iron and steel and introduced a scheme for intensifying the cultivation of waste and fallow lands through village multipurpose co-operative societies in select areas in Andhra Desa in the districts of East Godavari, Guntur and Nellore. Through village co-operatives villagers can be actively associated to make the self-sufficiency scheme a success. In these societies, arrangements have been made for the distribution of chemical fertilisers, groundnut cake, iron and steel and other agricultural requisites to the farmers. About 750 societies in Andhra Desa have undertaken the work during the current season. About 250 societies have constructed compost-pits and 107 societies are making arrangements to take up about 8,000 acres of fallow land for cultivation.

This is a splendid opportunity for the co-operators to make themselves useful in the national effort to intensify food production and help the country to achieve self-sufficiency in food. Co-operatives can render distinct service to the ryots by timely and proper distribution of iron and steel and chemical fertilisers by the application of which it is expected to increase food production considerably.

It is my conviction that distribution of chemical fertilisers, iron and steel should be the concern of co-operative organisations rather than the Agricultural Department, and that the latter Department is intended to render technical advice and help to the farmers and introduce improved methods and practices in farming with a view to augment agricultural production. It is in that belief that Government transferred this work to co-operative societies. I am sure that the societies will apply themselves to this task earnestly and carry it out efficiently, equitably and to the satisfaction of the ryots.

I am glad to note that a positive contribution to food production has been made in the Andhra area, principally in the Circular Districts, by the Tenants or Field Labourers Co-operative Societies. There are 448 such societies with over 36,000 members who are all poor agricultural labourers, or Harijans. They have obtained on lease 35,590 acres of *lanka* and other Government waste lands and cultivated about 28,000 acres with food crops and 6,000 acres with commercial crops.

Farming and Land Colonisation

The Government and the co-operators realise the importance of co-operative farming and land colonisation.

The Chief Minister opened a reading room in Repalle



Grow More Food Campaign itself aims not only at intensifying cultivation in existing lands through better methods but also its extension by bringing more land under cultivation. In all we have 41 land colonisation co-operative societies (for civilians and ex-servicemen) and there are 16 such societies in Andhra Desa. These societies have been formed mainly with Government lands. Government have given over 22,000 acres of land to the 41 societies and an extent of about 12,600 acres have been so far reclaimed and brought under cultivation. Government have been giving these societies all possible initial help by way of subsidies and loans to enable the members to carry out reclamation and cultivation. All may be aware that recently we have constituted District Advisory Land Colonisation Committees in order that they explore the possibility of bringing as much of land under cultivation as possible with a view to step up food production.

I understand that there are 120 schemes involving an extent of about 50,000 acres of land at various stages of investigation and examination. Representations also have been made to Government to increase the scale of financial assistance to the members of these societies who are all landless poor people and Harijans.

Government consider that through such societies some relief will be afforded to the landless poor and Harijans on the one hand and that some contribution to food production will be made on the other by bringing waste or fallow land under cultivation. Government also propose to take suitable steps for accelerating the examination and implementation of these schemes.

Dairying and Cattle-breeding

Milk and milk products are a part, an essential part, of the food of a very large section of our people. Government have introduced a three-year scheme of urban milk supply through co-operatives and appointed special staff of Dairy Assistants and Co-operative Inspectors to work out the plan. We have today 571 co-operative milk supply societies and unions in the State. During the year ended 30th June 1956 they handled milk worth about Rs. 150 lakhs. In the Andhra districts there are 166 societies and unions and they sold milk to the value of Rs. 17.47 lakhs. Relatively the progress is very slow and somewhat disappointing. Dairying is an important rural industry which provides supplemental income to the agricultural classes and requires to be encouraged and organised on satisfactory lines.

The Ongole tract is noted for its high breed of cattle and supplies them to other parts of the State. The preservation and improvement of this breed should be a matter of zealous concern to the co-operators and all others interested in the cattle wealth of our country. This lends itself to co-operative effort. I understand that a cattle breeding society has just been organised at Ongole. Government have sanctioned special staff and a non-recurring subsidy of Rs. 4,640 to meet the cost of stud bulls, etc. I hope the society will soon start work and fulfil its objects. Government have extended considerable help to a similar enterprise in Sugulimitta in Kurnool District. I am, however, afraid that these scattered efforts, however praiseworthy, may not meet the needs of the situation. I feel that the co-operators will do well to give this matter more attention.

Housing Schemes in Andhra Desa

The Government have formulated measures to relieve the housing shortage in urban and semi-urban areas. Housing schemes on co-operative lines were started and as a result 77 new house building societies have been organised in the Andhra Desa in the last two or three years. There are, in all, 116 such societies in the Andhra area with 7,800 members and a paid-up share capital of over Rs. 29 lakhs. Out of a crore of rupees provided in the Budget of 1950-51 to be given as loans to housing societies, a sum of Rs. 44.25 lakhs was allotted to Andhra Desa. Up to the end of October 1950, loans amounting to Rs. 32.52 lakhs were sanctioned to housing societies in the Andhra districts. At the end of September 1950, loans amounting to Rs. 48.50 lakhs were outstanding against the members of these societies. Apart from the houses built by their members in the past, at the end of September 1950, 587 houses were in different stages of construction in important towns in the Andhra districts. Co-operative housing societies in Chittoor, Guntur, Bapatla, Narasaraopet, Repalle, Vijayawada, Nellore, Kovvur, Kavali, Visakhapatnam, Srikakulam, Hiramandalam, Amadalavalasa and Parvathipuram have done good work. The societies at Bellary, Adoni, Ravachoti, Eluru, Kovvur, Anantapur, Tadpatri and Guntakal took possession of the sites, and construction work is fast progressing in Bellary, Adoni, Rayachoti, Eluru and Kovvur. I learn that the progress in certain towns has been slow owing to the time taken in the acquisition of sites, while in some other places misunderstandings among directors and members have retarded progress.

I need hardly add that Government have provided some of the building societies in Rayalaseema with staff at half cost to work as their secretaries. A Special Land Acquisition Officer is attached to the Registrar to speed up acquisition proceedings. Special quotas of iron and steel and fittings are allotted to the Registrar for distribution among co-operative housing societies. Government timber is supplied by the Forest Department to co-operative societies at concessional rates. In spite of financial stringency we have provided a crore of rupees in the current year's Budget for loans to these societies apart from Rs. 20 lakhs for rural housing societies. These constitute very substantial help.

Under the Rural Co-operative Housing Scheme, 12 villages have been selected in Andhra districts and nine rural housing societies have been registered. This is an interesting and useful departure the Government have made in housing policy and further extension of the scheme will depend upon the results of this experiment.

Cottage and Rural Industries

Andhra Desa is not lacking either in raw materials or in handicraftsman. The main handicaps facing the cottage and rural industries are want of finance and equipment, lack of organised marketing agencies and of technical advice. The problems can be tackled on a co-operative basis as has been done in many other Asian countries.

The handloom industry, which is next to agriculture in importance in the State, has made considerable progress on a co-operative basis. They produced about one-third of the cloth requirements of our people. Out of the five

lakhs of looms nearly 30 per cent are organised on a co-operative basis. There are 940 weavers' co-operative societies with 1,47,000 looms headed by the Madras Provincial Handloom Weavers' Society with its network of emporia in the State and outside. Of these 516 societies with 70,000 looms are functioning in Andhra Desa. Out of the total production of Rs. 3.2 crores of handloom goods by the societies in the State during the year 1949-50, nearly Rs. 1½ crores worth of goods were produced by the societies in Andhra Desa.

The chief problem now facing the handloom industry, more than markets, is the shortage of yarn. Government are keenly aware of this and have made repeated representations to the Government of India. I hope the position will soon improve. I must congratulate the Provincial Society on its decision to start at a cost of Rs. 30 lakhs a co-operative spinning mill with 11,000 spindles at Guntakal in Anantapur District to supply at least a part of the yarn requirements of its affiliated weavers' co-operative societies. The society has requested the Government to contribute a third of the capital by way of a ten-year loan and the request is now under the consideration of Government.

Assistance to Weavers

Cumbly-weaving is an important rural industry in parts of Andhra districts, particularly Rayalaseema. I am glad that efforts have been made to organise this industry also on a co-operative basis. I learn that there are eight cumbly weavers societies. Government have been providing subsidies and technical assistance through a designer to them. They recently gave the Bishkhal Co-operative Cumbly Weavers' Society in Bellary District a free grant of Rs. 5,120 to set up a weaving factory with fly shuttle looms and a subsidy of Rs. 400 for payment of premia to sheep owners. I have no doubt that the Rayalaseema Economic Development Board and the Co-operative Department will make joint efforts to place this industry on a sound, progressive co-operative basis.

All of us know how the weavers carry on their work in unhealthy surroundings and housing conditions. Government have been encouraging the weavers' co-operatives to provide decent housing conditions within the means of their members and towards this end they are giving the societies long-term loans at a low rate of interest. The Yemmiganur Weavers Co-operative Society, which is the biggest society in Andhra Desa, has been given a loan of Rs. 2 lakhs and 60 houses have been completed and 40 more are under construction. Similar housing schemes are in progress in Tenali and Rajahmundry also. There is no doubt that provision of suitable houses will contribute to the health and efficiency of the weaver and his family and greater output. I appeal to other societies to show the same spirit and enterprise and undertake suitable schemes to improve the housing and social conditions of the weavers. I may also make particular mention of the Eluru Pile Carpet Weavers' Society, whose products have earned reputation not only in India but also in foreign countries. Government have been giving every assistance to the society to place it on a progressive basis. It still seems to lack patronage from the general public apart from the want of loyalty on the part of its members. There is considerable scope for expansion of its business.

Besides 940 societies for weavers, other cottage industries societies have also been organised on a co-operative basis. There are in Andhra Desa 121 societies for metal workers, leather workers, carpet-making, basket-making, toy-making, etc. The societies produced goods worth Rs. 16 lakhs during 1949-50. The bulk of the business is done by the twelve metal workers societies which produced goods worth over Rs. 9 lakhs. I learn that the Ajaram Brass Metal Workers Society in West Godavari, the Aluminium Metal Workers Society at Rajahmundry, the Penugonda Hardware Co-operative Workshop in West Godavari District, Proddatur, Cuddapah and Venipenta Brass Metal Workers Societies in Cuddapah District have established a place among the industrial co-operatives in the State.

Palm Gur Industry

One important industry which has developed in the State on a co-operative basis after the introduction of Prohibition is the Palm Gur industry. This industry has received encouragement both from the Central and State Governments. There are at present 465 societies for manufacture of palmyra and date jaggery in Andhra districts with 20,218 tappers as members. They produced jaggery valued at over Rs. 18 lakhs last year. The industry has spread particularly in West Godavari District. The tappers have also been trained in improved methods of jaggery production under a scheme sanctioned by Government.

I should like to emphasise three basic factors as regards cottage and rural industries. Ours is a country of villages, and the need for a decentralised industrial economy is obvious. Secondly, it is necessary that in an underdeveloped country like ours with increasing pressure on land, the problem of an employment and seasonal employment can be tackled only through planned development of rural and cottage industries. Thirdly, many of our cottage industries are carried on in very crude methods and have not taken advantage of modern mechanical appliances, tools and implements to improve craftsmanship. The problem calls for urgent attention. The time has come for action; a sustained and planned attempt should be made to have a network of cottage industries in all promising areas on a co-operative basis apart from the question of agency that may concern itself with their promotion. Government have placed at the disposal of the Registrar a sum of Rs. 45,600 for being given to deserving cottage industries societies for the purchase of equipment for meeting expenditure on their establishment.

Forming Federations

Government have recently constituted Regional Advisory Boards to develop select industries. They have also constituted a Cottage Industries Board to make a survey of cottage industries and take all necessary measures for their development. Government have under consideration other measures too. I may mention in particular the proposal to encourage rural industries in select firkas through village co-operatives. Deserving village co-operatives will be provided with tools free of cost and raw materials at cost price. The village societies will be federated into a firka cottage industries co-operative

(Continued on page 47)

The Romance of Silk

By SRI C. PERUMALSAMI REDDI, Minister for Industries

The fascinating story of the origin of silk is enveloped in many a legend of the Royal Homes of China in ancient times. We are told how the secret of the silkworm was first revealed five thousand years ago in China by a little Princess of Empress Hsi Ling Chi, when the Princess dropped a cocoon into the steaming tea in her mother's table. To the amazement of one and all of the Royal family, they saw the cocoon unravel, when the soggy mess was removed. This led to the "discovery of silk," which in course of time became a foundation for much of the wealth of ancient China. The rich and luxurious fabrics with all the splendour and grandeur, superb appearances and supreme beauty, woven in looms invented by the ingenious Chinese, were eagerly sought by kings, princes, lords and their ladies, who willingly paid the extravagant prices demanded by traders in the merchandise marts of the cities of the West.

The Chinese jealously guarded the secret of the silkworm, which many foreign powers attempted to get. But for some three thousand years the secret remained behind the Great Wall. The secret however spread to India when a handsome young prince married a Chinese of royal blood. She carried with her as part of her dowry, a gift of silkworm eggs and some shoots of the mulberry tree. So far as South India is concerned the origin of the silk industry can be traced back to the days of Tippu Sultan of Mysore.

"The Queen of Textiles"

Silk has rightly come to be described the "Queen of Textiles". Technically, it is superior to viscose and acetate rayons. In some respects it is superior even to nylon. It has a unique lustre, not excelled by any other textile fibre. It can be dyed rich and in brilliant colours. Its demand the world over is permanent, even though almost every-day we hear of some new synthetic fibre being evolved. It still reigns supreme in the textile world.

The economic environment of the silk industry is an interesting study. It consists of three independent branches, each of which though inter-related to the other two, forms a separate economic entity. The production of the seed, that is eggs, is an independent branch involving functions which are entirely different from the production of cocoons. Again, the reeling branch has its own peculiarities resembling more to manufacturing than production processes. The first part, namely, silkworm rearing including mulberry cultivation is a home occupation. It is essentially a cottage industry subsidiary to agriculture. Almost all the members of a ryot's family participate in the production of cocoons. Perhaps in no other occupation does the entire family participate both by day and night through all the seasons of the year.

Silkworm and Mulberry Cultivation

Mulberry cultivation and silkworm rearing are twin operations carried on conjointly on a cottage basis by agriculturists wherever conditions are favourable. Although mulberry can grow in any place, the silkworms are required to be reared only under certain optimum conditions; as such the industry has certain limitations for its extension.

Optimum conditions of temperature and humidity are available only in altitudes of about 2,000 feet and above in the tropics. Thus, the industry is practised in Kollegal Taluk of Coimbatore District, Hosur Taluk of Salem District, Palmaner and Madanapalle of Chittoor District and Talavadi Firka of Gobichettipalayam Taluk. Recent investigations have shown that there are bright prospects for the introduction of the industry in certain places of the Ceded Districts and the Northern Circars. Already nucleus areas of mulberry have been started by private agriculturists in the new areas.

The food of the silkworm is mulberry leaf. The silkworms reared in Madras State are multivoltine in character. On an average, it costs Rs. 200 to establish one acre of rainfed mulberry and Rs. 100 in maintaining it per year subsequently. The yield per acre per year is about 3,750 lb. of leaves in respect of rain-fed gardens. But if irrigation facilities are provided, the yield of leaf per unit could be easily doubled or trebled by judicious cultural operations and utilise the leaves for seven to eight rearing crops in a year. Ordinarily a mulberry garden once established lasts for ten to fifteen years and thus it is more or less a perennial crop.

Rearing and Selling the Cocoons

The new garden reaches yielding stage in September-October when the rearing of worms is commenced. Incidental expenses may not exceed Rs. 50 for providing the rearing appliances which comprise rearing stands, bamboo trays, ant-wells, chopping knives, leaf baskets, boards, lantern and chandrikes. A ryot with three to five family members can conveniently rear about 250 lb. of cocoons per annum in five to six batches and realise about Rs. 300 in five or six instalments. The ryot usually sets apart a portion of his house for rearing purposes. He gets the required quantity of silkworm eggs from the nearest grainage and spreads them on bamboo trays kept on stands.

The silkworm eggs take ten days to hatch. The silkworm emerges as a tiny worm, technically called "an ant" and is immediately placed on finely chopped mulberry leaves. The worms are fed every two hours in day time and every three hours during night time. The silkworm feeds voraciously, periodically shedding its skin as it increases in size. The shedding of the skin is called moulting. The silkworm moults four times before it attains full size. Silkworms attain maximum growth in 25 to 30 days when they stop feeding and are ready for spinning. The spinning process lasts for nearly two to three days. The cocoons are ready for harvest after the silkworm starts spinning. The cocoons are sold in numbers for seed purposes and by weight for reeling purposes.

Reeling and Weaving

The next phase of the industry, namely, reeling and weaving is no less important, but on the other hand has exercised the human ingenuity more than the first phase of rearing. Reeling is the index by which the silk is judged by the world at large. It is the process which harnesses the natural excellence of the silk and therefore requires a

careful and perfected technique. In India the bulk of silk production is of Charka grade which is inferior to filature silk. The appliances and the methods adopted are both crude. It is necessary that this system of cottage reeling should gradually be changed over to filature or factory reeling. With a view to improve cottage reeling, the Japanese foot-reeling machines have been introduced in this State by the Department of Industries and Commerce. The high grade quality of silk, however, is produced in filatures only. The quality of silk reeled is tested according to its elasticity, density, lustre, winding quality, etc. Judged by these tests, the Indian filature silk has yet to register considerable improvement before we can occupy a noteworthy place in the international market.

It was the recent World War which gave the most powerful incentive to the filature silk industry in India. As a result of the schemes launched by the Government of India for the expansion of the silk industry, the number of filature basins rose from 1,290 in 1939 to 5,550 in 1948. The production of raw silk too rose to about 2,232,000 pounds from what was only 1,523,000 pounds in 1937-38. Yet our production is far below our requirements and it is with a view to bridge this gap that the Central Government have been allowing imports of foreign silk on a fairly liberal scale.

Sericulture in Madras State

In our State the acreage under mulberry now is about 20,000 and the number of basins installed in the Government Silk Filatures at Kollegal is 500. The Sericultural Section of the Department of Industries and Commerce in Kollegal was started in 1919. It is in charge of the Sericultural Expert, assisted by trained personnel. The Sericultural Staff come in close contact with ryots in order to advise and guide them in regard to technical matters such as production of eggs, rearing, prevention of diseases, etc. The most essential problem that has been engaging the attention of the Department has been to supply disease-free layings in adequate quantities to the rearers, as disease-free seed is the sheet-anchor of the industry on which its entire structure rests. The present organisation for seed supply is not adequate to meet the entire demand of the ryots and hence aided grainages run by private parties have been permitted to work under the close supervision and guidance of the Departmental staff.

In order to increase the mulberry acreage to meet the growing demand for silk, certain concessions are being granted by the Government.

They are:

- (1) permanent assignment of waste lands and free supply of mulberry cuttings;
- (2) grant of loans to ryots at fifty rupees per acre towards mulberry cultivation; and
- (3) remission of entire assessment for a period of three years on lands newly brought into cultivation.

Improvement Units in Action

There are a number of Silk Farms in important centres to produce the disease-free eggs of foreign races to be supplied to seed rearers. There is a Hill Rearing Station at Coonoor to preserve stock of foreign races. A Gut Manufacturing Section has been established at Coonoor to produce ligature guts on mass scale for medical purposes. Further, there is also a Research Unit at Kollegal which tackles the various important problems connected with mulberry and silkworms with a view to improve the

quality of the leaves; to find ways and means of eradicating diseases of silkworms and to evolve new breeds of silkworms which would produce a higher yield of silk.

Tassariculture and Ericulture also form part of the work of the Sericultural Section and suitable areas in the Ceded Districts and the Northern Circars have been selected for development. There is a Central Propaganda Station at Venkatapuram in order to reorganise and stabilise the Tassar industry among the Koyas in the adjoining forests in Nugur Taluk, East Godavari District. Further the Government is also running a Filature at Kollegal which produces high quality raw silk utilising the reeling cocoons produced in Kollegal, besides giving employment to as many as 800 workers.

Progressive National Asset

The silk industry which is a national asset has been giving livelihood to more than 20,000 families in this State directly or indirectly. The total quantity of silk required by India is estimated at about eight million pounds out of which the home production is only 2.2 million pounds. Therefore, all possible scientific methods should be adopted to increase production to cover up the deficit. Of the measures taken by the Government of India to develop the industry, the most important is the constitution of the Central Silk Board. This Board is charged with the development of all aspects of the silk industry on an all-India basis. The industrial interests involved as well as the silk producing States are represented on this Board. The Board has been periodically reviewing the position of the industry and formulating plans and measures designed to achieve self-sufficiency at no distant date.

So far as this State is concerned, a five-year plan for the development of the silk industry has been drawn up and several items of the plan are already under execution. The plan has been approved by the Central Board and considered for adoption by other State Governments. I have every confidence that, with the technological improvements introduced in our disease-free seed distribution, and the establishment of regulated cocoon markets in important cocoon producing centres and the adoption of modern reeling techniques, the sericultural industry in this State has entered on a prosperous era, so as to be able to thrive even if the present protection is to be withdrawn after some years.

—By courtesy, A.I.R., Madras.

Sale of Improved Raw Silk

With a view to enable established dealers in raw silk to sell the imported foreign silk obtained from the Department of Industries and Commerce, Madras, at rates not exceeding those at which weavers, twistors, master-weavers and other consumers may obtain the silk from the Department direct, the selling rates have been reduced in the case of dealers by Rs. 1-12-0 per pound. This reduction is intended to provide for sales-tax, margin of profit, etc. The imported raw silk will hereafter be sold to established dealers at the following rates: A grade—Rs. 43-8-0; B grade—Rs. 43-4-0; C grade—Rs. 43; D grade—Rs. 42-12-0 per lb. ex-godown, sales-tax extra.

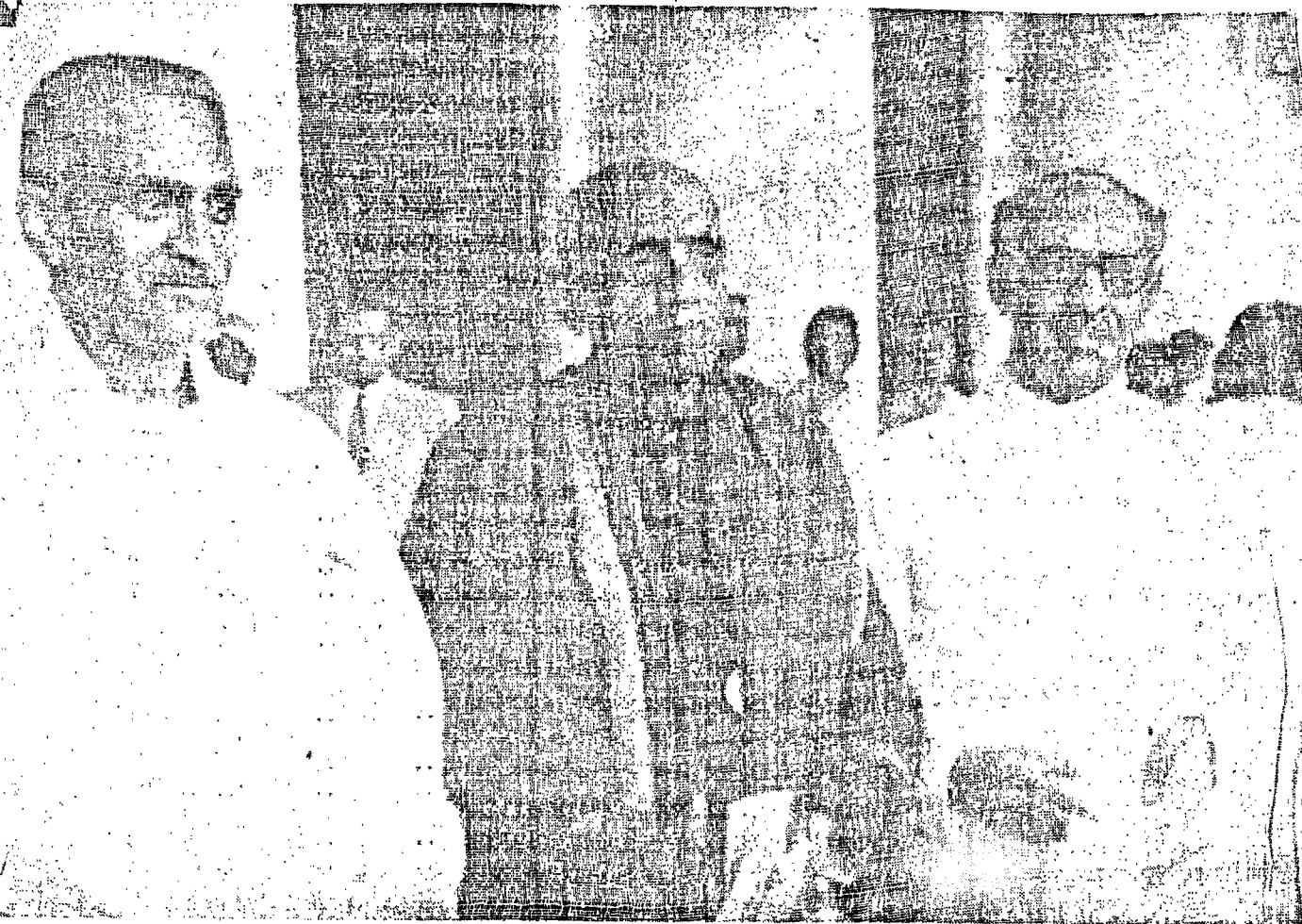
Releases at the above rates will be made to established dealers on application to the Director of Industries and Commerce, Madras, direct.

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The new Telugu Poet Laureate, Sri Sripada Krishnamurthi Sasrri, with the Chief Minister and Sri K. Madhava Menon, Minister for Education



OUR NEW TELUGU POET LAUREATE

H.E. the Governor of Madras invests the new Poet Laureate with the insignia of shawl

ornamentation. Brass and bronze play in the Hindu household as important a part as glass and chinaware among the Western nations. We have been using from time immemorial brass and bronze wares for domestic purposes and copper for ceremonial occasions. These articles were once most magnificently ornamented with fine and exquisite carvings. It is a pity that one must now look for examples of the fine old work not in temples nor in the houses of the rich, but among the waste metal of the brass bazaar doomed to the melting pot.

The art of wood carving had once attained higher perfection in India than in any other country, European or Asiatic. The woodwork of Guzerat, Kashmere, Lahore and Banaras, of Mysore and Travancore, were once the best specimens of their kind in the whole world. But they have now perished with their patrons, the old kings. The little woodwork South India can boast of is now in Ramanathapuram, Sivaganga and Tirunelveli; thanks to the Southern enterprisers, the Nattukottai Chettiyars, whose houses contain some fine wood carvings.

Pottery, Mats and Image Casting

India was the home of pottery to the whole world; from India pottery was carried to Persia and from there the Saracens introduced it to Europe.

The mat industry was once greatly thriving in the south and was famous for its excellent quality. Palghat, Ayyampet, Seerkali, Porto Novo, Wandiwash and Pattamadi are the present chief centres of mat industry. In the harmonious intermingling of Hindu colours and Hindu patterns of decoration, the Palghat mat alone stands uninvaded; in all the other centres magenta colour, European design and plainness in the place of ornamentation have been entirely ruining this once fine art. A very fine and most delicate though plain mat is manufactured at Pattamadi; its surface is softer than silk; it can be folded like cloth.

Image casting was a great profession in India especially in South India; but also such is the sad fate that has overcome our arts that we to the best of our researches can now enumerate hardly half-a-dozen artisans of this profession.

Ruined by European Influence

Unfortunately the skilled workman in brass, bronze and ivory is now reduced to the level of a common workman and the wood carver is obliged to maintain himself in great part by doing the work of an ordinary carpenter. Decline has been clearly marked in every branch of Indian handicraft. The production of articles of necessity such as textiles has suffered first by direct European competition and later by competition within the country from the textile mills. Handicrafts in articles of luxury such as wood carving, carpet weaving, ornamental work, has been affected to some extent by the decline of many old Indian States and Zamindaries, but more from the spread of European education and ideas which lead many of the better class Indians to throw aside their national tastes and decorate their houses in pseudo-European style with clumsy foreign carpets and ill-designed furniture.

To study the beauties of the old relics of the South Indian deeply cut engravings, one has only to go to the Sri Meenakshi Temple in Madhurai. The door-frames coated over with brass beautifully carved; the arch of lamps supported on the heads of damsels by the side and held up in the mouth of the gryphon at the top; the lamps

in the modest hands of brass images and the thousand and one utensils are all finely carved. Had it not been for these sacred shrines our arts must have died long ago.

Technical Training and Better Living

Few factors have had so hampering an effect on the development of handicrafts as the absence of a far-reaching plan of good technical education in this country. As education was primarily intended to provide candidates for the public services, other essential requirements were completely ignored. There was practically no technical education at all until recent times and in many cases the literary education provided engendered a contempt for manual work and therefore imparted to generations of Indian boys a distaste for industrial work, the full effects of which are still clearly visible. Almost all the talent in the country has been sedulously drawn away from the tasks of art and industry. It should now be one of our first duties in educational reconstruction to provide the training most suited to our boys and girls. This seems to be a long and tedious task made more difficult by decades of mistaken and wasted effort.

The great majority of our people are living in conditions of primary poverty with no opportunities to obtain their minimum nutritional requirements and therefore without capacity to obtain mental stimulus or spiritual strength. This is the problem in the solution of which large-scale expansion of handicrafts is an important ingredient. While the factory system has its own advantages and large-scale industry is necessary, it is an evil institution for it herds men together in a common task without recognition of their manhood and certainly without recognition of their equal rights. Many factories are inadequately equipped, conditions of work leave much to be desired; housing facilities are almost everywhere desperately inadequate and work is in some cases a bitter test of endurance.

Museums for Works of Arts and Craft

It has been recorded that a certain French silk firm in Paris was at the point of collapsing when merely to encourage the proprietor a fashionable lady ordered a suit of the silk cloth of that firm. The next day all the ladies began to buy from that firm and the trade at once revived. Even so, if leaders of fashion in this country would make up their minds to encourage Indian handicrafts, we would soon have another story to say. I would strongly recommend that in every important town and pilgrim centre in the State a museum be formed representative of all that is best in Indian handicraft and specially that of South India.

The largest collection of the best samples of Indian designs in every branch is absolutely essential. This will be the most important teaching agency and if properly directed, it would give a prestige to Indian handicraft in the eyes of Indians and create an interest in it; it would be the means of preserving those examples of a period when handicrafts attained a much higher perfection and standard than is generally to be found at the present time and which are daily being destroyed and becoming more difficult to obtain; it would thus create and maintain among the artisans themselves a higher standard of design and workmanship. Annual exhibitions to show the skill of handicraftsmen should be instituted and prizes awarded to the best craftsmen.

— By courtesy, A.I.R., Madras.

Handicrafts

By SRI P. GOVINDA MENON, Joint Director of Industries and Commerce

The dictionary meaning of "Handicraft" is work done by hand. Primitive man first adorned his person or that of his better half with ornaments ingeniously fashioned from dried grasses and stalks of creeping plants, seeds and stone and metal. Clumsy smoothing of some rough-hewn section of a fallen tree was perhaps the starting point of furniture making; this provided a fresh outlet for the spirit of craftsmanship. The next step was to carve in wood and cast in bronze or lead; then men imitated the twisted grass in gold and silver ware and with hammer and chisel fashioned more skilful counterfeits of seeds, fruits, etc., in thin sheets of the precious metals soldered together. But as man became conscious of his inventive faculty, he was not content with mere imitation. His religious ideas and the objects and symbols of his worship afforded a multitude of subjects for the exercise of his imagination. The tools he used and the character of the materials he worked with would suggest new forms. Filigree jewellery was thus created.

It is hard to believe that human fingers could have soldered together such infinitesimal fragments of metal. Goldsmiths who worked with dye, punch and chisel when they were no longer satisfied with imitation of natural objects began to devise original forms in chasing and repousse work as their fancy suggested or the tools and materials with which they worked lead them. Working with purest silver and gold and seeking inspiration from Nature but with Art to guide their hands and stimulate their imagination, they unconsciously fulfilled what Emerson has expressed in his admirable aphorism: "Art is Nature passed through the alembic of man"

When we compare the handicrafts in South India as existing now with those which flourished, say a hundred years ago, we cannot but regret the calamity that has come over them in a short time. Can any of the arts be shown not to have declined either by the poverty of the people or by the invasion of the European market, sometimes by way of assistance from the helping hand of Government, but mostly want of encouragement from our own selves. If a bad thing had disappeared and something better had taken its place, it might be held as a great boon, but on the contrary it is the reverse that has taken place in our South Indian handicrafts.

Weaving Industry has Declined

The weaving industry is by far the most important in respect of the numbers employed. A great variety of textile manufacture is carried out in this State—silk and cotton cloths, cotton and woollen carpets, silver and gold lace, satins, reed mats, etc. This industry suffered very considerably from the competition of the cheap cotton and woollen goods which poured into the country. With regard to the woollen carpets, a great decline is noticeable. Ayyampet in Tanjore District was once an important centre for the manufacture of woollen mats or small carpets for which the district was famous. About the year 1880 as many as 107 families were employed in Ayyampet in this industry; now the industry is practically extinct there.

Tanjore District was once well-known for silk carpets of remarkable beauty. This industry seems to have disappeared entirely. Satin was manufactured at Ayyampet, Arcot, Wallajahnagar and Ariyalur. It was a beautiful industry. The weavers were of northern origin; the material produced was worn by Mahomedans, the principal trade being with Hyderabad. The arrangement of colours was very bold and brilliant but was in good taste. Ariyalur satin was distinct in style and of remarkable beauty in colour as well as tasteful in the simple patterns woven. The printed cotton cloths of Masulipatnam were excellent in design and brilliancy and happy arrangement of colours were specially remarkable.

Take the case of Palampores; the beauty of art they once possessed and the utter ruin which has now enveloped them. In the Palampores of our old days, very fine representations of Hindu mythology or warfare were reproduced. The great centres of this art once were Salem, Kumbakonam, Nagapattinam, Worriyur, Cuddalore, Arcot, Kalahasti and Masulipatnam. About a hundred years ago there were in each of these centres several hundreds of houses the inmates of which were carrying on this profession; now there are not even half-a-dozen huts in each of these places where this handicraft is to be seen. The reason for this is the introduction of European chintz.

Madurai Red and Kanchi Black

Madurai is famous for a fine dye of a deep red colour. This dye is prepared in many other places but Madurai acquired a reputation for the finer colour and greater permanence which are attributed by the weavers to the peculiar qualities of the waters of the Vaigai. This red dye and the black dye of Kancheepuram were famous throughout the world for their fineness and durability. In the records of 1636 an interesting account is given of a white woollen cloth which was sent to India by His Majesty King Charles I to be dyed. So great a trade was established in textile exports from India that in 1700 William III ordered that from Michaelmas 1701 all wrought silks, calicos, Bengals and stuffs mixed with silks of the manufacture of Persia, China or the East Indies should be locked up in warehouses till re-exported, so that none of the said goods should be worn or used in either apparel or furniture in England on forfeiture thereof and also of a penalty of £200 on the persons having or selling them. It was in this way that the industry in India was suppressed in favour of English manufactured goods.

The lace manufacture of Madurai is entirely gone. Genuine lace is now a rarity and unknown in South India. Cheap copper laces have taken the place of our sumptuous silver and gold lace.

Bronze-ware and Woodwork

With regard to metal work that in brass and bronze was the most extensive industry, the fine ornamental work for which the South was famous, has become almost a lost art. Even ornaments and utensils in temple service which have always called forth the highest skill of the artificer are now in the case of the former generally inferior in design and rudely executed, and of the latter entirely without

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MADRAS INFORMATION WISHES
ALL ITS READERS A HAPPY NEW YEAR

Cover Page: Proposed Site of the Manimuthar Project.

R.R., Madras.

Quality Coconut Seedlings

By SRI K. GOPALAN, M.A., B.COM. (Manchester), Secretary, Indian Central Coconut Committee, Ernakulam

India has more than 1.5 million acres under coconut and produces about 3,277 million nuts annually. But her demand for coconut products is more than what she produces and her annual imports of these during the two years ending 1941-42 had amounted to as much as about 187,000 tons in terms of copra. In recent years, thanks to the sources of supplies drying up, the world shortage of oils and fats and other reasons, the imports have contracted considerably. But taking all factors into account, it has been estimated that the country's deficit in the matter of coconut and coconut products would be more than a lakh of tons in terms of copra. The task of the highest priority set for the coconut industry is, therefore, to devise ways and means of bridging the gulf between the country's demand for and production of coconut and coconut products. It has been recognised that, from the long-range point of view, one of the most effective ways of increasing the production of coconuts in the country is the production and distribution of selected coconut seedlings of guaranteed quality so that the future generations of coconut trees may be healthy, vigorous, high yielding and disease resistant.

It is an agricultural axiom to say that half the success in cultivation depends on the seed. The selection of seeds is important in the case of annual crops like rice, wheat or cotton. It is even more so in the case of a perennial crop like the coconut. The coconut palm takes about eight years to start bearing and 12 years to be in full bearing stage. Thereafter it continues to yield up to an age of about 80 years. Any mistake, therefore, in the selection of the seedling will be manifest only in about 8 to 12 years by which time much labour and money would have been spent on the tree and most growers would be reluctant to cut it down and plant another in its place. It would, therefore, be apparent that if there is one thing, in the long course of coconut cultivation, about which one cannot afford to take the least bit of risk, it is the selection of coconut seedlings. One has got to be absolutely certain that the seedlings are of guaranteed quality.

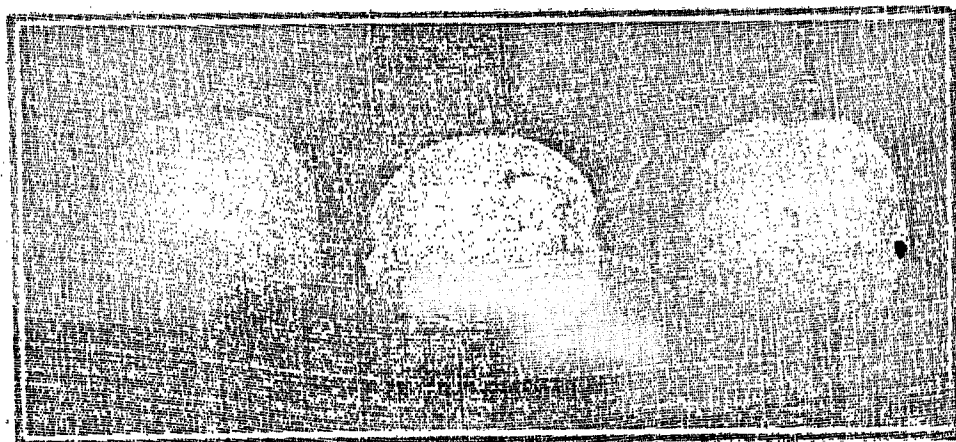
Pedigree is an Important Factor

Unfortunately, this all-important matter is not as fully or widely realised as it ought to be. Proof of this can be seen all around us—in coconut gardens which are uniformly inter-cultivated and manured but in which the trees are not of uniform quality though of the same age. Some are healthy, vigorous and high yielding, while others are not so healthy or vigorous and yield fewer fruits. This phenomenon may be explained by the pedigree of the seedlings originally planted. Good quality seedlings grow into healthy, vigorous and high-yielding trees, while those which are not so, develop into weaklings which lack in health and vigour and are poor yielders.

Now it is not as though coconut growers do not know that quality seedlings will grow into healthy, high-yielding trees. They do know that. What they do not know is which a quality seedling is and which not. One could as well distinguish between one crow and another crow in a flight of crows as between a good seedling and a bad seedling in any array of seedlings that a clever and unscrupulous nursery man offers for sale. He knows what the good points of a quality seedling are and he is loud in his claim that his seedlings possess them all. And the grower who has no other means of getting his requirements satisfied purchases any seedlings that come his way and plants them.

Sharp Practices in Private Nurseries

The necessity for using the best possible planting material in raising new plantations and for re-planting purposes, cannot thus be over-emphasised. The fact, however, is that most growers are not aware of this to the extent that they ought to be. One instance of the indifferent and unscrupulous manner in which seedlings are raised and sold may be mentioned here. In areas commanding adequate retting facilities where the husk of the coconut is a valuable by-product, it often happens that the nuts whose husk cannot be used for retting purposes are kept aside in storage for sale when prices improve. They



ideal seednu



Left: Garden suitable for selection of mother palms.

Below: Coconut nursery.



Growing Cotton

Mixed with Irrigated Summer Groundnuts

In the districts of South Arcot, North Arcot and Chittoor, it is usual to plant ragi in January, dibble seeds of the spreading variety of groundnuts at first hoeing or sow seeds of bunch groundnuts at harvest stage of ragi crop. Cambodia cotton is sometimes grown after ragi in the month of March. Experiments of mixed cropping with cotton at the Agricultural Research Station, Palur, and observation plots in all the three districts mentioned above were laid on cultivators' holdings. Seeds of Uganda-1 cotton were dibbled six to eight inches apart along the ridges separating two contiguous beds and the irrigation channels, on the same day as transplanting of ragi. The inter-planting of groundnuts and subsequent treatments of the crop were continued as usual. Harvest data showed that the yields of ragi and groundnut crops were not reduced and cotton registered yields ranging from 110 lb. to 475 lb. of seed cotton per acre depending on the date of planting, fertility of land and irrigations received. The harvests of cotton were complete by the time the groundnut crop was ready for lifting and in no way they interfered with other normal agricultural operations.

The farmers of the districts of South Arcot, North Arcot, Chingleput, Chittoor and Nellore are advised to extend this practice of mixed cropping of cotton with irrigated ragi *cum* groundnuts and to benefit to an extent of one hundred rupees per acre on an average. They can ensure a good crop by planting early long staple cotton variety Uganda-1, by dibbling seeds on inner sides of ridges and by manuring the cotton with ammonium sulphate up to half a hundred-weight per acre.

The farmers desirous of growing cotton mixed with irrigated summer groundnuts can get full details from any one of the following officers:—

- (1) Cotton Extension Officer, Coimbatore.
- (2) Assistant Cotton Extension Officer, Coimbatore, Koilpatti and Bellary.
- (3) District Agricultural Officers.

Yields of Irrigated Summer Cotton in South Arcot District can be Trebled

Cambodia cotton in South Arcot District is at present planted in the month of March and irrigated from wells in the same manner as the *Masipattam* Uganda cotton grown in the taluk of Srivilliputtur and its contiguous areas. The crop though extremely satisfactory from the point of growth and healthy appearance, is very disappointing in seed cotton yield which seldom exceed half to two-thirds of the Srivilliputtur averages. In addition, other defects like imperfect bell opening and poor seed germination are also noticed. Liberal applications of manures or irrigation water fail to correct them. The problem was taken up for a closer and intensive study at the Agricultural Research Station, Palur, in South Arcot District, from the year 1944. Flower drop was observed to follow periods of high atmosphere temperature and examination of such shed flower revealed the presence of a large proportion of defective pollen. It was concluded that if the

hot periods during flowering and fruiting periods could be avoided, the various defects could be rectified.

Experiments aimed at forcing early maturity through (a) shifts in planting dates, (b) close planting and (c) development of short duration varieties, were conducted for over three years from the year 1946. The conclusions were that December-planted crop of Uganda-1 always gave three times the yield of March-sown cotton, and that close planting combined with frequent irrigations during hot months increased the yields further. The quality of seeds, however, remained generally poor though some improvements in germination was registered.

The cotton farmers of the districts of South Arcot, North Arcot, Chingleput, Chittoor, Nellore and Tanjore who are likely to experience the ill-effects of hot summer on the *Masipattam* crop are therefore advised (a) to plant cotton early in the months of December-January, (b) to choose early duration varieties recommended by the Agricultural Department, (c) to plant cotton close and irrigate frequently during hot periods, (d) to use only seeds from other districts for sowing purposes and (e) to manure the early planted cotton in preference to late-planted areas. The wholesale adoption of the above recommendations will help every farmer to treble his profits per acre and place the production of long staple cotton in Madras and India on a sound basis. Any advice on the subject can be had from any one of the following officers:—

- (1) Cotton Extension Officer, Coimbatore.
- (2) Assistant Cotton Extension Officer, Coimbatore and Koilpatti.
- (3) District Agricultural Officers.

Chitrāi Cholan mixed with Clusterbeans

The problem.—Farmers of Coimbatore District who grow Cambodia cotton after irrigated summer (*chitrāi*) cholam are probably not aware of the fact that the yield of the cotton is only 80 to 90 per cent of the normal crop and that the reduction from every acre is estimated at 20 lb. lint.

The experiments.—Experiments conducted at the Cotton Breeding Station, Coimbatore, for a number of years revealed that *chitrāi* cholam and clusterbeans mixed in the ratio of three to one gave same yields as unmixed cholam for both fodder and grain and improved the yield of the succeeding Cambodia cotton by about ten per cent.

What the farmers are advised to do.—All the ryots following the intensive rotation of cotton-cholan are requested to grow a three to one mixture of *chitrāi* cholam and clusterbeans instead of summer cholam. The clusterbeans will come to maturity more or less at the same time as the cholam crop. The farmers are advised to collect clusterbeans seeds required for the next sowing before the harvest of the cholam crop. The clusterbeans can be harvested along with summer cholam and fed to cattle as they relish the mixture better than the pure summer cholam straw which is considered inferior to the rainfed *Periamayal* cholam sown in cold weather. The practice if it gets into vogue will be similar to the legume mixtures like cowpeas or lablab grown with the cold weather cholam.

Regulated Markets for Coconut and Areca

There appears to be a total misconception about the object of the extension of the Madras Commercial Crops Markets Act, 1933, to coconut and its by-products and to arecanut in the districts of Malabar and South Kanara. A great deal of propaganda has been carried on by the merchants in these places with a view to compel Government to withdraw the notifications. The Government wish to make it very clear that their object is not to interfere with the trade in these commodities or to control the price or to tax the grower indirectly.

These markets are established in order to enable the grower to get a better price for his produce by providing open market yards. The market practices will be regulated by the Committee which consists of representatives of both growers and traders. This Committee will fix uniform market charges such as commission, brokerage, etc. All unauthorized deductions for charity or trade allowance will be eliminated. Weights will be checked and licensed weighmen will be employed to do the weighing. Merchants and the trade will be free to do the business in the usual manner but they must take out licences. It is not obligatory on the merchants to buy in any particular place and petty merchants who buy less than one thousand coconuts a day will be exempted from taking out a licence.

The growers are absolutely free to sell their produce to any trader or at the market yard. The grower need not take out a licence and he need not pay any fee or tax. To enable the Committee to carry out its functions, a cess of two annas on thousand coconuts (which cost Rs. 150 to 200), two annas on every maund (82-2/7 lb.) of cured arecanuts and one anna on every maund of by-products of coconuts, is collected from the buyers only. The grower need not pay any cess.

The Government also wish to make it clear that by establishing these markets both growers and traders will derive a lot of advantage. The Committee will supply market intelligence, arrange for fair sales and conduct auctions, whenever necessary, thus ensuring that the grower gets the best price, benefit of correct weights and freedom from unauthorized and illegal deductions by commission agents, brokers, etc. The Committee will also provide accommodation and storage facilities for growers and sellers and disputes between them can be settled.

There seems to be misconception in Malabar that this Market Committee will function like the Producer-cum-Consumers Co-operative Societies. This is not the case. It is not the Government's intention to oust the traders from their present business or to put them to any inconvenience. It is wrong to say that the staff of the Market Committee will be a burden. After all, it should be remembered that the Market Committee consists of representatives of the growers and the traders who although now nominated by the Government will be elected in due course and the staff are the servants of this Committee. It is hoped that the public will realize that the present propaganda against regulated markets is engineered by merchants based on misconceptions and that it does not deserve any support.

The improvement in the fertility of the soil will be gradual but lasting. It will be ultimately reflected in the yield of Cambodia cotton which will increase by 30 lb. kapas or 20 lb. lint valued at Rs. 20 to Rs. 25 per acre. Enrich your soil without any investment.

Co-ops to distribute Iron and Steel for Agricultural Purposes

The Government have entrusted to the co-operative societies the work relating to the distribution of iron and steel for agricultural purposes, hitherto attended to by the Agricultural Department through its depots in the districts.

The Deputy Registrars of Co-operative Societies in the districts have selected a few co-operative societies for this purpose and agriculturists are advised to apply direct for their requirements of iron and steel to these societies, with the recommendation of the Revenue and Agricultural Officers.

Grant of State Lands for the Manufacture of Salt

Consequent on the Government of India's intimation that the import of salt from outside India may have to be stopped from 1st January 1951, it has become necessary for the State Government to take all possible steps to increase the production of salt in the State.

The Government have decided that all State lands which are regarded as suitable for the manufacture of salt and in respect of which applicants are forthcoming to take them on payment of market value, should be assigned to those applicants.

In areas where there are lands suitable for the manufacture of salt but no applicant comes forward to take them on payment of market value, the Collectors concerned have been directed to consider the question of leasing the lands on long-term lease, the minimum period of which should be 25 years.

In disposing of the lands the Government have laid down that preference should be given wherever possible to co-operative societies of salt workers.

Our New Telugu Poet Laureate

By SRI K. MADHAVA MENON, Minister for Education and Law

In the wake of the far reaching political changes which took place in this country on the memorable date—the 15th of August 1947—the Provincial Government felt that our languages should receive greater recognition. Among the steps adopted to achieve this object, one was the institution of prizes for the best books written in the regional languages. Another step taken was the creation of Poet Laureateships in Tamil, Telugu, Kannada, Malayalam and Sanskrit. Any one acquainted with the history of our country will know that the institution of poet laureateship is nothing new; in the Courts of our Ancient and Medieval kings, poets Laureates distinguished by such titles as "*Asthana Kavis*" flourished, and their inspired verses have added to the wealth of our literature.

The Government announced their decision to create poet laureateships in the four regional languages and in Sanskrit in December 1947. In accordance with this decision, poets for the Laureateships were to be chosen for five years by specially constituted committees and a honorarium of Rs. 1,000 a year was to be paid to them. Five Poets Laureate were thus appointed, one for each of the languages mentioned above. It may be recalled that Government convened a Public Durbar on the 14th August 1949 at which His Excellency the Governor was pleased to present the insignia of "*Asthana Kavi*" to the Poets Laureate then chosen.

The Poet Laureateship in Telugu has become vacant, owing to the demise of Sri Chellapilla Venkata Sastri, the first holder of the title "*Asthana Kavi*" in Telugu. At the instance of the Government, the Selection Committee for Telugu which is presided over by the Hon'ble Sri B. Gopala Reddi, Finance Minister, chose Sri Kalaprapurna Sripada Krishnamurthi Sastri Garu, a poet and scholar of eminence, as the Telugu Poet Laureate designate. From the citation which will now be made by the Chief Secretary, it will be seen that Sri Krishnamurthi Sastri Garu is an outstanding personality in the field of Telugu literature. Acting on the recommendation of the Committee, the Government have appointed him as the Telugu Poet Laureate for five years. I extend a hearty welcome to Sri Kalaprapurna Sripada Krishnamurthi Sastri Garu. I am happy to announce that the Government are presenting a medal and a shawl, as the insignia to the Poet Laureate.

The Citation

Sri Kalaprapurna Kavi Sarvabhūma Sri Sripada Krishnamurthi Sastri was born on the 29th October 1886 in Rajahmundry, the ancient capital of the Andhra Kingdom and a city noted for its poets and scholars, past and present. Even in his boyhood he showed signs of literary talent.

He has to his credit about 150 literary works, as a result of his ceaseless literary pursuits for about half a century. He is a writer who has been influenced considerably by the Puranas and Itihāsas. His monumental work is *Sri Krishna Bharatam*, a translation in Telugu of *Mahabharatam*, a bold attempt, particularly when the

Telugu public had already before them the *Andhra Mahabharatam*—the work of the three great poets, Nannaya, Tikkana and Errana—dating back to the 11th Century A.D. The public received his work well, particularly in view of the fact that it was a more vivid and elaborate rendering of the original. Notable among his other works are *Bobbili Natakam*, *Sri Krishna Ramayanam*, *Madhukara Vijayam*, *Vijayalakshmi Vilasam*, *Amrutanandam* and *Vecrasena Vijayanatakam*.

Public admiration for his profound scholarship in Sanskrit and Telugu and for his outstanding attainments as a poet has found expression in the honours conferred on him by the public on several occasions; the performance of Swarnabhishekam at Palacole, West Godavari District, in 1930; the presentation of Kavigandapenderam by the people of Rajahmundry in 1933, the celebration of Gajarahana Mahotsavam at Vijayawada and Salur in 1936; the erection of his statue in Rajahmundry; the presentation of Manikireetam at a large gathering at Vijayawada in 1945—all these bear testimony to his popularity among the Andhra public.

The attainments of Sri Sastri are not confined to literary pursuits. He is considered to be the pioneer in the field of Telugu journalism. He edited as many as five periodicals even in the early days of journalism in Andhra Desa.

He has thus enriched the Telugu language in several ways. In recognition of his eminence, His Excellency the Governor on behalf of the people, now invests him with the insignia of Poet Laureate for Telugu.

Passengers to Burma from Andhra Desa

Several representations purporting to be from Burma Evacuees residing in Visakhapatnam District have been received complaining about hardships to intending passengers to Burma from Andhra Desa. The Government wish to make the position clear. Sailings of passenger ships from the port of Visakhapatnam have been discontinued from November 1949, owing, among other reasons, to the paucity of passenger traffic offering at the port. Intending passengers to Burma from Andhra Desa have since then been proceeding through the ports of Calcutta or Madras. Protectors of Emigrants appointed under the Indian Emigration Act continue to function at those ports and are attending to the needs of those passengers.

The Immigration Office of the Union of Burma at Visakhapatnam has been closed with effect from the 31st August 1950 and Immigration permits for entry or re-entry to Burma are being provided by the Immigration Offices of the Burma Government in Madras and Calcutta. Taking into account all these circumstances, the Government of India, after very careful consideration, have decided that no useful purpose will be served by maintaining the office of a Protector of Emigrants at Visakhapatnam any longer. The office was accordingly closed from 15th October 1950. It will probably be re-opened when circumstances permit the resumption of sailings of passenger ships from the port.

In the Great Tradition of Royal Patronage

Sri Sripada Krishnamurthi Sastri, the Telugu Poet Laureate, in his address at the Investiture Ceremony at Rajaji Hall, declared that the honouring of poets by the Government of Madras, was in the great traditions of old when emperors and kings patronised poets.

The Poet Laureate said:

We may rightly call this assembly *Brahma Sabha* as the atmosphere here is mainly filled with the blessings of Saraswathi, the Goddess of Learning. His Excellency the Governor who has presided over the sacred function represents the *Brahma* whose duty it is to establish righteousness and peace in the world. Poets and other eminent people adore such meetings. It is no exaggeration if I say that this compares equally with those assemblies held when Srinadha was honoured with *Swarnabhisheka* and Peddanarya with *Gandapendera*. This exalted position is undoubtedly the fruit of the labours of our leaders who fought for and won independence.

During the Muslim and British regimes our people led the most wretched life. They were reduced to becoming mere slaves who sacrificed everything for the sake of the rulers. Today the position is different. The untiring efforts and endless sacrifices of the Congress brought us independence. Sri Dadabhai Nawroji was the first who struggled through the medium of the Congress. In those days the only aim of the Congress was to pray and get favours from the British Government. Gradually the Congress was divided into Rightist and Leftist sections. Gopalakrishna Gokhale, Lala Lajpat Roy, Motilal Nehru, Bala Gangadhar Tilak and other prominent people continued the struggle started by Nawroji under the Congress banner. Men like Bala Gangadhar Tilak, being extremists, underwent ordeals of jail and lathi charges.

At this stage Mahatma Gandhi who left South Africa for his own country stepped into the field of Indian politics. He was a Rightist in the earlier stages and did not approve the policy of non-co-operation at the Amritsar Congress session. But with the death of Tilak he became the foremost among the Leftists and led the country in an unprecedented way towards independence. His policy of non-co-operation and non-violence proved so irresistible that the British, in spite of their diplomatic strategy, found it impossible to hold sway over India and ultimately they had to quit it.

Now let me come to the point: the existence of poets laureate in the courts of kings and emperors is not a new thing for us. Like ministers the poets laureate also used to help the kings. We learn that great poets like Kalidasa helped kings like Bhoja. Sri Krishna Deva Raya had in his court eight eminent poets known as "*ashtadiggajas*." They produced great literary works under the direction of the king. Krishna Deva Raya used to take the poets with him in the military campaigns where the latter would inspire the soldiers by the recital of appropriate verses on necessary occasions.

Even today we find Rajas and Zamindars who patronise poets. In Andhra Desa places like Vijayanagara, Bobbili, Pithapuram, Muktyala and Venkatagiri prove homes to many poets who served to augment the riches of literature. Sri Venkata Kumara Mahipati Surya Rao, the Raja of Pithapuram, not only patronises poets but also

holds literary contests of various kinds and awards scholarships. In my appreciation for him I dedicated my *Brahmanandam* to him. I stayed for fifteen years at the court of the Raja of Muktyala when I rendered the Sanskrit *Mahabharata* into Telugu.

Let me congratulate the Government of Madras for having retained the great tradition of Poet Laureateship.

Rural Welfare Work

A note on the salient features of the activities of the Rural Welfare Department during October 1950:

South Kanara District

Kumbha firka: Compost pits numbering 1,150 were constructed during the Compost Week. One elementary school was opened during the month in Belinje of Kumbdaje village. A Hindi library costing more than Rs. 1,000 was opened at Perdal with a Government grant of Rs. 500 only. Cottage Industries and Basic Education Exhibition was conducted by the Grama Seva Sangham, Perdal. The Director of Rural Welfare, Madras, has sanctioned a sum of Rs. 200 to this Sangham for furthering its cultural activities.

Manjeshwar and Mulki firkas: In Manjeshwar firka, 551 compost pits were constructed. A Cottage Industries and Basic Education Exhibition was conducted by the Grama Seva Sangham, Paivalike, and in Mulki firka, 549 compost pits were dug.

Cuddapah District

Proddatur firka: Village street cleaning was done in several villages with the help of school boys and members of Grama Seva Sangham.

Madurai District

Tirumangalam firka: A cosmopolitan dinner was arranged in connection with the Grama Sevak's constructive work day at Nedungulam on 12th October 1950 and at Kadanerai on 27th October 1950 and Caste Hindus and Harijans participated in the dinner.

Salem District

Veerapandi firka: A non-stop spinning *yagnam* for 82 hours was conducted and the yarn produced was sold and the sale proceeds were credited to the Assam Relief Fund. A new school building was constructed at a cost of Rs. 3,000 at Vembadithalam by four donors in the village. An estimate for Rs. 6,580 has been sanctioned for constructing a big drain in the Harijan Cheri at Anayampatti and the work is in progress.

Hindupur firka: Spinning demonstrations and competitions were conducted during Gandhi Jayanti. Taklics, slates and books were distributed free to the poor children. Model agricultural farms were started at Boreddipalli village. A village road was formed at Golapalli through voluntary labour.

The Manimuthar Project

By SRI A. R. VENKATACHARIAR, Chief Engineer (Irrigation)

On November 29, 1950, Sri M. Bhaktavatsalam, Minister for Public Works, inaugurated "The Manimuthar Reservoir Project." This is a great event in the history of Tirunelveli District, as this is the first large irrigation project to be taken up for execution in this district.

The chief source of irrigation in Tirunelveli District is the Tambraparni River and its tributaries. Manimuthar is a tributary of the Tambraparni River. The Tambraparni River irrigates about 83,000 acres and two crops are grown on a portion of this area. The Papanasam Reservoir, executed as a power project, regulates the flow of the main Tambraparni River for power purposes. Its construction has not helped to tide over the shortage of supplies in certain parts of the year in the Kar and the Pishanam seasons. Besides, there are large areas in Ambasamudram, Tirunelveli, Nanguneri, Tiruchendur and Srivaikuntam Taluks, fed by tanks, which receive a precarious supply even for one crop. An additional supply to these tanks would greatly help them and enable them to grow an additional crop also. These defects can only be remedied by controlling one of the major tributaries of the river. The construction of another reservoir across Manimuthar River has therefore been proposed. It will hold up flood flows and regulate the stored floods both to the existing Tambraparni ayacut, as well as fill the tanks in the area commanded by the Project.

Preliminary Investigation

The preliminary investigation of this reservoir scheme was taken up in 1945. The ryots were asking for extension of the Perungal Channel into the Nanguneri Taluk, from 1933 onwards, but this request could not be complied with until time was ripe for the investigation of a reservoir project. After the cessation of the World War, and as a result of the Grow More Food drive by Government to make up the acute shortage of food, particularly rice, this reservoir was taken up for investigation on 21st September 1945. The preliminary report with skeleton plans and estimates were made out in 1946. These were examined and a report was sent to Government. The Government

ordered the further investigation of the scheme. Accordingly, a special subdivision was sanctioned by Government for further investigation of the scheme. Investigation was commenced in June 1948 and completed in March 1949.

Meanwhile, the ryots in Nanguneri area particularly under tanks in the Nanguneri Taluk, besides those in Tiruchendur, Tirunelveli and Ambasamudram Taluks, represented to Government in July 1949 that the benefits of the Manimuthar reservoir project should first be made available to the existing ayacut under the precariously rain-fed tanks within the commanded area. They also represented that during periods of draught and uncertainty of monsoons, these tanks required some river supply to save the standing crops from failure or to start the cultivation in time, particularly in years of draught. As a result of the representations of the ryots, Government, on 6th August 1949, sanctioned the formation of a special subdivision for the investigation of a new proposal for the high level canal from the reservoir, with suitable alterations to the reservoir itself. The investigation of the modified proposals was taken up in December 1949 and was completed about the middle of July 1950.

The Manimuthar Project as now sanctioned consists of a storage reservoir formed by constructing a dam across the Manimuthar River, at a place about three miles about its confluence with the Tambraparni River and about one and a half miles from the Singampatti Zamin village, where the river drains about 61 square miles. The dam will be about two and a half miles long and consists of two parts: (i) a masonry overflow dam at the river crossing, with non-overflow masonry sections on both sides and (ii) earth dams in continuation of the non-overflow sections at the two ends.

Salient Features of the Project

Following are the salient features:—

- Useful capacity of the Reservoir 3,400 m.c. ft.
- Length of Ogee Masonry Spillway dam at the river crossing is 238 feet with a non-overflow dam for a length of 900 feet on the left side and 1,320 feet on the right side.
- Earth dam 5,230 feet on the left side and 4,320 feet on the right side of the masonry portions.
- the maximum height of the masonry dam above the deep bed level of the river is about 137 feet.
- The maximum height of the earth dam is 100 feet. Necessary provision has also been made in earth dam sections for cut-off walls to prevent seepage and revetment on the waterside to afford sufficient protection against wave wash.

There is also a proposal to raise the Full Reservoir Level of the dam by 15 feet, i.e., from plus 350.0 to plus 365.0 by providing radial gates over the Ogee Spillway dam later on as in the case of Papanasam, after watching the effects of the working of the present proposals for some years.

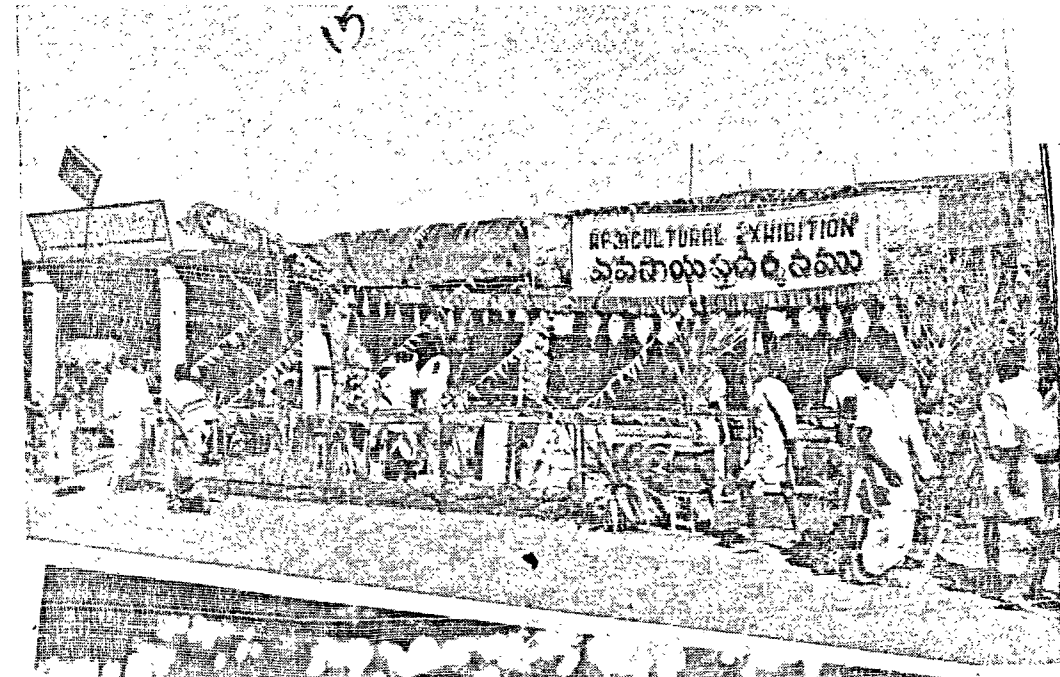
The Chief Engineer (Irrigation) explains the layout of the Manimuthar Project to the Public Works Minister and the Food Minister



A great Indian, an unmatched warrior in the cause of freedom, a great servant of the people and a statesman of mighty achievements.

"History will record it in many pages and call him the builder and consolidator of the New India and will say many other things about him. But, perhaps, to many of us here, he will be remembered as a great captain of our forces in the struggle for freedom and as one who gave us sound advice in times of trouble as well as moments of victory, a friend and colleague and comrade on whom one could invariably rely, as a tower of strength which revived wavering hearts when we were in trouble."

—JAWAHARLAL NEHRU.



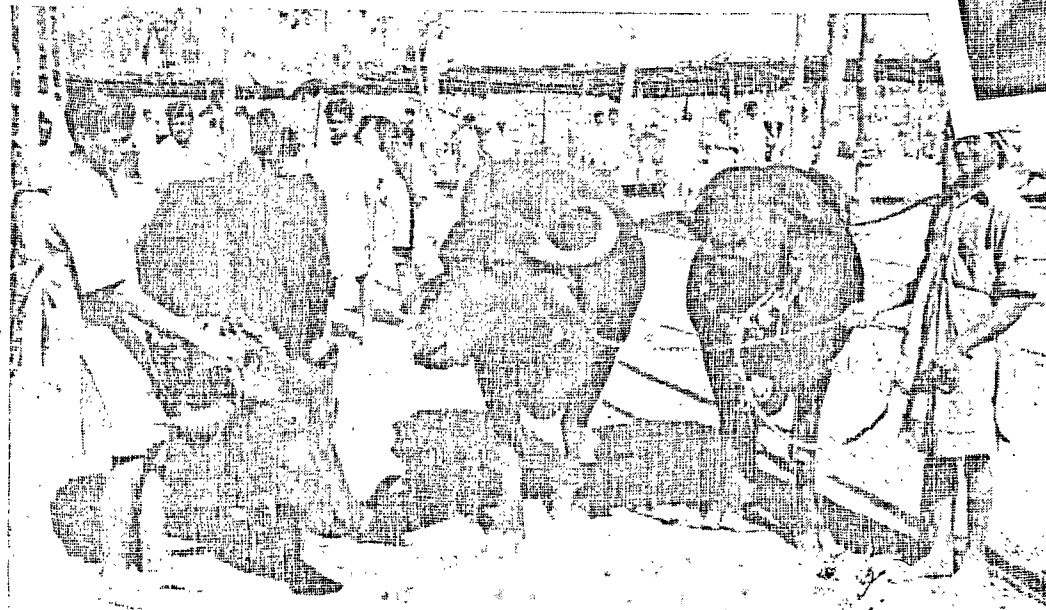
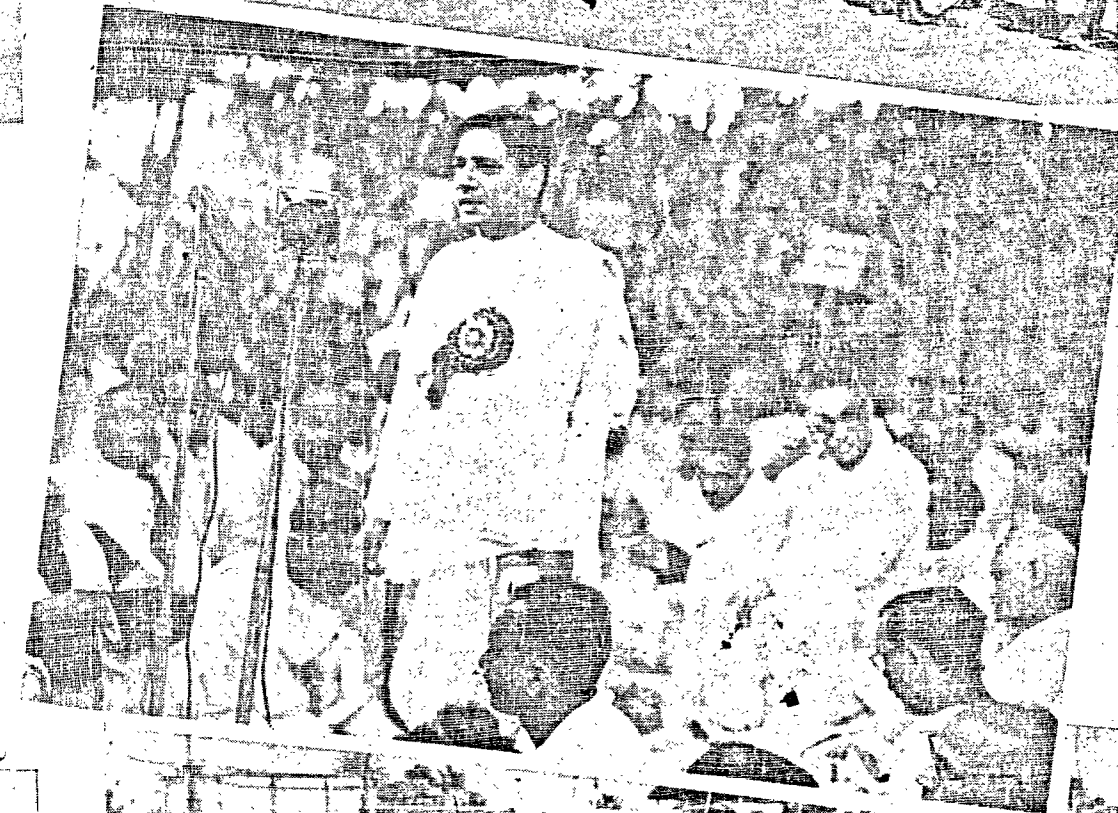
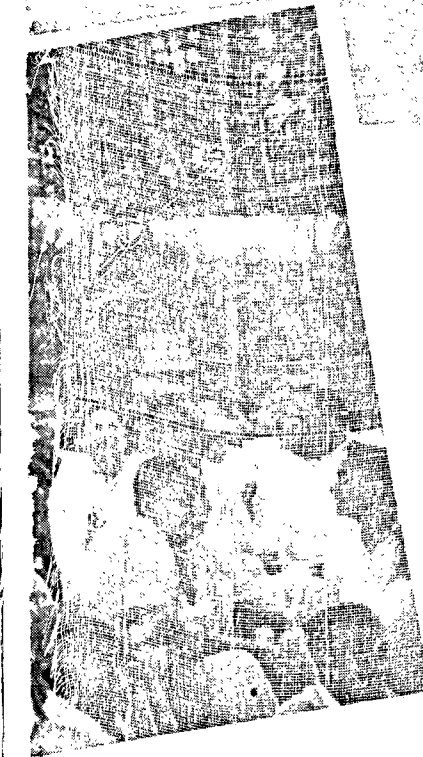
ANDHRA CO-OPERATIVE CONFERENCE

The 17th Andhra Provincial Co-operative Conference was held recently at Tenali. Sri P. S. Kumaraswami Raja, Chief Minister, inaugurated the conference and opened the Industrial Exhibition organised on the occasion

Top: Views of the Animal Husbandry, Palm Gur Development and Agricultural stalls at the Exhibition

Centre: The Chief Minister and Sri K. Chandramouli, Minister for Local Administration, addressed the conference

Bottom: Prize cattle were on show

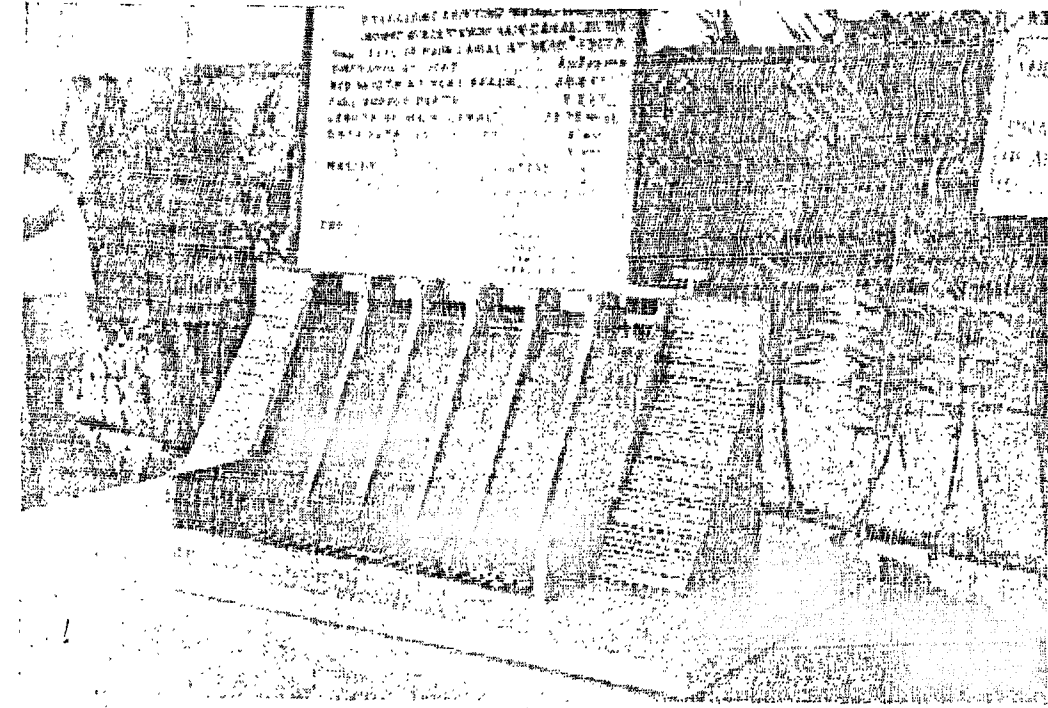


WORKS IN TIRUNELVELI

Right: Site of the bridge over River Galana

Centre: The Manimuthar Dam—model of the spillway

Bottom: The Minister for Public Works addressing the gathering



Manimuthar and other Dams compared

Name of dam				Length in feet	Height in feet	Net capacity in m.c.ft.
Dams in India						
1 Ramapadasagar	..	..	Madras	6,600	428	620,000
2 Tungabhadra	..	..	Do.	8,000	160	113,000
3 Mettur	..	..	Do.	5,300	214	93,500
4 Krishnarajasagar	..	..	Mysore	8,600	130	43,934
5 Lower Bhavani Dam	..	..	Madras	29,000	166	27,460
6 Nizamsagar	..	..	Hyderabad	15,992	160	25,446
7 Periyar	..	..	Madras	1,241	176	9,300
8 MANIMUTHAR	..	..	MADRAS	12,000	145	4,600
9 Malampuzha Dam	..	..	Do.	4,500	110	4,500
10 Poondi	..	..	Do.	770	40	2,730
Dams in foreign countries						
1 Boulder	..	..	U.S.A.	1,282	726	1,407,300
2 Norris	..	..	Do.	1,860	265	98,800
3 Aswan	..	..	Egypt	6,900	170	37,600

The reservoir proposed is expected to fill tanks with an ayacut of 20,000 acres in the five taluks of Ambasamudram, Tirunelveli, Tiruchendur, Nanguneri and Srivaikuntam, besides giving steady supplies to the existing ayacut under the Tambraparni system.

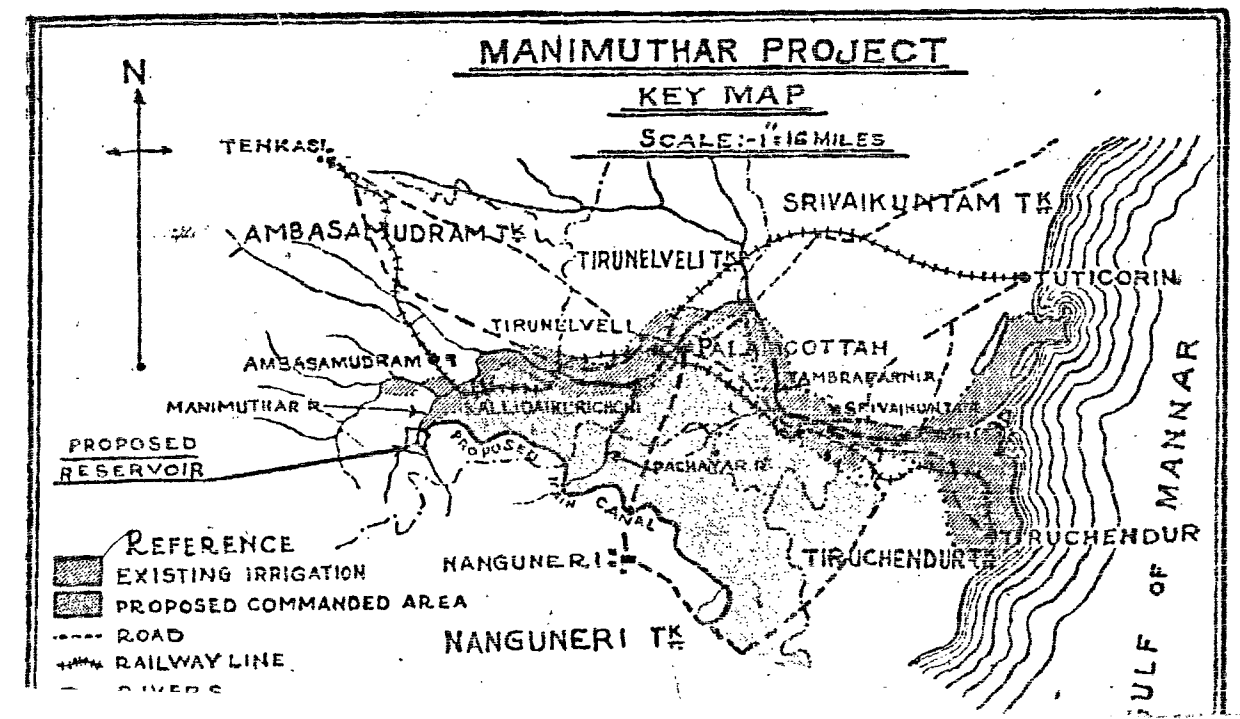
There will be low level sluices to pass water into the river to supply the existing irrigation. The existing Perungal Channel ayacut will be served by a separate sluice at level plus 284.5. A high level sluice with sill at level plus 320.0 will supply the new canal feeding the tanks.

New Canal to fill 321 Tanks

The new canal will be 29 miles 6½ furlongs long and there will be about 12 distributaries taking off at various points to fill 321 tanks in Ambasamudram, Tirunelveli, Nanguneri,

Srivaikuntam and Tiruchendur Taluks, with an ayacut of about 20,000 acres.

The total cost of the project is about Rs. 398 lakhs. The project will be completed in period of about four and a half years. The ryots of the district have displayed great enthusiasm over this project and given an earnest sign of it by raising a loan of more than a crore of rupees to help execution of this project in a period of financial difficulties. Government have also responded by sanctioning this project very quickly. It is hoped that the project will soon be an accomplished fact, and will fulfil the cherished desires of those who have looked to this for years. The project is expected to add 20,000 tons of rice worth about 60 lakhs of rupees annually to the food resources of this district.



"Unmarried Mothers"

By SRIMATHI V. T. LAKSHMI, Provincial Vigilance Officer

The world of today is caught in the vortex of civilisation of a mixed nature. It is a truism that in every stage of purely material advancement, devoid of a spiritual touch, any society is bound to be beset with numerous social evils. One of the gravest among such that retard the moral progress and social regeneration of Indian society, which is helplessly influenced by the world's forces of today, is the pitiable problem of "unmarried mothers," who are increasing in steady numbers during peace time but at a fearful rate during and after wars. Men going to wars and most of them dying there or absenting themselves for long, leave behind the problem of excess female population, sometimes unprotected, unbridled, homeless and even unmarried. The foreign army-men, stationed in these places, befriend such helpless and gullible women with false promises, but leave them finally unmarried and at times with "unwanted children". Despite the efforts of some social workers at least to check the growing number of "unmarried mothers," the knotty problem remains mostly unsolved.

Now, who are these "unmarried mothers"? How do they come about? Why should they be regarded as social outcasts? How could they have been spared their plight? What is the immediate solution for their redemption? And what suggestions can be made for preventing future girls and young women from becoming "unmarried mothers"? If social workers, who have genuine interest in the suffering women, only try to pause over these questions and seek not only suitable measures, but also employ them for their benefit, this grave problem would cease to be a baffling one.

Victims of Circumstances

Who are these "unmarried mothers" and how do they come about? Commonsense tells us that no girl or young woman is born fated to be or labelled as an "unmarried mother." They are sheer victims of circumstances, both avoidable and unavoidable. Many homes do not or fail to exercise proper control over girls in their impressionable age. Lessons of self-restraint, self-control and self-denial are not taught to them. Economic circumstances stand in the way of their parents securing suitable matches for them. They are perforce compelled to remain single, but with bubbling sexual urge in them remaining unsatisfied. Again, there are girls who are sent away to prosecute their studies in far-off places, where absence of supervision, false sense of freedom as well as their inability to restrain themselves against sexual temptations, expose some of them to moral danger. There are many girls, who, for no fault of theirs, lack sexual attraction for men to seek their hands in marriage, but who are nevertheless considered good enough to be exploited by some inconsiderate men who feign to pledge their better counsel to their erstwhile wayward sexual appetite.

Further, in many poor homes, due to lack of facilities, girls are left uneducated and gullible. They are, therefore, easily seducible by some irresponsible men, who are not economically sound to run a family or who are not self-disciplined to curb kindled and impulsive passions. Lastly, there are still many young virgin widows, who are as good as unmarried women and who are obliged to remain single,

but who are not proof against moral lapses. Well, some of these girls and young women go unscathed, in spite of their wayward adventures; while other unfortunates among them are compelled to bear the brunt of their false steps, by becoming mothers of children to whom they cannot present legitimate fathers.

Now, by the way, does it not strike us that for every "unmarried mother" thus created by circumstances there is an "unknown father" behind the curtain? Are not these "unknown fathers" responsible for the creation of "unmarried mothers" and production of "unwanted and illegitimate children"? Yet, are they made to realise their responsibilities? Are they forced to marry those whom they stigmatise or made to bear maintenance for their "natural children"? Are they at least penitent? Are they scoffed at by the very society in which they lift up their heads and walk tall? No. Never! That is because of the one-sided justice of mankind. The moral code, man-made as it is, stands in their favour. Society, ridden by man-made laws of centuries old, winks at their crimes and allows them to go unchecked, and even unchallenged. Strange! The same society makes capital out of the "unmarried mothers" who become subjects of talks at meetings and at conferences.

Society Indirectly Responsible

"Unmarried mothers" are abhorred and condemned as unthinkable social outcasts. True, they attain their legitimate motherhood outside wedlock. It is equally true that marriage is an honoured institution which is meant to knit diverse individuals into organised family units and keep up the morale of society. But, by several socio-economic causes and inevitable circumstances, if some young women stray away from such accepted codes of morality and become mothers without the claim of being wives, should they be denounced and stigmatised? Can they be discarded by their families? Can they be disowned by society which is, in a way, indirectly responsible for their plight? Do we know that by so doing, families and society punish the innocent children of these women, as well, by calling them "illegitimate," and by looking down upon them as "unwanted children"?

It will not be out of place for one to say that many young women who are thrown out of their homes, fear social ignominy and hence try to abort their pregnancies, failing which, do not hesitate even to commit infanticide. The more sensitive among them commit or try to commit suicide. One may ask—who should be held responsible for such happenings? Emphatically, it is society at large. Instead of pointing their unsympathetic fingers against the "unmarried mothers" and treating them as social outcasts, if they could only render them a helping hand, give them protection and advice, and if their own families own them without discarding them, how many indiscreet daughters could be reformed and turned into useful women, wives and mothers?

Some may ask—Can't young women be spared "unmarried motherhood"? Under normal circumstances, certainly "Yes"—provided parents of girls be intelligent

Government Lorries for Private Purposes

A fleet of three tonners and five tonners of the Civil Supplies Department is operating in Madras City. Though the lorries are primarily intended for the transport of foodgrains, a few of the lorries are also available for public requirements. Lorries will be made available at 24 hour notice and in cases where requisitions are made at short notice, every effort will be made to meet the demands.

Details of the hire charges prescribed by the Government for using these lorries are given below. A glance would show that these rates are more attractive for business people of firms, etc. It is hoped that members of the trading community and public will utilise the lorries to their advantage.

Schedule of rates of transport charges for three tonners.

(a) Trip basis.—Under five hours—Rs. 1 per mile from shed to shed plus detention charges of Rs. 2 per hour after the first hour.

(b) Daily basis.—(i) Over five hours—Rs. 1 per mile from shed to shed subject to a minimum of Rs. 45 per day of 24 hours.

(ii) Rupees 1-8-0 per laden mail, i.e., from shed to the place of delivery or unloading centre, subject to a minimum of Rs. 45 per day of 24 hours.

Idling charges.—Rupees 16 per day when a lorry is booked for hire and is not used.

Schedule of rate of transport charges for five tonners.

For private parties—

Over five hours.—Rupees 90 up to 70 miles plus Rs. 1-4-0 a mile thereafter.

Below five hours.—Rupee 1-8-0 per mile plus Rs. 3-12-0 per hour as detention charges after the first hour.

Idling charges.—Rupees 24 per day charged when a lorry is booked for hire but not utilised.

The lorries are stationed at No. 7, Patullo Road, Mount Road, Madras (Opposite to Messrs. Spencer & Co.), Telephone No. 86095.

The hire charges should be paid in advance in cash approximately equal to the transport charges likely to be incurred.

All communication or indents for lorries should be addressed to the Transport Officer, City Civil Supplies Transport Unit.

Prevention of Adulteration Rules

The Government have amended the Madras Prevention of Adulteration Rules so as to prohibit any person either by himself or by any servant or agent selling or offering or exposing for sale or having in his possession for the purposes of sale under any description kesari dhal flour and its products, a mixture of kesari dhal or any other dhal and a mixture of dhal flour and bengalgram flour, or any other flour.

and responsible in their ways of bringing them up; provided girls are properly educated and capable of looking after themselves; provided they are fortunate to be married well and in time, or be able to guard themselves against sexual onslaughts from men, should they be unmarried employees. But circumstances should favour them and men should spare them.

Solution: Marriage or Career

There is absolutely no use of our trying to be prudes nor are we called upon to conceal the existence of "unmarried mothers" in our society. We must face facts as they are and try to give immediate succour to them, still neglected and despised. Their little children should be taken care of. It is not to be forgotten that some of the world's greatest men and women have sprung up from the queer stock of illegitimate or "unwanted" children. Social workers should try to restore the unmarried mothers to their families or keep them in institutions for their protection and training. They may also find suitable men to marry these "unmarried mothers." Marriage is the best solution and not less than 21 marriages of "unmarried mothers" have been performed in the Sri Sadana, and hundreds of others have been happily restored to their families. Next, "unmarried mothers" should be educated and trained to become teachers, midwives, nurses or matrons of hostels and thus be placed economically independent in life. About 17 of such have emanated from the Sri Sadana. Children of these unmarried women-workers should be placed in good orphanages or destitute children's homes. These suggested measures, already tried by some, should be equally successful when adopted by all bona-fide social workers.

Social Inquiry into Root Causes

Society of today, social-reform-minded as it is, will not be justified if it only offers a remedy to the existing "unmarried mothers" and their children. It should dive deep into the varied root-causes, social, economic and ethical, already enumerated, which lead young women to become "unmarried mothers." Young men should be taught to honour the chastity of women. The traditional conception that women exist only to satisfy the sexual needs of men, should be thoroughly revised. The true purposes of sexual relations between man and wife and the necessity of their practising continence should be taught to boys and girls, as well as the dire consequences of any of their possible promiscuous and clandestine sexual waywardness. Only then will there be some effective check upon the tendency on the part of young women to become "unmarried mothers." There is, however, a school of social workers, even in India, which believes in teaching young unmarried women the use of contraceptives as a step to prevent them from conception, even if they are prone to indulge in sexual excesses. But, this view, apart from being still a controversial one, is far advanced for the times and may, therefore, be unacceptable to the conservative Indian mind.

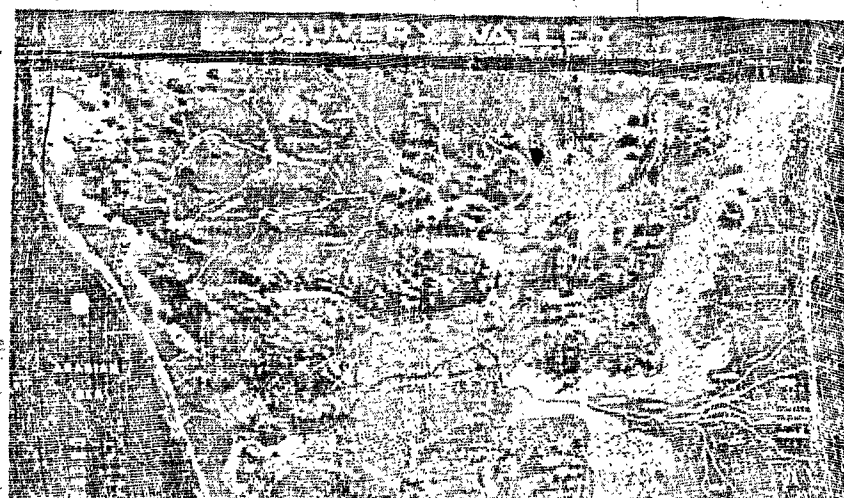
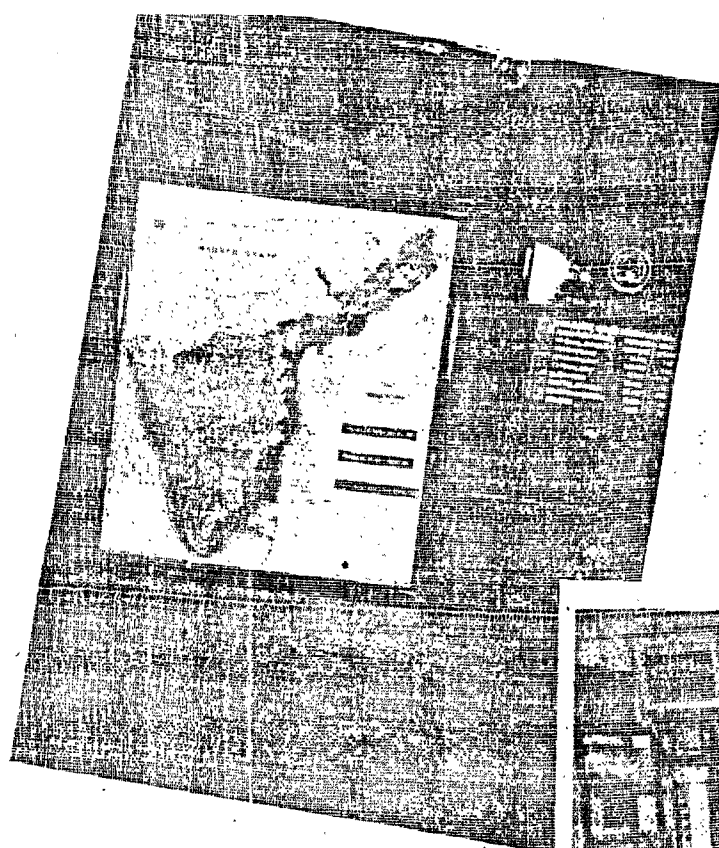
After discussing the plight of "unmarried mothers," are we not going to do our mite towards the alleviation of their sufferings? Are we not going to change the attitude of our brethren towards them, get as many of them as possible married and render others economically independent? May it be given to us, perhaps, to work for the establishment of a society which will not have to face the problem of "unmarried mothers."

Models of Madras Irrigation Projects

By SRI T. N. SESHADRI

PROJECTS IN MODEL

Some of the models prepared for the International Engineering Congress on large dams: (left) Map showing irrigation projects in Madras State; (centre) The Chief Engineer (Irrigation) explains a model to the Chief Minister; (bottom) The Cauvery Valley, and (bottom left) the Krishna-Pennar System



In connexion with the International Engineering Congress on large dams to be held in Delhi during January 1951, an All-India Engineering Exhibition will be organised in Delhi during January and February 1951. Models and exhibits from all parts of India and other countries of the world will be also on view. The exhibition is expected to attract a large number of visitors, including the delegates from all over the world to the International Congress.

The Soil Engineering Research Station, Chempauk, Madras, is sending for this Exhibition four electrically operated models of Irrigation Projects. These are described below:—

(i) *Irrigation map of Madras State.*—The exhibit is a map of Madras State, indicating the geographical positions of the various projects (a) under operation, (b) execution and (c) planning in the State. The sites are indicated in different colours, blue for existing projects, red for projects under construction and green for projects under investigation. The names of the projects are also lighted up simultaneously in corresponding colours. The project sites appear automatically one after another and then all at once in a pleasing pattern of colour, covering the whole map.

(ii) *Chart of irrigation projects in the Madras State.*—The details of cost and irrigated areas under each of the above projects are given separately in an illuminated chart which is kept continuously moving on a drum through another model.

(iii) *Illuminated model of Cauvery Valley.*—The Cauvery Valley is an example of a completely developed river valley from the points of view of irrigation and power development. Practically the whole of the river flow is conserved and utilised to irrigate about 18 lakhs of acres of land and to develop about 50,000 K.W. of firm power. The Lower Bhavani Project, now under construction, will bring an additional two lakhs of acres into irrigation and in addition will develop some hydraulic power. The exhibit is a relief model of the Cauvery Valley in colour, carved in wood, showing the course of the river together with its important tributaries. The Krishnarajasagara Reservoir and the Sivasamudram Power Station and the old irrigation works, namely, the Upper Anicut, the Grand Anicut and the Lower Anicut weirs intended for the regulation of the delta irrigation, are all shown on the model.

The model also shows the Mettur Reservoir and the new Grand Anicut Canal which irrigate new areas to the South of the Old Cauvery Delta in Tanjore District. The Lower Bhavani Project is also shown with the Bhavani-sagar Reservoir and the irrigation canal tailing off from it. The river courses are lighted up from underneath and a system of automatic switches lights up the tributaries one after another until the whole river system is formed.

(iv) *Model of the Krishna-Pennar Project.*—The Krishna-Pennar Project is a unique one, connecting as it does two large river valleys into an integrated plan of development, which will bring nearly 42 lakhs of acres of additional crops into irrigation and bridge the gap between

supply and demand of rice for the people in Madras State. The area now under irrigation from major irrigation works will be doubled after the completion of this Project. A part of the waters of the River Krishna, 90 per cent of which are now running to waste into the sea, will be utilised to grow food in portions of Kurnool, Cuddapah, Nellore, Guntur, Chingleput, North Arcot and South Arcot Districts. In addition, Krishna waters flowing in the canal about 30 miles west of Madras, will ensure adequate drinking water supply to the city for all time to come. The Pennar South Canal will be the longest in the world. The whole Project will be the biggest rice crop project in the world.

There are three reservoirs to be formed as part of the Project. (The two large reservoirs are the Krishna Reservoir and the Pennar Reservoir.) The third is a smaller reservoir, called the New Gandikota Reservoir, on the River Pennar about 65 miles above the Pennar Reservoir. These reservoirs will together hold 12.6 million cubic feet of water, which is nearly six times the quantity of water held in Mettur Reservoir.

A special feature of the project consists in the planning of its execution in stages, the first stage concentrating on most useful and immediately beneficial parts of the full project. The first stage, called the "Stage Plan" will consist of two reservoirs and three new canals and will irrigate 20 lakhs of acres, giving ten lakhs of tons of rice annually, valued at about 30 crores of rupees per annum, a large part of which will be by way of second crop in Krishna and Nellore old deltas. The cost of this Stage Plan will be Rs. 60 crores for irrigation and nine crores for power plant to develop about 120,000 K.W. continuous and 250,000 K.W. seasonal.

The execution of the full project called the "Full Plan" will follow immediately after that of the "Stage Plan". This full plan will cost about Rs. 135 crores for irrigation and ten crores for the power plant. The Stage Plan is estimated to be completed in seven years and the Full Plan in another seven years. The completion of the project will save large sums of money now spent on imports of food from other States and countries and will make Madras self-sufficient.

The exhibit prepared in this connexion is a relief model of the project area, carved out of wood to a horizontal scale of 1" to 4 miles and a vertical scale of 1" to 1,056 feet (20 times vertical exaggeration). The reservoirs and the canals are lighted up from below. An automatic switch lights up first the reservoirs and canals included in the Stage Plan and subsequently the rest, thereby completing the full plan. The reservoirs and canals are lighted up one after another in their natural order and then all together to bring out the picture of the full project.

A table gives the salient features of the reservoirs to be formed and the canals to be dug as part of the project in the Stage Plan and the Full Plan. This table is electrically operated and is synchronised with the main model, so that the details appear on the table at the same time when the corresponding canal or reservoir lights up in the model.

(Continued on page 35)

Welfare of Mother and Child

By Dr. (Miss) H. M. RAJAMANIKKAM, M.B., B.S., Assistant Director of Public Health

Health Services for the protection of mother and child should have the first place in any National Health Programme. It is an integral part of any Health Service, whether Public Health or Medical. The idea sought to be inculcated by a progressive Public Health Department is that the efficiency of the individual at every stage of his existence affects not only his own progress through life but also that of his family and progeny and that this efficiency could and should be inherited as much as it ought to be fostered through environment and wise-living.

For every 60 seconds, six lives are born, and in those self-same 60 seconds, one infant perishes. There is no shortage of new life in this country nor in this State, where the birth-rate is still high, but the wastage of human life is prodigious. No measure of warfare with the exception of the Atom Bomb could kill so many innocent children so continuously, so systematically and so cruelly. When a few thousands of lives are devoured by an earthquake or flood, the whole atmosphere is tense and electrified. Huge posters pour out headline propaganda, the front pages of newspapers proclaim the event and demand immediate help. Great men fly the distance to console the grieved. Philanthropists and social workers rush money and needed relief.

But how much is done to mitigate the death of these hundred thousands of infant lives which wither away from year to year even while suckling at their mothers' breast? Is this not a catastrophe equal in magnitude, but so insidious in its effects? On an average, of the 16 lakhs of infants that are born in a year, three lakhs of infants do not even reach the first year of life, apart from the 20,000 still-births that are registered. During the last decade, however, there has been a progressive decline in the infant death-rate all over the world and in this State, except during the War years of 1943-45. There has been a steady reduction in the Infant Mortality rate from 192 to 117 at the end of the year 1949. Infant Mortality is vastly and intimately interwoven into our everyday life.

Maternal Mortality

And how many of us realise with what tenacity the storm of Maternal Mortality has besieged happy homes. During the last twenty years, it was found that on average 14,000 mothers die from childbirth alone every year. How many young men there are today who have become widowers even before they could complete their first year of marital life. And how many of these are left with motherless infants to be fed at the chemist's bottles and to be tutored by a mercenary ayah?

We are all morally, socially and economically responsible to mitigate these horrors which are so rampant and devastating. The strength of the nation is rocked at the cradle. The mortality in these two groups of Infants and Mothers, is an index by which the effect of measures of Maternal and Child Health work and the health of a country is assessed.

Maternal and Child Hygiene is an integral part of Public Health. The Public Health authority cares for the health of the individual in his setting in the community, which

community in these days of fast travel and constant intercourse between nations has spread itself and become a worldwide entity. No single Public Health measure undertaken by a Government can in such a context be planned without reference to Public Health as a whole. In the course of national progress all over the world, particularly in advanced countries such as the United States of America and the United Kingdom, health measures have been placed and developed under a specialised Department of Public Health, which it has been found necessary to arm with statutory powers. This is necessary in order that an individual may be safe within a community and the community safeguarded by the habits and ways of living of the individual.

Statutory Powers for Health Service

Maternal and Child Health service is the right of every woman and child and so far Madras is the only State which has a Public Health Act under which provision for Maternity and Child Hygiene also exists. For this purpose, it has been found necessary to cover the whole period of life with such care and supervision as the findings of science demand. Maternity must not be merely regarded as the ten months of pregnancy, the critical hours of labour and the six weeks after birth. It has been found therefore that through such care and supervision is established automatically a system of constant health teaching carried on through the practice of Public Health measures, such as vaccination, registration of births, care of the mother during her pre-natal, intra-natal and post-natal periods of pregnancy and the care of the infant and pre-school child, etc., and through the impression created in the minds of the people who benefit by such measures. Apart from this, a modern Public Health Department undertakes active teaching of the principles and laws of health emphasising prevention. Our Government is doing its best under the circumstances, and with a co-ordinated system of preventive measures and medical care together with Local Bodies and private-aided efforts, Maternity and Child Health relief measures have been established.

Today there are 445 Maternal and Child Health centres in this State, which cater to the 29 million population (approximately) of women and children; 279 are located in rural areas, while 166 centres are placed in urban areas. A proportion of expenditure incurred on maintaining these centres by Local Bodies is met by Government who also contribute 50 per cent towards construction.

Technical Help made Available

The standard of services depends on the technical help and advice and direction available from the staff employed and from medical workers locally. To this effect there are women medical officers, health visitors and midwives employed for technical advice and supervision. The women medical officers are appointed to be in direct charge of the work under the administrative control of the health officer. The task of carrying on Maternity and Child Welfare work on scientific basis is entrusted to them: every aspect of work—clinical, educative, preventive,

relating to obstetrics, normal development of infant and pre-school child, health education of girls in schools and of mothers individually at homes and collectively at centres, receive personal attention. Clinical notes are made in the specified registers and records; every ante-natal mother that attends the centres is radically examined and definite advice given as regards care before and during labour; action taken with regard to reference to hospitals are recorded; the domiciliary work of midwives is supervised by the Women Medical Officer.

The work of a Health Visitor is mainly educative. She is the liaison between the clinic and home; her duties are chiefly to contact the mothers with infants and young children at home and to teach them individually or collectively measures that are necessary relating to Maternity and Child care. She also collects as many of the ante-natal mothers and infants at the centre on the days of the doctor's visit and in the absence of the doctor, may conduct separate ante-natal and infant clinics. She is responsible for seeing that instructions given by the woman medical officer to mothers as regards their children and themselves are carried out in homes. She is also responsible for carrying out referral treatment to hospitals and other medical institutions. Health instructions and health talks are given by her in girls' schools. In short, the Health Visitor is the most important "Health Publicity" agent in the field of Maternity and Child Hygiene and she is responsible for ably interpreting the value of these services to the public.

Proper Setting for the Midwife

One of the hardest tasks achieved by the Public Health authority in Madras has been to place the midwife in her proper setting and thus attain the maximum of proper and correct results through her professional work. The place of the midwife in Maternity and Child Health is considered as the most important in the field. Without her, an entry into the home would be almost impossible. Even at this stage in the development of health education, it may be stated that the services of the Maternity and Child Health staff would hardly be availed but for the free midwifery services rendered. Each midwife is located in a suitable village or municipal area; in the case of rural centres, she attends calls from village within a radius of three miles from the centre. She makes house to house visits, and registers fully each ante-natal case, conducts the delivery and carries out the post-natal care of the mother for ten days, while the infant is followed up from thence onwards till five years of age by the Health Visitor.

The indigenous, hereditary *dais* still continue to monopolise the maternity services in the rural areas. Experience has shown that she can render valuable service if she is given simple practical training and her work supervised by adequately trained staff who would not interfere with her practice and income but would assist her.

Institutional care of pregnant mothers and for their delivery is provided as an essential adjunct to an organised Maternity and Child Health service. To this end maternity beds are provided in many centres and suitably designed maternity homes have been opened in areas where insanitary conditions prevailing in the houses point to the need for adequate sanitary environment during the delivery and puerperal periods.

Voluntary Organizations and Social Workers

Voluntary organizations and social workers should continue to play an important role as they have been doing in the past, but their efforts should be guided by Government. They should contribute in all phases of Maternal and Child Health services, supplementing the work rather than supplanting the rightful duties of official organisations. For the development of special Maternal and Child Health programmes for families of industrial workers, miners, railway employees and for the development of ancillary institutions such as creches, nurseries, etc., it is necessary that there is close co-ordination so that there is no duplication of services. Although health and welfare services should go hand in hand, the functions of these two Departments need to be clearly defined. "Welfare work" in particular is peculiarly suited to voluntary workers. Their efforts are largely important to make the centres a place for social and recreational activities; they may be responsible to dispel dark prejudices and create an atmosphere of co-operation and willingness between maternity centres and the home.

Much can be done if only every one of us realise that the maternity centre is a social necessity which is interwoven into the social structure of that particular locality and should be the most welcome place for the mother and child. In order to bring the centre to such a state, so that it can cater to the needs of mother and infants personalities, let me ask social workers: What have you provided for your baby at a maternity centre? What individual care have you shown and what individual responsibility have you discharged towards the centre to which presumably your wife, your daughter or daughter-in-law belongs?

Without depending entirely on State aid, social workers, particularly those who come from rural areas, can take an active and live interest to build a new or to expand the existing maternity services; only then can we achieve a healthy nation of healthy children.

Prevention and Control of Cholera

The Government have ordered that the following special measures for the control of the epidemic of cholera in the State be taken:—

The Director of Public Health has been permitted, if necessary, in an emergency—

(a) to utilise the services of the Public Health staff employed for malaria, nutrition, etc., for cholera control;

(b) to withdraw some of the Class II Health Officers from certain minor municipalities free from epidemics for temporary epidemic duty in the infected districts;

(c) and to utilise the three motor vehicles supplied to the Nutrition Branch of his department for Cholera work if he feels that vehicles otherwise available with him are inadequate.

The Government have also ordered that for some time the Deputy Director and Assistant Director of Public Health be sent to the infected districts, for being in charge of two or three districts for purposes of supervision and control of the work of the staff.

Improvement of Livestock

By SRI A. B. SHETTY, Minister for Agriculture

The importance of the role played by livestock in the economy of this country is too well known to need any special mention at this place. The improvement of our draught and milch cattle is vitally necessary at this time of food shortage to raise the efficiency of our agricultural operations and add to our food resources. Our present food plan is a short-term plan which is more or less concentrated on maximising cereal production for tiding us over the present food crisis. It has not given due recognition to the contribution which the increase of milk, meat and egg production can make to the improvement of our nutritional standards.

The Dairy Development Adviser to the Government of India has pointed out how the lot of the ordinary cultivator can be elevated through the improvement of his cow. It is possible to increase milk production and grow stronger bullocks, if the cultivator can possess and maintain a good milk cow. Dairying in India must depend upon the cultivator-milk-producer. The development of the dairy industry in our country cannot be visualised without the improvement of the cultivator's cow. We can increase the overall production of milk in the country and also grow stronger bullocks for work purposes by raising the quality of the cultivator's cow. The plan for cattle development, the increased milk production which the Dairy Development Adviser has put forward, is well worth consideration.

Better Feeding and Selective Breeding

The improvement of cattle depends, as we all know, upon the use of approved types of bulls and provision of adequate quantities of fodder and feeds. The village cattle are usually housed in insanitary conditions. They are grossly underfed. The insufficiency of bulky fodders both green and dry as the scarcity and high prices of concentrated feeding stuffs is a great problem for us. No gram fodder is available for our cattle except during the monsoon season. Silage making for use during the hot months is hardly known to our cultivators. Even the dry fodder that is available in the country is said to be barely sufficient to feed one-third the number of our cattle.

A grand thoroughbred buffalo from the Andhra area, on show at Tenali



It has been estimated that the present production of concentrates is only about five per cent of the nutritional requirements of the cattle in our country. The ordinary cultivator cares better for his plough cattle than for his milch animals. He neglects the dry cattle and the young stock. It is a common sight to see wretched starving cattle roaming about to find their own food on the village grazing ground or in the jungle or by raiding the neighbour's crop. In these circumstances the task of improving the quality of our cattle by better feeding seems a very difficult task indeed.

There are very few bulls of the desired quality for stud purposes. We have not been able to issue more than 80 to 100 bulls in a year from our Government Farms. About 1,700 bulls and buffalo bulls are maintained under the premium and other schemes in this State and nearly a hundred of this number are stationed at our veterinary institutions. This number is far short of our requirements which has been estimated at 50,000 bulls. The use of the bulls under the premium scheme is limited to small areas. The improvement effected through the present system of bull supply and distribution must, therefore, be more or less insignificant. Moreover, this upgrading work is to a great extent nullified by allowing scrub bulls to do promiscuous breeding in the same areas.

Cattle and the Key Village Scheme

The Key Village Scheme that has been recommended by the Cattle Preservation and Development Committee has many commendable features about it. The essence of this scheme is to purchase selected young calves in the breeding tracts, rear them on Government farms till they are sufficiently mature and keep the required number of such bulls in a selected village or a group of contiguous villages containing about 500 cows. All the scrub bulls in the key villages are to be compulsorily castrated or removed from that area. This scheme involves no capital expenditure on acquisition of sites or construction of buildings. Every key village will, in course of time, develop into an economic cattle-breeding centre. The Indian Council of Agricultural Research proposes to start a small number of such centres. One of such centres will be in Madras, probably in the Ongole tract. A Village Livestock Improvement Scheme based on the Key Village Scheme idea has been sanctioned for introduction in four Firkas Development Centres in Guntur, Bellary, Tanjore and Coimbatore Districts.

The adoption of the method of artificial insemination can, to some extent, meet the difficulty caused by the shortage of good breeding stock. Artificial insemination work which has been done with success at the Veterinary College Hospital has recently been extended to the hospitals at Coimbatore and Guntur, and there are proposals to introduce it in other suitable centres. Mr. Kothawalla thinks that by resorting to the method of artificial insemination we can utilise the limited number of good bulls

From the inaugural address at the Annual Conference of the Madras Veterinary Assistant Surgeons' Service Association by Sri A. B. Shetty, Minister for Agriculture.

now available in the country to cover a much larger proportion of female stock over wider areas at lesser cost and in a comparatively shorter period. He suggests for this purpose the setting up of "Seed Bull" centres, at suitable places with insemination yards around them within a radius of about ten miles. This arrangement will enable one bull to be employed for the insemination of about one thousand milch cattle in a year. If facilities can be provided for the storage and transport of semen under refrigerated conditions, large-scale adoption of artificial insemination may become more possible for breeding work.

We are having too many unserviceable cattle which reduce the limited food resources available in this country for feeding the more useful cattle. In western countries considerable headway is said to have been made in the development of good stock of cattle by slaughtering unproductive and unserviceable animals. Here, the age long sentiment for Gorakshan prevents such disposal of uneconomic cattle. In view of the public demand for cow protection and preservation the Union Government are asking the State Governments to take steps to prevent the slaughter of all useful cattle as a first step. They are also contemplating the enactment of a Central Legislation and the constitution of a statutory body called the Indian Council of Gorakshan with a Central Board and Boards for each State for organising Gosadans for segregation of useless cattle and Goshalas for cattle development.

Disease Control and Eradication

One of the outstanding problems we have to tackle is the control and eradication of contagious diseases. Frequent outbreaks of these epidemic diseases result in great loss to the poor cultivator and it is one of the two major causes for his indebtedness. More serious than the loss by death is the indirect loss by enfeeblement brought on by some of these epidemic diseases. Rinderpest, for instance, is said to kill about one-third of its victims and incapacitate the remaining number for a longer or shorter period. Veterinary science has placed in our hands vaccines and medicines for the prevention and treatment of the main animal diseases. In western countries they have been able to keep contagious diseases under effective control. Rinderpest has been stamped out. The veterinary facilities available in our State are limited. We have no elaborate legislation for control purposes as they have in western countries. The Veterinary Research Institute at Mukteswar is said to have submitted to the Union Government a plan for wiping out rinderpest from this country within five years. They expect to produce on a mass scale lapinised vaccine which is said to be very cheap and quite effective for this purpose. There is no doubt that cheaper and better vaccines will be discovered and manufactured in future.

Cattle Breeding in Cuddapah

Cuddapah District in Rayalaseema has cattle population of over two lakhs and large tracts of reserve forests and grazing grounds. Yet, the district has been in a disadvantageous position in producing both work-strain and milk-strain cattle for want of good and pure studs. With a view to improve the quality of the local cattle by grading up cows and she-buffaloes with Ongole Bulls and Murrah

buffaloes respectively, a scheme was drawn up and approved by Government in 1948. It is being implemented through co-operatives at ten centres in the first instance, where cow population is predominant. The centres selected are—Saraswathipalle, Chennur, Thippireddipalle, Lingaladinnepalle, Ramapuram, Mantapampalle, Obulam, Chitvel, Kodur and Vempalli. Government sanctioned two Senior Inspectors for the organisation and supervision of co-operative societies at these centres. They were given training for six weeks at the Livestock Research Stations at Hosur and Guntur.

The object of the scheme is to station a stud bull at each centre under the care of a member of the co-operative society to serve all the cows of its members. Government sanctioned a grant of Rs. 800 to each society for the purchase of an Ongole or a Hallikar bull suitable to the locality and a subsidy of Rs. 200 per annum to each society towards working expenses. Two Ongole bulls were purchased by Co-operative Cattle Breeding Societies at Mantapampalle and Saraswathipalle in the latter half of 1949. The other eight societies purchased bulls in March and June 1950. The bulls stationed at Mantapampalle and Saraswathipalle served 36 and 50 cows respectively up to 30th June 1950 resulting in seven and two calves so far. The calves are reported to be in good condition.

The Mantapampalle Cattle Breeding Co-operative Society started to work on 17th July 1949. It has a membership of 16 and a paid-up share capital of Rs. 500. The society purchased an Ongole bull in July 1949, out of the Government grant of Rs. 800 sanctioned under the Livestock Development Scheme in Cuddapah District. It rendered 36 services up to 30th June 1950, resulting so far in six male calves and one female calf. The bull has been included in the premium scheme of the Animal Husbandry Department. Government have also sanctioned a subsidy of Rs. 200 per annum towards working expenses. The bull is in the custody of the President of the Society, Sri P. Ramana Reddy, a rich and influential landholder with a philanthropic and liberal outlook.

The cattle of the members of the society are at present allowed grazing facilities in the neighbouring reserve forests on the permit system. The President proposes to grow improved varieties of grass and to take up ensilaging of forest grass during the winter months to be utilised in summer.

Some fine specimens being groomed at the Mantapampalle Cattle Breeding Co-operative Society in Cuddapah District



Water-supply and Drainage Schemes

With reference to the proposal of the Planning Commission to prepare a 15-year plan for water-supply and drainage schemes throughout the State, comments were made in an editorial of *The Hindu*, dated the 9th November 1950, stating that this Government need not have waited for a directive from the Commission as the Water-supply and Drainage Committee appointed by this Government had already suggested the plans and priorities for water-supply and drainage schemes and the organisation of the Public Health and Engineering Department as a separate unit for dealing with the schemes. The editorial complained that Government had done nothing to draw up a ten-year plan or to quicken the pace of supply of the services and that there was a lack of vigour and imagination in dealing with the problem. The Government regret that a responsible daily should have made observations without having taken the trouble to ascertain the correct facts.

In their Press Communique No. 5, dated 21st April 1949, the Government announced the following decisions:—

1. (a) The provision of water-supply and drainage in urban areas throughout the Province would be completed within a period of 20 years and in rural areas in ten years.

(b) The urban water-supply and drainage schemes would be taken up for investigation, design, preparation of plans and estimates and execution irrespective of the financial resources of the local bodies, with reference to the priority list drawn up by the Water-Supply and Drainage Committee and approved by the Government.

(c) The financial aspect of each scheme would be completely examined and Local Bodies would be required to meet the cost of the scheme only to the extent they are able through accumulations in the Water-supply and Drainage Fund and through such loans, the repayment of which they could finance by levying the water and drainage tax at a reasonable rate considered suitable by the Government with reference to the cost of the scheme and the resources of the Local Body and the population of the town. The balance of the cost, whatever it might be, would be met by the Government.

(d) The local authorities would be permitted to repay the loans in 40 years, where necessary, instead of 20 to 30 years as used to be the case.

Reorganization Carried Out

2. As a preliminary to the formation of a separate Sanitary Engineering Department and with a view to speed up the execution of schemes, the Sanitary Engineering Department has been reorganized and the execution of water-supply and drainage schemes have been transferred from the Public Works Department to the Sanitary Engineering Branch. Five divisions, each in charge of an Executive Engineer assisted by Assistant Engineers, etc., have been created and the question of sanctioning two additional divisions is under consideration. The investigation, designing, preparation of plans and estimates and execution of schemes will hereafter be done by a single authority which will contribute for speedy execution.

3. To avoid work on the schemes being held up for want of pipes and other fittings, the Government have sanctioned

the creation of a reserve stock of pipes and fittings to the value of Rs. 10 lakhs. The Government of India have been addressed to give priority for the supply of pipes and specials. Orders have also been placed for further quantities of pipes required for specific schemes.

4. The Government of India's consent has been obtained for utilising the Army Engineering Divisions and Labour Corps for the execution of water-supply and drainage schemes provided such units are available and can be spared.

5. *Five-year Plan for Municipal areas actually in execution.*—In pursuance of the divisions referred to, a definite five-year programme for the period beginning from 1949-50 has been drawn up for municipal areas actually under execution.

6. *Non-municipal Urban Schemes.*—The Government have approved a compendium in respect of schemes for panchayats with a population of over 10,000 in the case of water-supply schemes, and with a population of over 5,000 in the case of drainage schemes. A priority list has been approved in respect of the most important water-supply schemes. Work on these schemes will be taken up as and when funds become available.

7. *Expenditure on Protected Water-supply and Drainage Schemes.*—During the five years preceding the Five-year Plan, the average grant and loan sanctioned per year amounted to Rs. 6.4 lakhs and Rs. 2.7 lakhs, respectively. After the inauguration of the Five-year Plan in 1949-50 there has been a very great increase in expenditure. Rs. 12.7 lakhs was disbursed as grants and Rs. 7.7 lakhs as loan in 1949-50. In the current year's budget, a grant of Rs. 16.8 lakhs and a loan of Rs. 18.36 lakhs have been provided for. The tempo of execution will increase appreciably from 1951-52.

8. *Rural Water-supply.*—A review of the steps taken for the provision of water-supply in villages since 1915 showed that much headway had not been made. On the basis of the report of the Water-supply and Drainage Committee, the Government have announced their decision that all the villages in the Province should be provided with water-supply within a period of ten years. They have approved a five-year plan beginning from 1948-49 and the work is in progress.

Expediting the Work

Various steps that have been taken to expedite the work are indicated below:—

(1) In 1947-48, the Government created a Special Fund for development of rural water-supply with an initial contribution of rupees one crore. In addition, a sum of Rs. 15 lakhs is being set apart every year from the current revenues for the same purpose. If in any year the schemes to be put through require more than Rs. 15 lakhs the extra amount is drawn from the One Crore Fund.

(2) To facilitate speedy execution, the Collectors have been empowered, as a permanent measure, to approve estimates amounting to Rs. 4,500 in the case of each work.

(3) To overcome the acute shortage of qualified personnel, the Government have sanctioned the training of maistries.

Schemes Sanctioned

During the month of September 1950, the Government sanctioned the following Grow More Food irrigation schemes:—

East Godavari.—(1) An estimate for Rs. 88,380 for works or Rs. 1,17,510 inclusive of direct and indirect charges, for providing irrigation facilities to a block of 1,400 acres in Kathalanka village in Analapuram taluk, East Godavari district. An additional production of 700 tons of foodgrains is expected as a result of the execution of the scheme.

(2) Provisions of irrigation facilities to a block of 882 acres of lands in Kothapeta and Devarapalle villages in Razole taluk beyond the tail-end of the Lolla high level channel. The estimated cost of the scheme is Rs. 52,000 for works or Rs. 68,416 inclusive of direct and indirect charges. The scheme will benefit 882 acres in all, which includes 388 acres of dry lands. The extra food production expected is 194 tons.

The following works are sanctioned under the Tank Improvement Scheme:—

Nellore.—(1) An estimate for Rs. 17,300 for works or Rs. 22,500 inclusive of direct and indirect charges, for improvements to the Gudipadu tank in Gudipadu village of Darsi taluk, Nellore district. An additional extent of 108 acres is expected to be brought under cultivation, yielding an additional production of 54 tons of rice.

(2) An estimate for Rs. 16,000 for works or Rs. 20,820 inclusive of direct and indirect charges, for improvements to the Chinna Nagampalle village in Udayagiri taluk, Nellore district. An additional extent of 100 acres will be brought under cultivation, yielding an additional production of 50 tons of rice.

Distribution of Pig Iron

With effect from the first quarter of the year 1951 the distribution of pig iron will be decentralised and the State Government will take over the work of distributing pig iron to all the foundries, within their jurisdiction, except the following which will continue to get their allotments as at present from the Directorate-General of Industries and Supplies:—

- (a) all foundries owned by the Central Government;
- (b) all railway foundries;
- (c) all foundries forming part of steel-processing factories which are on the list of the Directorate-General, Industries and Supplies;
- (d) Messrs. Indian Iron and Steel Co., Ltd., Kulti.

Foundries not falling under categories mentioned above will be allotted pig iron from State quota. They should apply at once in the prescribed form to the Director of Industries and Commerce, Madras, furnishing full particulars called for therein. The quota certificates will be issued to them by the Director of Controlled Commodities for the quotas allotted by the Director of Industries and Commerce.

(4) Minor Irrigation Supervisors have been employed in addition to Overseers and maistries in the districts.

(5) The drills and pumpsets which can be spared by the Industries Department are placed at the disposal of the Collectors and the purchase of 75 pumpsets at an estimated cost of Rs. 1.43 lakhs has been sanctioned, solely for rural water supply work. The question of purchasing drills and boring sets solely for the execution of Rural Water Supply Schemes is under consideration.

(6) The entire work in regard to the rural water-supply has been entrusted to the Board of Revenue.

(7) Quarterly conferences are held by the Collector in which the District Health Officer, the District Engineer, the Revenue Divisional Officer, the Minor Irrigation Supervisor and Overseers take part, to review the work. The Board reviews the work done in each district half-yearly and submits a report to the Government.

(8) During the years 1942-43 to 1947-48 the average number of works executed was 1,405 per year. This number increased to 1,741 in 1948-49 and to about 3,100 in 1949-50.

(9) During the six years preceding the Five-Year Plan the average expenditure on rural water-supply works was Rs. 16.6 lakhs per year. After the inauguration of the five-year programme in 1948-49, the expenditure incurred in 1948-49 was Rs. 36.28 lakhs and in 1949-50 was Rs. 59.20 lakhs, and the anticipated expenditure during 1950-51 is Rs. 65 lakhs. The One Crore Fund created in 1947-48 will be completely exhausted during the current year. A proposal to replenish the Fund is under consideration.

Models of Madras Irrigation Projects

(Continued from page 27)

(v) *Model of Mettur Dam.*—In addition to these models, there is a large-scale model of Mettur Dam made at the Irrigation Research Station, Poondi. This is a working model with water flowing through the low level and high level sluices of the dam. The Concrete Laboratory has also prepared exhibits including an apparatus to measure the settlement of earth dams.

All these exhibits have been prepared by an Exhibition Committee consisting of five officers of the Public Works Department Irrigation Branch.

The Present Food Situation

(Continued from page 6)

This change of policy is not, however, going to reduce our requirements of rice or other foodgrains as we will have to ensure that enough quantity of foodgrains is made available in the State to meet the overall deficit. The Government of India will, therefore, be pressed to allot for us 3.86 lakhs tons of rice and 3½ lakhs of tons of other foodgrains for the next year. But the advantage lies in the fact that there will be less harassment, less corruption and more contentment in the State, in view of the large volume of opinion in favour of the course now suggested.

—From the statement made by the Minister for Food in the Madras Legislative Assembly.

The Kottakuppam Murder Case

'Truth is stranger than fiction' would probably apply to the cases of murder popularly known in South Arcot District as the 'Maulana Murder Case' or the 'Kottakuppam Murder Case.' The cases are interesting not only from the manner in which the murders were carried out, but also from the manner in which the guilt was brought home to the accused by the Police. It required imagination and perseverance. This case will probably have something to impart to the reader as it brings out the credulous nature of the victims upon whom unscrupulous and dangerous persons like the Maulana play with disastrous consequences.

Kottakuppam is a small village in South Arcot District adjacent to Pondicherry. Here a mollah named M. S. Maulana or Muhammad Syed, a native of Malabar District, was running a dispensary. He professed to cure ailments like stomach-ache and even sterility in the case of women apart from various other diseases, if necessary by black magic. Actually the Maulana knew very little of medicine, but he knew how to play upon the ignorance of the villagers. He had the assistance of two others who professed to know medicine—Selvanayakam, a resident of Pondicherry, who had a certificate to practise Homeopathy and Arunanga Gramani, a neighbour of the Maulana who was a quack. A number of women used to visit the so-called dispensary of the Maulana at Kottakuppam, and quite a number came even from Pondicherry.

On April 10, 1947, a woman by name Mangamma visited the dispensary of the Maulana for treatment. But she disappeared mysteriously from that day onwards. She had on her person jewels valued at Rs. 1,200 and enquiries made regarding her whereabouts by her husband and relatives lead them nowhere. No complaint was preferred to the Police about the disappearance of this woman.

More Women Disappear

The next incident was on 29th April 1948 when Chintamani Ammal who went for treatment to the Maulana's dispensary with jewels valued Rs. 800 on her person also disappeared. Two more incidents followed in quick succession on 29th May and 22nd June 1948 when Selvanayaki Ammal and Visalakshi Ammal also disappeared from the Maulana's dispensary. These two women also had jewels on their persons, the former to the value of Rs. 200 and the latter to the value of Rs. 700. In all these cases the husbands of the concerned women and their relatives made exhaustive enquiries in all likely places and questioned the Maulana also. The Maulana cleverly put them off the scent stating that soon after the treatment the women left the dispensary and that he had no knowledge as to where they had gone. Vague suspicion centred round the Maulana, but nobody knew what had happened to the women and what exactly was the part played by the Maulana.

The husband of Visalakshi Ammal, however, was more persevering and he submitted a petition to the District Superintendent of Police, South Arcot, narrating the mysterious circumstances under which his wife Visalakshi Ammal disappeared and also the strange disappearance of other women. At this point enquiries by the Police started. Since four women had disappeared after visiting

the Maulana's hospital, the Police suspected the conduct of the Maulana and he was arrested. The Maulana flatly denied knowledge of the whereabouts of the women. But there was sufficient publicity in the neighbourhood of Kottakuppam about the facts of this case and public opinion was gathering against the Maulana. The District Superintendent of Police, South Arcot, came to know about this and he took up the matter. Suspecting foul play, he instructed the officers in charge of the investigation to have the house of the Maulana thoroughly searched and also the backyard of the dispensary to be dug up.

Four Skeletons Discovered

These instructions which were in the right direction were carried out and to the surprise and horror of all concerned, four skeletons were discovered in the narrow backyard of the Maulana's dispensary. The backyard itself which was in a triangular shape, measured at one end about 8½ feet and at the other only about 1½ feet. In this, pits were dug up to about five feet depth and skeletons were found kept in sitting posture. The persons responsible for this work, in order to ward off suspicion, had put up plants over the pits after filling them up with earth. There was not much chance of identifying the persons from the skeletons found. In fact, in three pits nothing except the bones were traced. However, in one of the other pits, along with the remains, a woman's skirt, bodice and blouse with dhoby marks were found. In another pit along with a heap of bones some rice was noticed. All these were taken and examined.

The husband and relations of Selvanayaki Ammal readily identified the clothes as that of the missing woman. The forearm was not much damaged and tattoo marks still visible were also recognized by Selvanayaki's husband and relatives. These to a great extent helped to fix the identity of the body. The bones found in all the pits were sent to the Chemical Examiner and they were found to be that of women. In the rice a mixture of ganja was also detected. Excepting the one case in which there was evidence to fix the identity, viz., Selvanayaki Ammal, there was no definite clue to fix the identity of the rest. But there was reason to think that the other three skeletons were that of the other three women who disappeared.

Maulana Throws Blame on Colleagues

The investigating officers now directed their attention again on the Maulana who was by then released from remand. Though the quack denied all knowledge at the early stage, he could not but admit his knowledge regarding the suspicious circumstances when confronted with the discoveries made. He exculpated himself completely and threw the blame upon the other two doctors who were giving him assistance, who however denied all knowledge. This admission on the part of the Maulana did not have any evidentiary value as he exonerated himself completely. Though it was clear that the Maulana was responsible for these murders, it was necessary to bring home the guilt satisfactorily in a Court of Law. Further detailed investigations were undertaken by the Police.

Enquiries showed that Selvanayagi Ammal was brought from her house to the dispensary in a rickshaw. The rickshaw puller was traced and questioned. His evidence

was of considerable value. He mentioned the day on which the woman was taken to the Maulana and also gave the description of the sarree worn by her besides mentioning that she wore some jewels. Selvanayaki Ammal wore that day a blue sarree, almost new, and after purchase she had torn a small bit in order to make out a blouse to match the sarree. The blouse was left in Selvanayaki's house and this was traced. The sarree was removed after Selvanayaki Ammal was done away with from her person and the Maulana had sent it to his wife living a few miles away. This was also recovered and a comparison with the blouse showed that they were of one piece. Other clothes with dhoby marks found in the house of Selvanayaki Ammal were taken and compared with the marks found on the skirt, blouses, etc., recovered from one of the pits with Selvanayaki's remains. All the dhoby marks tallied and the concerned dhoby when examined identified the marks. One of the rings worn by Selvanayaki Ammal of a particular pattern was recovered from the Maulana on search and this was also identified by Selvanayaki's husband.

Possession of Valuable Jewels

The noose round the Maulana was slowly tightening with the discovery of all these facts. There was also the additional fact brought to light that the Maulana who was leading a precarious hand to mouth existence was suddenly found in possession of valuable jewels between May and June 1948 which he disposed of to various persons, some through his son and some directly by himself. The account books maintained by the Maulana also showed the names of Selvanayaki Ammal, Mangamma and the two other women missing. All these factors showed clearly that the Maulana was the person responsible for the death of these women who after murdering them buried them in the backyard. He had done this for purposes of gain, viz., for the value of jewels found on the women who foolishly went unaccompanied to the Maulana's dispensary decked themselves with costly jewels and sarrees.

As already mentioned, the Maulana implicated the other two doctors. Their houses were also searched along with the Maulana's. Hypodermic needles and boxes containing ampoules for injection marked 'Morphine Chloride' were recovered from the shop of the Maulana.

Diabolic Nature of Murder Plan

As regards the actual murder, evidence could not be let in. It was however ascertained that morphia injection was first given to the women under the pretext of curing the disease and when they were unconscious doses of chloroform were administered through the nose and the combined effect of these was the quick death of the women. The bodies were then taken to the backyard and after the valuables were removed the bodies were kept in the pits dug in a sitting posture in order obviously to save more space and to bury more victims. It was a diabolical plan and was carried out without the least sympathy or consideration for the poor women who trusted the Maulana and his assistants. The two assistants of the Maulana who professed to practice medicine had no doubt a hand in these murders, but conclusive proof was lacking to show the part played by them.

The Maulana and the two other assistants and the Maulana's son were all charged for murder, conspiracy to murder and conceal evidence. The evidence was purely

circumstantial but was strong against the Maulana. The Moulana was convicted and sentenced to be hanged while the other three were acquitted.

The earlier investigation was conducted by the South Arcot Police and late the case was handled by the Crime Branch, C.I.D., Madras. The suggestion given by the District Superintendent of Police, South Arcot, that the backyard of the dispensary be dug up, was most valuable and this started the chain of investigation that followed and brought home the guilt of the clever and unscrupulous quack Maulana who had planned to lead to the grave not only these four unsuspecting women but a number to follow if only he was allowed to practice further.

Minimum rates of wages for Employees in Rice Mills

The Government have notified the fixation of minimum rates of daily wages specified below as payable to employees of rice mill, flour mill or dal mill. The notification will come into force on the 1st January 1951.

Class of employees.	Minimum rate of daily wages.		
	RS.	A.	P.
Amalis or kata mazdoor	1	4	0
Bag stitchers	1	4	0
Bag weighers	1	5	0
Carriers of husk	1	0	0
Carriers of rice	1	0	0
Mazdoor (including miscellaneous workers)	1	0	0
Engine drivers	1	12	0
Electricians	1	10	0
Firemen	1	4	0
Fitters	1	4	0
Hullermen	1	2	0
Mechanics	1	8	0
Maistries	1	4	0
Oilers	1	2	0
Paddy boilers	1	2	0
Paddy driers	1	2	0
Paddy millers	1	2	0
Paddy soakers	1	2	0
Sweepers	0	12	0
Shellermen	1	2	0
Winnowers	0	12	0
Water carriers	0	12	0
Watchmen	1	0	0

Financial Aid to Displaced Students

The Government have appointed the Director of Public Instruction as the competent authority to sanction the stipends to non-Muslim displaced students from Pakistan taking up collegiate and technical education in the educational institutions of this State and to grant the concessions to students of Primary and those of class V to High School Standard mentioned in the Government of India's scheme. This scheme will be enforced with immediate effect and will hold good for a period of three years ending with 31st March 1953.

Corruption Among Government Servants

During the month of July 1950, corruption among Government servants was brought to notice against 308 persons including those against whom proceedings were pending at the end of the previous month. Of these, 14 persons were let off as charges against them were not proved and proceedings against 278 were pending at the end of the month. Corruption was successfully detected in the case of the remaining 16 persons and they were suitably punished. Of these, two persons were awarded minor punishments. The names and designations of the 14 persons who were awarded severe punishments are as follows :—

I

CASES DEALT WITH BY THE TRIBUNAL

A. Gazetted Officers—Nil.

B. Non-Gazetted Officers

- | | |
|---|-----------------------|
| 1 Solaimalai Konar, Inspector of Police, Ramanathapuram District | Removed from service. |
| 2 Ramasundara Kone, Sub-Inspector of Police, Ramanathapuram District. | Do. |

II

CASES DEALT WITH BY DEPARTMENTAL AUTHORITIES

A. Non-Gazetted Officers

- | | |
|---|-----------------------|
| 1 P. V. Parameswara Ayyar, Lower Division Clerk, Port Office, Mangalore. | Compulsorily retired. |
| 2 M. Subrahmanyam, Attender, Controlled Commodities Department | Services terminated. |
| 3 R. Sadasiva Reddy, Forest Guard, Anantapur Division | Do. |
| 4 Ch. Venkatapathi Raju, Officiating Head Constable, Visakhapatnam South District. | Dismissed. |
| 5 Palanimuthu, Constable, South Arcot District | Do. |
| 6 Annamalai, Constable, South Arcot District | Do. |
| 7 Shaik Bandagi Sahib, Railway Constable, Government Railway Police, Madras. | Do. |
| 8 A. M. Swaminathan, Lower Division Clerk, Civil Supplies Department (Madras Collectorate). | Do. |
| 9 Nabi Rasool, Prohibition Guard, Krishna District | Do. |
| 10 Abdul Rahim, Prohibition Guard, Krishna District | Do. |
| 11 Akbar, Prohibition Guard, Krishna District | Do. |

B. Inferior Servants.

- | | |
|--|-----------------------|
| 12 Chowdappa, Forest Watcher, Anantapur Division | Removed from service. |
|--|-----------------------|

During the month of August 1950, corruption among Government servants was brought to notice against 346 persons including those against whom proceedings were pending at the end of the previous month. Of these, 25 persons were let off as charges against them were not proved and proceedings against 311 were pending at the end of the month. Corruption was successfully detected in the case of the remaining ten persons and they were suitably punished. Of these, five persons were awarded minor punishments. The names and designations of the five persons who were awarded severe punishments are as follows :—

CASES DEALT WITH BY DEPARTMENTAL AUTHORITIES.

A. Non-Gazetted Officers.

- | | |
|---|--------------------------|
| 1 Appukutty Nambiar, Head Constable, Malabar District | Dismissed. |
| 2 K. P. Kesavan Nair, Jemadar, Malabar Special Police, Malappuram | Do. |
| 3 G. H. Ponniah, Health Inspector | Do. |
| 4 P. Narasimulu, Prohibition Guard, Sriakulam Circle | Discharged from service. |
| 5 N. Nagarajan, Line Inspector | Services terminated. |

B. Inferior Servants—Nil.

Enforcement and Ameliorative Measures

To ensure the successful working of the Prohibition campaign, the Prohibition Department implements enforcement and ameliorative measures. The former include action against illicit tapping and distillation, smuggling of liquor and offences relating to intoxicating drugs and spirits. Under the latter head come activities such as provision of employment to ex-tappers, organisation of co-operative credit societies for the economic and social welfare of rural areas, recreation and thrift drives. Following is the report on the working of Prohibition in Madras State for the month of August 1950.

ENFORCEMENT

Cases.—During the month 6,467 cases were detected as against 6,485 in the previous month. In Anantapur and Cuddapah Districts record number of cases was detected. In the Nilgiris District where the number of cases reported hitherto was negligible, 21 cases were registered. In raids in Tadpatri of Anantapur District 4,855 gallons of fermented wash, six gallons of I.D. arrack and 29 working stills were seized.

Illicit distillation and kindred offences.—Of the total number of cases reported in the State, 2,930 related to I.D. and kindred offences against 3,045 in the previous month. Of these 1,179 related to I.D. and the rest to possession and sale of I.D. spirits. There was a steep rise in the detection of illicit distillation and kindred offences in Cuddapah while there was marked fall in Kurnool and Tiruchirappalli Districts. A quantity of 8,384 gallons of wash and 41 working stills were seized in the open hills in Onahally Thanda which is the source of supply of illicit liquor to Bellary Town. The Collector of Bellary, the District Prohibition Officer with his staff and the Advisory Council Members raided a house and unearthed 32 gallons of arrack. In Cuddapah District incessant raids in villages noted in illicit distillation yielded satisfactory results. In Salem District notorious I.D. centres received adequate attention by the Police. I.D. crime around Rajahmundry Town is heavy and the D.P.O. is taking all steps to check the crime. In West Godavari District several notorious illicit distillers were booked. Crime under this head was successfully tackled in the sandy tracts of Tuticorin Circle. In Mylapore in the Madras City, two persons were caught redhanded while they were getting down from a catamaran near Adyar beach with eight gallons of I.D. arrack.

Illicit tapping.—One hundred and thirty-one cases were reported as against 193 in the previous month. Of these 124 related to tapping for fermented toddy, five to permitting sweet toddy to ferment and two to tapping for sweet toddy without licences. Tapping offences showed a decline due to the termination of the sweet toddy season. In the sandy palmyrah topos of Tuticorin Circle a large number of illicit tapping cases was detected.

Smuggling of liquor.—Ninety-nine cases were detected as against 135 in the previous month. Of these 88 related to bringing in of liquor from other States and 11 to smuggling from district to district. The decrease was mainly in South Arcot and is attributed to the temporary lull in the activities of smugglers. In South Arcot 47 bottles of

foreign liquor, 62 bottles of brandy, seven gallons of French arrack and six gallons of toddy were seized. On Karaikal borders 17 cases were detected.

Intoxicating drugs.—One hundred and seventy-seven cases were reported as against 131 in the previous month. Of these three related to cultivation of hemp plants. One to smuggling from district to district, 18 to smuggling from other States and the rest to possession of drugs. In Anantapur District 8 seers 70 tolas of ganja were recovered in four cases detected. The ganja was smuggled from Mysore for consumption in Cuddapah District. In Koilkuntla Town, Kurnool District, 21 seers of unpressed ganja were seized in a raid besides other contraband. The Salem Police detected a case of smuggling of 55 tolas of Mysore ganja. In West Godavari two cases of illicit cultivation of hemp plants involving 24 plants in all were detected. Smuggling of ganja from Mysore is on the increase. Necessary instructions have been issued by the Board of Revenue for taking suitable steps to check this offence. In Royapuram a case of possession of two seers of opium was detected; 36 seers of opium were seized at Chingleput Railway Station from some luggage booked from Delhi to Guntakal and rebooked from Guntakal to Chingleput.

Denatured spirit.—The total consumption was 13,704 gallons as against 16,522 gallons in the previous month. Twelve cases of rendering denatured spirit fit for human consumption were reported in the State—North Arcot (five cases), Tiruchirappalli (one case) and Madras (six cases). In one case in North Arcot 51 gallons and 32 grams of denatured spirit were seized from a bullock cart.

Border problems.—Border checks continued to be effective in the month.

AMELIORATION

Provision of employment to ex-tappers.—During the month three jaggery manufacturing co-operative societies were organised in the districts. The jaggery societies in the State produced 1.01 lakhs of maunds of jaggery worth about Rs. 56.69 lakhs. Two milk supply societies one at Pedapatnam in the Rajahmundry Circle and the other at Kasiralla in the Chittoor District and one Land Colonisation society in the Salem District were formed during the month for the benefit of the ex-tappers. Two Field Labourers' Co-operative Societies, one in the Kakinada Circle and the other in the Salem District were also organised. Four hundred and nine ex-tappers were found employment in various other avocations as agricultural labourers, unskilled workers in commercial and industrial establishments as watchmen, peons, gang coolies, etc.

The Palm Gur Instructors appointed by the Government trained the ex-tapper members of jaggery societies in improved methods of jaggery manufacture. So far they have given training to 702 ex-tappers.

Gramasangams and Rural Credit Societies.—During the month, 12 gramasangams were organised in the districts. This brings the total number of Sangams so far organised to 13,453. Of these 4,819 did active work during the

(Continued on page 41)

Palm Candy Making in the Far South

By SRI S. V. KAMAT, All-India Village Industries Association, Wardha

Candy manufacture is a lucrative profession mainly practised in the southern coastal strip of Tiruchendur Taluk for centuries. The following is a short note prepared from observations of the process and prevailing conditions.

As I was a stranger to those parts and also to their language (Tamil), I had to get an interpreter. Ex-students of our Gram Sevak Vidyala have established themselves in all parts of India. One Shri Kumaraguruparan is working in the neighbouring village of Sankaranayainarkovil, in North Tirunelveli. He became my host, guide and mediator by turns. His resourcefulness is largely responsible for enabling me to finish this survey in the unknown wilderness with comparative ease and brevity of time.

The season was nearing its end (it ended by the 15th August) so, we had to hurry along by the southern bus up to Tirunelveli and thence by the easterly train to Tiruchendur. Here enquiries revealed that Udangudi, a coastal village ten miles south of Tiruchendur, was a flourishing centre. As that place was strange even to Kumaraguruparan, we secured some credentials and proceeded by bus. The route lay through saline wastelands thronged with palms (thick with palmyras and sparsely with coconuts).

Driven to Candy Manufacture

South India, especially Tirunelveli District is endowed with innumerable palmyras. Then why, I asked myself, out of all these palmy places should this far-off barren belt of land specialise itself in candy-making? As far as agricultural crops were concerned it was the barren waste land that had deprived the population of their main employment—paddy cultivation. The unemployment which the geographical conditions had imposed seemed to be the main incentive to the ever devising human brain to probe deeper in the palm gur industry and develop it into a refined art of candy manufacture. Palm gur making was, and still is, a subsidiary vocation to agriculture in other parts but here it had to be evolved into a whole-time profession. When Nature had forbidden a man to work as a simple farmer, he had to transfer himself into an artisan, an adept in preparing crystalline candy.

Crystallization Process

The tapping season is from mid-May to mid-August. A candy maker usually employs three to six tappers. Neera, the sweet palm juice, is boiled into rab to the consistency of 108 G. At this point the boiling syrup from the earthen pots over the furnace is quickly ladled out in a palmyra-leaf container, through which it is carried to big earthen jars that are buried to the neck in sand in a nearby hut. The capacity of these storage pots in which the rab is crystallized into candy, is 80 lb. or so. It is necessary to fill the jars within two days so as to ensure proper crystallization. Therefore, unless there was sufficient juice (say 300 lb.) to produce at least 40 lb. of rab, candy making could not begin. Usually, it started in the first week of June and stopped after two months.

As soon as the jar is full, some eight or ten tiny sticks of a local bush named korandy are inserted in it vertically.

Then it is left alone for the next 40 days, during which crystals are formed around the korandy and also on the inner surface of the jar, half of which is 'solidified' with fine crystals of minor dimensions. After taking out the bulging korandis and the other crystals, the remaining syrup is emptied over an improvised 'filter'—an inverted bottomless jar with a piece of perforated mat at its mouth). To collect the oozing molasses a pot is used. The crystals are allowed to remain for 24 hours, and then dried by being spread on a mat.

Economics of the Industry

A tapper taps 30/40 trees, drawing, on an average at least 180/200 lb. of Neera every day. The boiled rab would amount to 35/30 lb. out of which approximately 8 lb. of candy and 20 lb. of gur is produced. The former would fetch him something more than Rs. 4 and the latter Rs. 3 per seer. The total returns of the two months of candy manufacture would be Rs. 400 or so. This would be subsidized by another 100 rupees earned by the sale of gur that is produced in the season.

It was equally difficult to calculate the expenses. Besides food and some cloth, the actual sum paid to the tappers varied from Rs. 150 to Rs. 200. There was a woman boiler for every three tappers and two other females to collect fuel, who were likewise fed, clothed and paid Rs. 30 each at the end of three months. All these wage-earners were temporary emigrants from the Cape Comorin area.

Potentialities and Conditions

Tree rent Rs. 200, earthen vessels for collecting and boiling Rs. 100, storage jars Rs. 100, shed Rs. 100, sundry Rs. 100, total Rs. 600. Three tappers would produce candy and gur worth Rs. 1,500. So, the net profit to a family of six comes to Rs. 900, at the end of three months. But the primary condition which enables them to earn this lucrative sum is that they must put in united effort and should be able to invest at least Rs. 1,000, because for the first two months or so no returns could be expected, as all the available juice is boiled and used for crystallization. As the meagre resources of the average tapper could not collect this amount, the well-to-do community (the petit-bourgeois class) of the village had stepped in and a hire-and-lease system was established, in which the hard-working tappers received less, the lion's share being taken away by the landlords. Unless some genuine co-operative society financially helped them and pooled their solitary toil into suitable units ranging from three to eight tapper families, there seemed to be no solution to improve their lot.

The industry is in the same old primitive condition. The slow unscientific boiling involves more fuel, labour and time. Moreover they are negligent in retaining the lime which chars and embitters gur. The meagre resources, the strenuous effort, the utter ignorance about modern scientific devices and lack of will or wish to get them simplified to suit their environment, were some of the reasons why the industry has not made any headway.

Rural Development Work to be Entrusted to Non-Official Agencies

With a view to extending the Rural Development work to additional areas and in order to effectively stimulate healthy competition between the official and non-official agencies, Government have decided to entrust the Rural Development work to five non-official institutions engaged in doing constructive work. These non-official institutions will be paid grants and will be expected to select a compact area not exceeding the size of a Revenue Firka for carrying out rural development work on the lines indicated in the general plan for Firka Development.

The non-official institutions should engage themselves in the following items: provision of communications, provision of drinking water facilities, improvement of sanitation, improvement of agriculture, development of khadi and other village industries, and other items of the constructive programme such as adult education, establishment of multipurpose co-operative societies, etc. The assistance and the advice of the officers concerned of the several departments of the Government will be made available to these institutions whenever required.

The application for the selection of non-official institutions for being entrusted with rural development work should be sent through the Collectors of the districts.

Prohibition

(Continued from page 39)

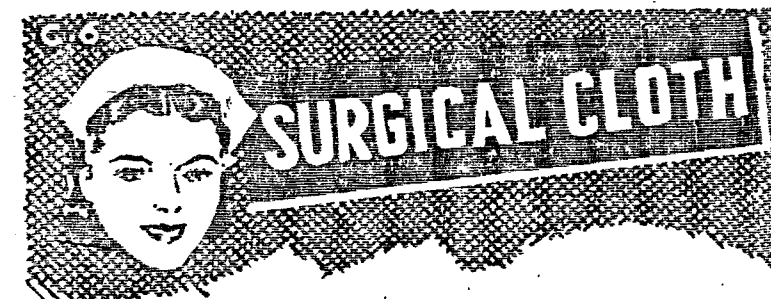
month attending to various items of work such as the provision of counter-attractions to drink and the improvement of the economic and social conditions of the villagers, particularly in the direction of public health, sanitation, communication, education, agricultural improvement and the welfare and uplift of woman.

Three hundred and fifty-six rural credit societies amended their bylaws for undertaking social and recreational activities, bringing the total number of such societies at the end of the month to 5,956. They did good work in running reading rooms, opening libraries, installing radio sets, etc.

Substitute to drink.—During the month 15 tea stalls were opened in the districts. They were very popular.

Rural recreation.—Dramas, bhajanas, kalakshepams and folk dances were conducted as usual in many places. During the month the Rural Welfare Officers visited 1,772 villages and conducted games and tournaments in 592 villages.

Thrift.—During the month 738 hundi boxes were distributed in the villages and a sum of Rs. 30,285 was saved through them.



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Control Orders in Force on October 31, 1950

Food and Agriculture Department

THE MADRAS FOODGRAINS PRICE CONTROL ACT, 1949

This order fixes procurement and wholesale issue prices of foodgrains for the year 1949-50, in the several districts of the State. The order contains six schedules specifying the different prices, charged above and payable to producers or other stock-holders for deliveries of paddy or rice, etc., made by them in accordance with the notification of the Collector of the district. Nothing contained in this order shall apply to the purchase of paddy and millet seeds by officers of the Agricultural Department. The State Government of the Commissioner, of Civil Supplies, Madras, may by a general or special order authorise an increase over the prices specified for F.O.R. deliveries, ex-mill/godown and wholesale prices of paddy, rice and millets to meet the fluctuations in interest and capital extra transport charges, increase in cost of gunnies, etc.

FOODGRAINS INTENSIVE PROCUREMENT ORDER

This order extends to the whole of the State of Madras. This empowers the Government to issue directions to the Collector or any other officer which they may deem fit to requisition stock of foodgrains whenever the Government consider it necessary to do so.

SALT PRICE CONTROL ORDER, 1947

This order specifies the ex-factory price exclusive of the cost of the gunny and cess for each of the salt producing district of the State. The prices vary between 12 annas to 15 annas per imperial maund after the abolition of the salt duty and in order to ensure the full benefit of the concession to consumers. The Collectors of the districts have been empowered to fix the maximum wholesale and retail prices of salt for each consuming area within the respective districts to the cost and factory price, cost of the gunny, transport charges, handling charges, wholesalers profits of 6½ per cent. No producer, wholesaler or retailer should sell salt at price exceeding the notified price. Failure to comply with any of the instructions will render a dealer punishable in the court of law.

THE MADRAS RATIONING (PREPARATORY MEASURES) ORDER, 1947

This order enables Government to take the preliminary steps such as enumeration of householders, etc., for the introduction of statutory rationing in any area. In an area where this order has been extended with a view to the introduction of statutory rationing in that area Government may authorise any person to collect information and statistics necessary for the rationing of foodstuffs. Every person, of whom any question is asked by the enquiry officer authorised by the Government in connection with the rationing of foodstuffs, is legally bound to answer such questions. Every person occupying any premises shall allow the numbering officer or enquiry officer such access thereto as may be required for the purpose.

THE MADRAS RATIONING ENQUIRY ORDER, 1947

This order enables the Government to call for the necessary particulars from establishments in an area where

statutory rationing is proposed to be introduced. In an area where this order has been extended, every person owning or in charge of any establishment in that area shall furnish to the officer specified by the Government true and correct information relating to such establishments as may be required by the said officer if such establishment desires to obtain rationed articles for consumption after the rationing date.

THE MADRAS RATIONING ORDER, 1947

This order regulates the distribution of rationed articles to householders, establishments, retailers and wholesalers in the statutorily rationed areas.

The following is the list of offences under this rationing order:—

- (1) It is illegal to transfer one's ration card to any other person.
- (2) It is illegal to use another person's ration card.
- (3) Defacing or destroying one's ration card is wrong. Further a new card in place of a lost one can be got only on payment of a fine of two annas.
- (4) Every change in the members of a family owing to death or absence from the household for a period of not less than seven days shall be reported to the Rationing Officer within ten days in the case of death of a member and within 14 days in the case of absence of a member from the household.
- (5) Change of address of cardholders should be reported to the Rationing Officer within ten days from the date on which the change takes place.
- (6) Rations should not be drawn for a person who is not in the rationed area.
- (7) If a cardholder is leaving the rationed area permanently he should return the ration card to the Rationing Officer. If a cardholder is leaving the rationed area with his family temporarily for a period of not less than eight weeks he should surrender the ration card to the Rationing Officer.
- (8) Rations should not be drawn for the same person on more than one ration card.
- (9) Possession of more than one ration card is an offence.
- (10) Rationed articles should not be purchased from an unauthorised dealer and except on a ration card.
- (11) A landholder owning lands in a rationed area should intimate the date of harvest of his lands to the Rationing Officer and should obtain a permit from the Rationing Officer either for retaining the produce for his consumption or for transporting the quantity outside the rationed area or for selling the surplus grain with him.
- (12) A landholder in a rationed area who imports grain from his lands outside for personal consumption, etc., shall inform the Rationing Officer of the date of arrival of the consignment and the place of storage, and should keep account for the quantity spent.

THE ESSENTIAL ARTICLES RESTRICTED ACQUISITION ORDER, 1947

This order is in force throughout the State. Under this order no person shall acquire any essential articles, viz., paddy, rice, beaten rice, millets, wheat, maida,

maize or rice flour, if by so doing the quantity thereof in his possession or under his control will exceed the normal quantity required for consumption in the household or establishment during a period of one month. The restrictions do not apply to the acquisition in the ordinary course of his business of any essential article by a person carrying on the business of a producer, dealer, manufacturer, carrier, or warehouseman.

THE MADRAS FOOD (RESTRICTIONS ON SERVICE OF MEALS BY CATERING ESTABLISHMENTS) ORDER, 1947

This applies to the whole of the State. Under this order no catering establishment shall supply or offer or attempt to supply for consumption and no person shall obtain or consume or attempt to obtain or consume at or in connection with any catering establishment for purposes of any single meal more than three courses. The three courses shall consist of (a) one substantial dish, (b) one subsidiary dish and (c) one sweet dish or (a) two subsidiary dishes and (b) one sweet dish.

ORDER RESTRICTING THE NUMBER OF PERSONS TO BE FED AT PARTIES OTHER THAN MARRIAGE PARTIES

This order is in force throughout the State of Madras. Under this order no person shall give or allow to be given or take food at any party at which the number of persons to whom food is served including the person or persons giving the party exceeds thirty. This does not apply to a marriage party or to a party where one or more of the following are served:—Parched gram, nuts, fruits, drinks and biscuits and cakes made of non-cereals.

Note.—The Government of India have fixed revised limits in this regard and the matter is under examination.

ORDER RESTRICTING THE NUMBER OF PERSONS TO BE FED AT MARRIAGE

This order extends throughout the State of Madras. Under this order no person shall provide food or cause or allow food to be provided at any marriage party on the marriage day for more than two principal meals for more than fifty persons at each such meal including the bride, the bridegroom and the relations of either. 'Food' does not include drinks or parched gram or nuts or fruits or biscuits and cakes made of non-cereals which can be served to any number of persons without restriction.

Note.—The Government of India have fixed revised limits in this regard and the matter is under examination.

THE COTTON CROP (COMPULSORY GROWTH WITH CHILLIES) ORDER, 1950

This order extends to the whole of the State of Madras. According to this no person who cultivates the rain-fed crop of chillies in any of the districts of Guntur, Krishna, East Godavari and West Godavari in the State of Madras except as a crop mixed with cotton in the proportion of not less than one line of cotton plant to every 14 lines of chilli plants.

THE MADRAS MANURE DEALERS' LICENSING ORDER, 1947, AND THE MADRAS OILCAKE (MOVEMENT CONTROL) ORDER, 1943

These orders have been re-issued as Madras Manure Dealers' Licensing Order, 1949, and Madras Oil Cake (Movement Control) Order, 1949, respectively, under the

Madras Essential Articles Control and Requisitioning (Temporary Powers) Ordinance, 1949, since enacted as the Madras Act XXIX of 1949.

THE MADRAS WHEAT, RICE, BLACKGRAM AND SUGAR PREPARATIONS (MOVEMENT CONTROL) ORDER, 1947

This has been cancelled.

THE MADRAS SUGAR (TRANSPORT CONTROL) ORDER, 1949

According to this order no sugar shall be transported or offered or accepted for transport whether by rail, road or water, or by any carrier or other person except under and in accordance with the general or special permit issued by the Commissioner of Civil Supplies, Madras, or his nominee.

For the purpose of this order sugar means sugar manufactured by any process including sugar made in vacuum from factories, from sugarcane or gur or palmyra jaggery as well as khandasari sugar, sugar candy (misry) and bura.

THE MADRAS FOODGRAINS (LEVY PROCUREMENT) ORDER, 1950

This order is in force in Coimbatore District. According to this order, the surplus of each producer is determined with the scales of levy prescribed in that order.

THE MADRAS FOODGRAINS (INTENSIVE PROCUREMENT) ORDER, 1950

This order is in force in all areas of the State except the districts of Malabar, Coimbatore and Madras City; both paddy and millets have been brought within the scope of this order. Under this order producers of foodgrains are required to deliver their surplus produce as determined by the Government to the Collector or his agents within the dates notified by the Collector. Further the Collector may direct, even before the determination of the surplus, the sale of a specified quantity of foodgrains to the Government. The allowance to be given to the producers are also prescribed in this order. A provision for the seizure and confiscation of the vehicles, animals, etc., used for lorries transport of foodgrains has been made in the Order. Any holder of stocks can be asked to deliver his stocks to a nominee of the Collector at prices fixed by him and failure to do so will entail the seizure and disposal of the stocks.

BRAN AND STRAW TRANSPORT ORDER

The order regulating the transport of bran or straw from the South Arcot District as subsequently amended ceases to be operative with effect from 16th August 1950.

THE MADRAS FOODGRAINS CONTROL ORDER, 1947

This order generally controls all dealings including trade in wheat, paddy (rice in the husk), rice (husked), cholam (jowar), cumbu (bajra), ragi, korra, maize and rye exceeding ten maunds by a system of licensing. For the grant of a licence under this order in respect of dealing in foodgrains, one must have been in the foodgrains trade during any period prior to 22nd June 1942, the date on which this order first came into force.

More Trees Mean More Food

By SRI T. JEYDEV, B.SC. (HONS.) A.I.F.C. (HONS.), District Forest Officer, Nellore

On the first July 1950 we celebrated all over the Indian Republic 'Vanamahotsava' with a national zeal characteristic of a free nation. The ceremony went off with great éclat and it is worthwhile to deliberate the reasons for celebrating the festival of trees.

Briefly stated, the main reasons are—

(1) To inculcate upon the public the importance of forests and to develop an attitude of reverence and sacredness towards the Tree—the real staff of our very existence;

(2) to replenish to a certain degree the destruction which the improvidence of Man had wrought on the forests in the recent past; and

(3) to aid our arduous task of growing more food to feed the growing population.

From time immemorial trees have been revered by one and all. The importance of the tree for the well-being of man had been recognized both by the sage and the common man and different species of trees were worshipped in different countries. When wooded lands were in plenty, little thought was given to any destruction of a portion of forest land because the evil that resulted was insignificant. The needs of a growing population and the requirements of timber and fuel for a host of purposes in modern civilisation have made the axe fall heavily on the wooded wealth of the nation and the grim struggle for very existence had brushed aside the sentimental regard for the tree.

The time has come to cry a halt to the vandalism which man unknowingly had caused. Efforts made by the State to preserve the forest wealth of the nation would not be of much avail if the man in the street is not made to realise the value of the tree. The sagacity of Sri K. M. Munshi, Minister for Food and Agriculture to the Government of India, had conceived the magnificent idea of celebrating the festival of trees with such grandeur as to catch the imagination of the common man and to restore the spirit of reverence towards the tree. When the country becomes tree conscious and forest loving, the significance of keeping a certain portion of the land for conservation by the Forest Department will be appreciated by everyone.

Food and Forests

The relation between Food and Forests may appear paradoxical but nothing is more dependent on the other, that is, Agriculture on Forestry. For growing more food two important conditions are essential, viz., (1) good soil and (2) sufficient moisture. Without a good forest canopy at least over 25 per cent of the country, it is not possible to conserve the necessary moisture which the seasonal rainfall showers on us, and all our attempts at growing more food will be set at naught if it is without this fundamental appreciation of the necessity to retain sufficient moisture to sustain the food crops. Without the forest lands to arrest the run-off and thereby protect the loss of fertile soil by erosion, diminishing yields will result because of the impoverished soil and arid conditions. Forests conserve the moisture obtained from rainfall and

feed the springs and riverlets gradually and steadily so that permanent sources of moisture are rendered possible.

Forests serve the needs of agriculture adjoining it by giving the cultivator his requirements and by affording his cattle ample pasture. Forests provide means to replenish the impoverished soil with greenmanure and help the cultivated lands to maintain the texture of soil by warding off the evils of erosion. Though the Forest Department is conserving the forests under its charge, the percentage of really wooded tracts is not sufficient to confer on agriculture to a full measure the benefits of forests. If more lands come under more trees, leaving the optimum acreage for cultivation, more food per acre would result. Unless the green glory that was restored as speedily as practicable, there is no escape from stark hunger stalking the land.

Famine follows Denudation

When forests go fertility departs and pestilences follow. Much of our wooded land under private control had been ruthlessly exploited recently and the general denudation of tree growth had affected food production and made famine to show its ugly head. The impoverishment of soil by repeated cropping and the growing population of the country had created a food problem, which we have to solve if we have to live. The conditions that are essential for growing more food are so intimately connected with forestry that we must see that the lands under good forests are maintained carefully and where they are not and where they should be grown, intensive efforts at afforestation should be made. The scale in which the Forest Department had been doing planting work in the past had been stepped up all over the country for meeting the demands of the public for a variety of purposes.

But the incessant cry from the public for disreservation of forest areas to bring more land under cultivation is a pointer to show that many have not yet realised that they are destroying the very source of food in the name of more food. The people who want more forest land to be brought under the plough must realise that the cry for disreservation is only an easy escape from a difficult situation which should really be tackled by maintaining optimum percentage of land under forests and devising ways and means to improve the yield per acre by intensive cultivation. The ruthless and indiscreet destruction of forests have made the deserts to advance, the sources of moisture to dry up and the fields to go barren. The choice before us is either "Trees or Famine." Unless we grow more trees we cannot save off hunger from this land.

Gift of Maternity Ward

The Government have accepted with thanks the offer of late Sri V. Kamiswara Rao Naidu to donate a sum of Rs. 35,000 for the construction of a maternity hospital with six beds at Pundi Railway Station, Visakhapatnam, on a site to be given free of charge by the donor at Pundi Railway Station.



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A licence fee of Rs. 24 per annum for each licence or exemption certificate issued or to be issued under the order has to be paid by the applicant.

The Commissioner of Civil Supplies or an officer authorised by him in this behalf may in special cases condone any delay in the payment of the said fee up to any period specified by him on payment of a penalty of Rs. 2 in every such case.

Every applicant should produce satisfactory evidence to prove that he was in the foodgrains trade during the period prescribed. He should not also have been found guilty at any time of hoarding or black-marketing offences under the Control Order or even strongly suspected of having indulged in anti-social activities. Harijans, co-operative societies, hand-pounding concerns, ex-akbari contractors, ex-servicemen's associations, etc., are exempted in deserving cases from the conditions regarding the previous business standing.

THE MADRAS FOODGRAINS (MOVEMENT CONTROL) ORDER, 1947

This order controls the movement of foodgrains from places within the State of Madras to places outside it by a system of permits created in certain cases and under certain conditions specified in the order. Permits under the order are issued by the Commissioner of Civil Supplies, Madras. Small quantities of foodgrains forming part of the luggage of bona fide travellers, grains intended for seed purposes, etc., are exempted from the operation of the order.

This order has been extended to apply in the case of imports of foodgrains. A permit is necessary for the import of foodgrains into the State.

ORDER PROHIBITING THE PLYING OF MOTOR VEHICLES DURING NIGHTS

According to this order no driver, owner, or other person in charge of a motor vehicle for which a public carrier's permit or a private carrier's permit has been granted shall, when such vehicle carries foodgrains except bengalgram, groundnut (shelled and non-shelled), drive it or cause it to be driven between the hours of 7 p.m. and 6 a.m. on any road or land notified by the District Magistrate in the districts and by the Collector of Madras in Madras.

Foodgrains transported under Military Credit Notes are exempted.

THE MADRAS RICE MILLS LICENSING ORDER, 1947

This order is in force throughout the State. According to this order, millers in the State are required to take out a licence from the Collector of the district concerned and to abide by and carry out the conditions of the licence. For contravention of the provisions of this order, the Collector may suspend or cancel the licence. The Government may suspend or cancel the licence without assigning reasons.

A licensee is prohibited from increasing the hauling capacity of his mill by installing additional machinery or in any other manner except in accordance with the conditions of a permit issued in that behalf by the District Collector. Further, a licensee shall maintain accounts in respect of aforesaid business in such a manner as may be prescribed by the District Collector or his nominee.

THE MADRAS TAPIOCA (MOVEMENT) ORDER, 1948

This order prohibits the export of tapioca and its products except sago from the districts of Malabar, South Kanara, the Nilgiris, and Coimbatore except under and in accordance with a permit issued in that behalf by the Commissioner of Civil Supplies or the Collector concerned. This order does not apply to the export of tapioca under Military Credit Notes.

THE MADRAS FOODGRAINS (RESTRICTED PLEDGING WITH BANKS) ORDER, 1950

This order imposes certain restrictions on the pledging of the stocks with banks to the procuring agents in the State.

THE MADRAS DRUGS (CONTROL ORDINANCE), 1949

In order to ensure that essential drugs continued to be sold at reasonable prices even after devaluation, the Madras Drugs (Control Ordinance) 1949, was promulgated by the Government. The Ordinance provides for the control of the sale, supply and distribution of drugs in the Madras State.

The Ordinance has since been replaced by the Madras Drug (Control) Act, 1949 (Madras Act XXX of 1949).

THE MADRAS FOODGRAINS PROCUREMENT ORDER, 1947

This order is in force in Malabar District only.

Under this order the quantity harvested in each holding is at the disposal of the Collector who, after allowing enough for the consumption and cultivation requirements of the holder can procure the surplus. The price of the surplus shall be determined in accordance with the provisions of the Madras Foodgrains Price Control Order, 1949.

If it appears necessary for maintaining supplies of foodgrains essential to the life of the community the State Government may direct the District Collector or any other officer they may think fit to issue a notice to any person holding stock of foodgrains to sell the whole or a specified part of the stock to the Government at the price then in force under any law in the district.

THE MADRAS SUGAR DEALERS LICENCE ORDER, 1949

This order directs that wholesale dealers for sugar should be licensed and that permits either from the Commissioner of Civil Supplies or his nominee are necessary for removal of consignments of sugar arriving at railway stations and ports. The Collectors have been empowered to fix the wholesale and retail prices of sugar.

THE SUGAR STOCKS (SALE TO GOVERNMENT OF MADRAS) ORDER, 1949

Under this order sugar factories in the State should deliver stocks of sugar to the Madras Government at the price fixed by the Government of India under the Sugar Stocks (Sale to Central Government) Order, 1948.

Two more orders prohibiting that the manufacturers of confectionary, bura of sugarcandy should take out licences to carry on the manufacture of these commodities, have also been issued.

GRAM CONTROL ORDERS

Gram control orders in force in the State of Madras have been rescinded. The Government of India have decontrolled gram, but they have fixed the maximum prices of Bengal gram at Rs. 16 per maund at which it has to be sold or purchased in this State.

Rural Welfare Department

THE MADRAS KHADI DEVELOPMENT ORDER, 1949

The provisions of the order prohibit a person to carry on business as a producer or dealer of hand-spun yarn and Khadi in the State of Madras except under and in accordance with the terms and conditions of a licence issued to him for the purpose.

Further, the order states that no person who is a purchaser or a dealer in mill-made yarn or cloth woven out of such mill-made yarn shall carry on the business of a producer or of a dealer in hand-spun yarn or Khadi. No hawker shall be licensed to deal in hand-spun yarn or Khadi. The sale price of Khadi should not exceed the aggregate of the cost of production of the cloth plus 15-5/8 per cent thereof.

No person shall weave cloth partly from hand-spun and partly from mill-made cotton yarn or sell or otherwise dispose of any cloth so woven. No person shall also spin

Co-operation in Andhra Desa

(Continued from page 11)

federation with the main object of distributing and supplying raw materials to the artisans in the firka. Where it is not possible to form a federation, co-operative stores or marketing societies may undertake this work. It is expected that as a result of operation of the scheme village industries will be promoted in select firkas so that the ordinary everyday requirements of villagers can be met. Rice hulling and cotton ginning may lend themselves to co-operative effort. A bone-meal factory on a co-operative basis round about the Kollair Lake is yet another possibility.

Thus the co-operative movement in Andhra Desa has been making very rapid progress in several directions. The need for trained and efficient paid men to supervise and run the institutions is obvious. The progress and soundness of the movement will be conditioned by the availability of trained personnel. The movement needs not only a band of honorary workers but well-equipped paid staff. It is true that co-operation is founded on high ethical principles but it must be remembered co-operative societies are essentially business organisations. Honorary service supplies the idealism, zeal, direction, advice which these organisations really require. Their day-to-day management, development of business, maintenance of accounts or supervision of societies, etc., cannot, however, be attended to by amateurs. A pool of trained employees is essential to the success of the movement. Its stability depends on their efficiency, honesty and loyalty.

We have in Andhra Desa co-operative training institutes at Rajahmundry and Anantapur which train candidates for employment in co-operative institutions. More men will have to be trained and if need be, more

by any yarn from mill-made cotton slivers or mill waste cotton or otherwise dispose of any yarn so spun and no producer or dealer shall deal in such yarn.

Development Department

THE MADRAS COTTON (CONTROL) ORDER, 1950

This order provides for control over contracts relating to sale or purchase of cotton and over sale of cotton to specified persons at specified prices.

Public Department

THE MADRAS BUILDINGS (LEASE AND RENT CONTROL) ACT, 1949

This Act seeks to regulate the letting of residential and non-residential buildings and to control the rent for such buildings and to prevent unreasonable eviction of tenants therefrom in the State of Madras and applies to the City of Madras, all municipalities within the State, and such other areas as may be notified in the Gazette by the Government of Madras from time to time.

To remove certain practical difficulties which were experienced in administering the Act, a comprehensive amending Bill has been prepared and it is under consideration of the Government.

institutes will have to be established. The movement should be able to train enough men it requires and create a pool of such men. It is not a sound arrangement to go on taking the loan of services of Government officers. The tendency to indent the services of departmental officers is still strong, and I suggest this be stopped as soon as possible. For one thing, the Department has not enough men to attend to its statutory duties and for another, societies will have relatively to pay more by way of additional remuneration and leave and pensionary contributions of the officers lent. What is more is that when they become useful to the institutions they are taken away for administrative reasons and their experience is lost to the societies concerned. This is an unsatisfactory state of affairs and needs to be remedied. The service condition of non-official staff should be rendered sufficiently attractive.

The tendency for party or sectional politics or local factions to invade co-operative institutions is most undesirable and should at all costs be checked. Co-operative organisations are business organisations intended for the benefit of all members, irrespective of their political or party or communal loyalties or differences. Unless the movement keeps clear of local rivalries and faction, it cannot expect to command the confidence of the people or to be of real service to them. In some cases, the party spirit is carried to the extreme length of creating deadlock in institutions. I earnestly appeal to co-operators of all shades of thought to keep the movement above these things and bring under its beneficent influence a larger and larger body of men and women.

Achievements of Madras Regiment

Defenders of Kashmir

Men of the Madras Regiment were among the first batch of troops to participate in the Kashmir campaign and help in cleaning the beautiful valley of raiders. On 1st November 1947 this Regiment entered the operational area of Jammu and for fourteen months the Madrassis were continuously in action until the cease fire on January 1, 1949.

During this arduous campaign this battalion was awarded many battle honours. Their quota in Republican India's first list of gallantry award is one Maha Vir Chakra and six Vir Chakras. Naik Raju, recipient of Maha Vir Chakra, was incapacitated in action and has now left the Battalion and so did Jemadar Shakh Khader Sahib who has been awarded the Vir Chakra.

Other recipients of Vir Chakra are Capt. Kunhiram Vemugopal, Havildar Murugesu Pushpanathan, Havildar Gopala Kurup, Nk. Abdul Rahman, I/Nk. Ayyappan.

Soon after partition, hordes of raiders with the active connivance of Pakistan invaded the beautiful valley of Kashmir. Indian troops were rushed in to stop the unprecedented aggression and to save the people of the State from an orgy of pillage and plunder.

When the Madrassis first landed in Jammu in November 1947, a wave of communal passion was sweeping over the State and terror-stricken men, women and children were being uprooted from their houses and fleeing for life; with the arrival of Indian troops confidence among the people was gradually restored and the troops were regarded as saviours.

Ramgarh Fort, about thirty miles north-west of Pathankot, was strongly held by the raiders and the surrounding area was at their mercy. This fort is famous in history, for it is said, those who hold it control the whole of Kashmir. It was built by the first rulers of Jammu and Kashmir and it is the first of the series of forts still existing in the State.

On February 14, 1948, the Madrassis defeated the enemy in this area and completely freed the country side of raiders. One complete enemy platoon was destroyed except its Commander Sub-Major Lal Khan, Amb State Forces, who surrendered and was taken prisoner. Lal Khan was presented to the Prime Minister Pandit Nehru who visited the area the next day. Enemy arms captured in this action included 18 service rifles, one pistol, seven bayonets and a large quantity of ammunition and equipment.

In April 1948 the Madras Battalion moved to the Uri sector. A few days later the Battalion suffered heavy losses and its Commanding Officer was killed while leading his men. The Madrassis soon made up for this by inflicting heavy casualties on the enemy and soon pushed forward to capture the strategic position of Thithwal.

At this time the enemy tried to ambush our column at Dringadi. The Madrassis cleverly made a feint move and took the enemy by surprise charging him with bayonets on either flank. The enemy had to retire with heavy losses. This rout of the raiders at the hands of the Madrassis

cleared the way for the ultimate capture of Thithwal. Thithwal actually fell to our troops three days later on 23rd May 1948.

Some 20 days later, on 11th June regular Pakistan troops supported by Azad forces and fully armed with modern weapons attacked "Ring Counter" piquet held by the Madrassis. The enemy suffered a heavy defeat and they left 40 killed on the field of battle. Enemy weapons captured included a Bren gun, five rifles, four sten guns besides other weapons and ammunition.

Piquet Ring Counter became the graveyard of the enemy. The small band of Madrassis saw to it that whenever the enemy attacked in strength he was pushed back only after paying a heavy price. Captured documents showed that the enemy force in the area consisted of troops belonging to the Baluch and Punjab Regiments. After one pitched battle in July 1948 an intercepted enemy message stated "Three companies of a regular battalion crippled and 100 civilians killed." Intelligence showed that the enemy at this time had to send reinforcement of about two battalions in this sector.

When the Madras Battalion left Kashmir for India in the middle of last year (after 20 months of active service), handsome tributes, well deserved, were paid from all sides.

Sheikh Abdullah, Premier of Kashmir, making a presentation to the brave defenders of Kashmir said: "Our brothers from the South have taken a leading part in the defence of Kashmir. They have fought tenaciously and valiantly and although unused to the severities of a cold climate, they have held their posts on tops of snow-covered cliffs and mountains, with a courage which has won them the admiration of the whole Kashmir people. The role of 'unknown soldiers' in the war in Kashmir has truly been of the Madrassi foot soldier. The people of Kashmir will never forget the help, they have received from their brothers of the South."

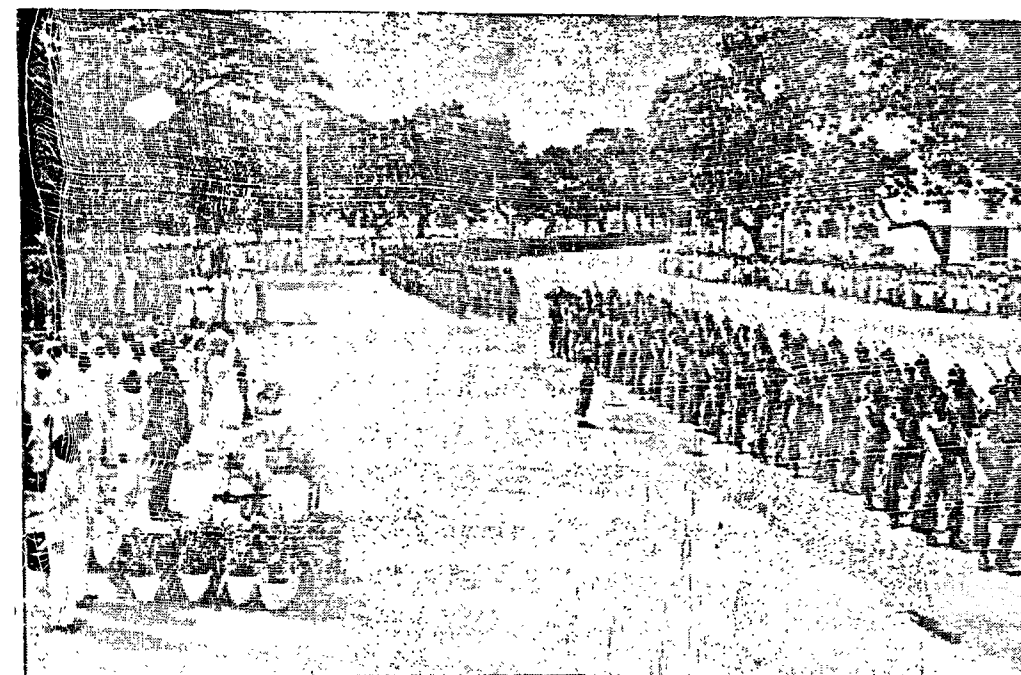
Maj.-Gen. K. S. Thimayya, D.S.O., addressing the Madrassis before departure from Srinagar, recounted that in all the actions fought by them in Kashmir, they inflicted the following casualties on the enemy: Killed 504, wounded 731 and captured 23 including one officer.

He said, "The Madrassis had shown in Kashmir gallantry and discipline of a very high order and established a reputation in keeping with their traditions of being one of the oldest regiments in the Indian Army."

Facilities to L.I.M. Students

The number of maternity beds in the 'Hyde Park' building, Madras, has been increased from 14 to 50. This has been done with a view to providing additional facilities for the training of the students of the College and School of Indigenous Medicine.

The Corporation of Madras has been requested to send for admission to the maternity ward suitable cases who report themselves at the Maternity and Child Welfare Centres in and around Kilpauk.



Right: Through the streets of Madras City



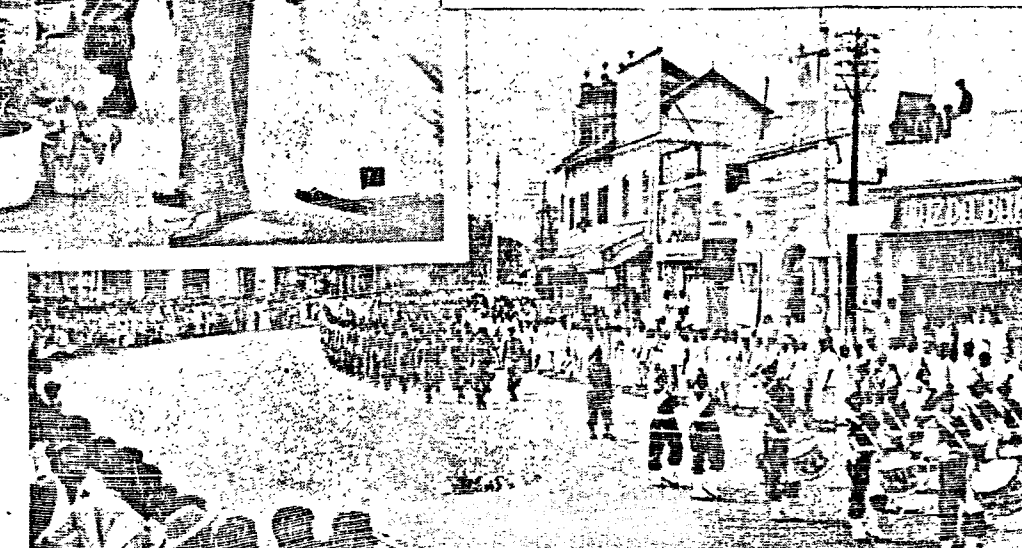
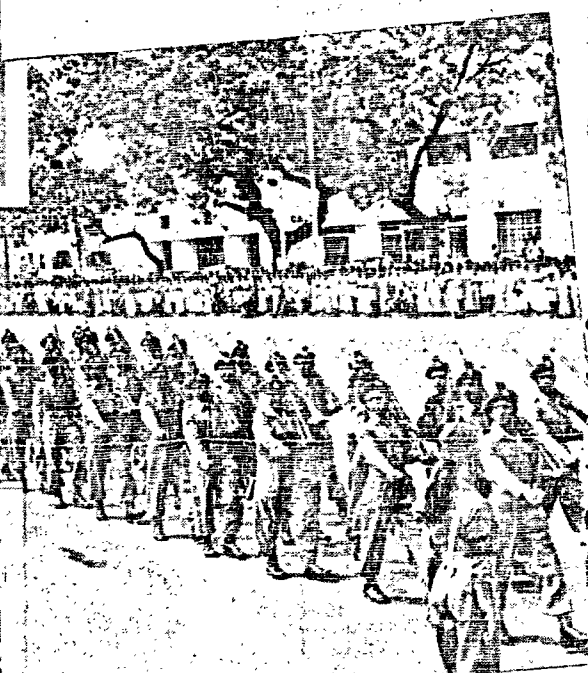
Left: Officers of the regiment are presented to H. E. the Governor and Ministers of the Madras Government

Right: The public throng to acclaim the soldiers as they march past with regimental band in full regalia

MADRAS SOLDIERS BACK HOME

A rousing reception was accorded by the citizens of Madras to the men of the Madras Regiment who returned after meritorious service in the Kashmir campaign

Left: H. E. the Governor of Madras, the Maharaja of Bhavnagar, takes the salute at the March Past





NATIONAL CADET CORPS

Top: ROUTE MARCH: Smart cadets of the National Corps practising a Route March

Left: TARGET SHOOTING: Correct aiming and shooting are taught to cadets



Above: FIRST MADRAS Battalion Company won the lucrative championship cup in the football match. Sri P. S. Kumaraswamy Raja, Chief Minister of Madras, is presenting the trophy to the Officer Commanding

Left: "ON GUARD": A cadet charging his imaginary enemy with a bayonet



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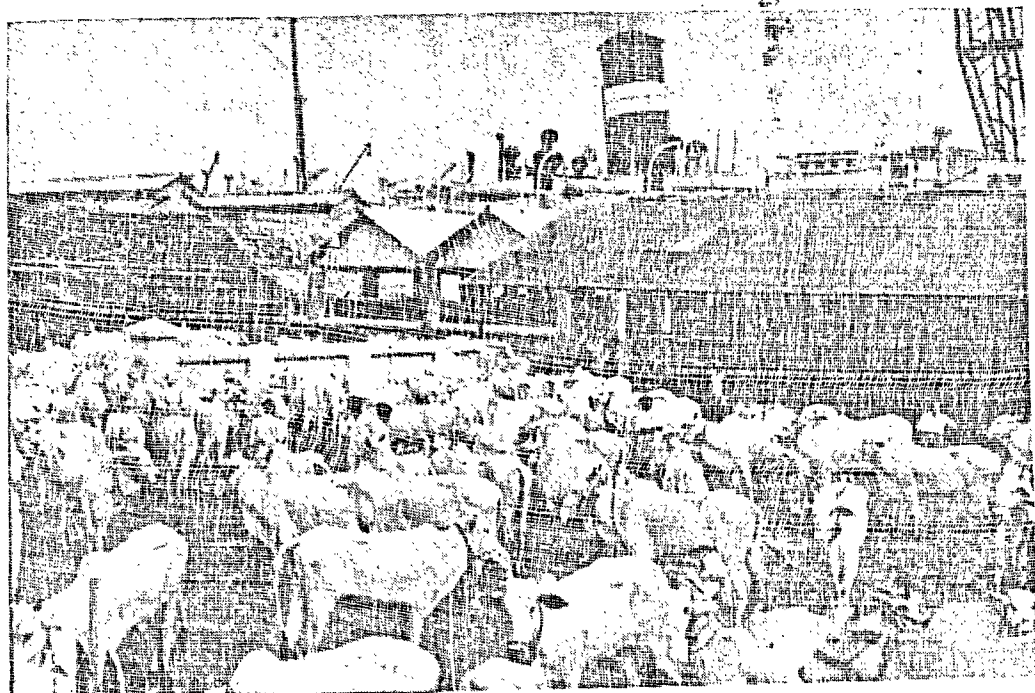
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"WE SEEK TO SERVE AND NOT TO COMPETE"

February 1951

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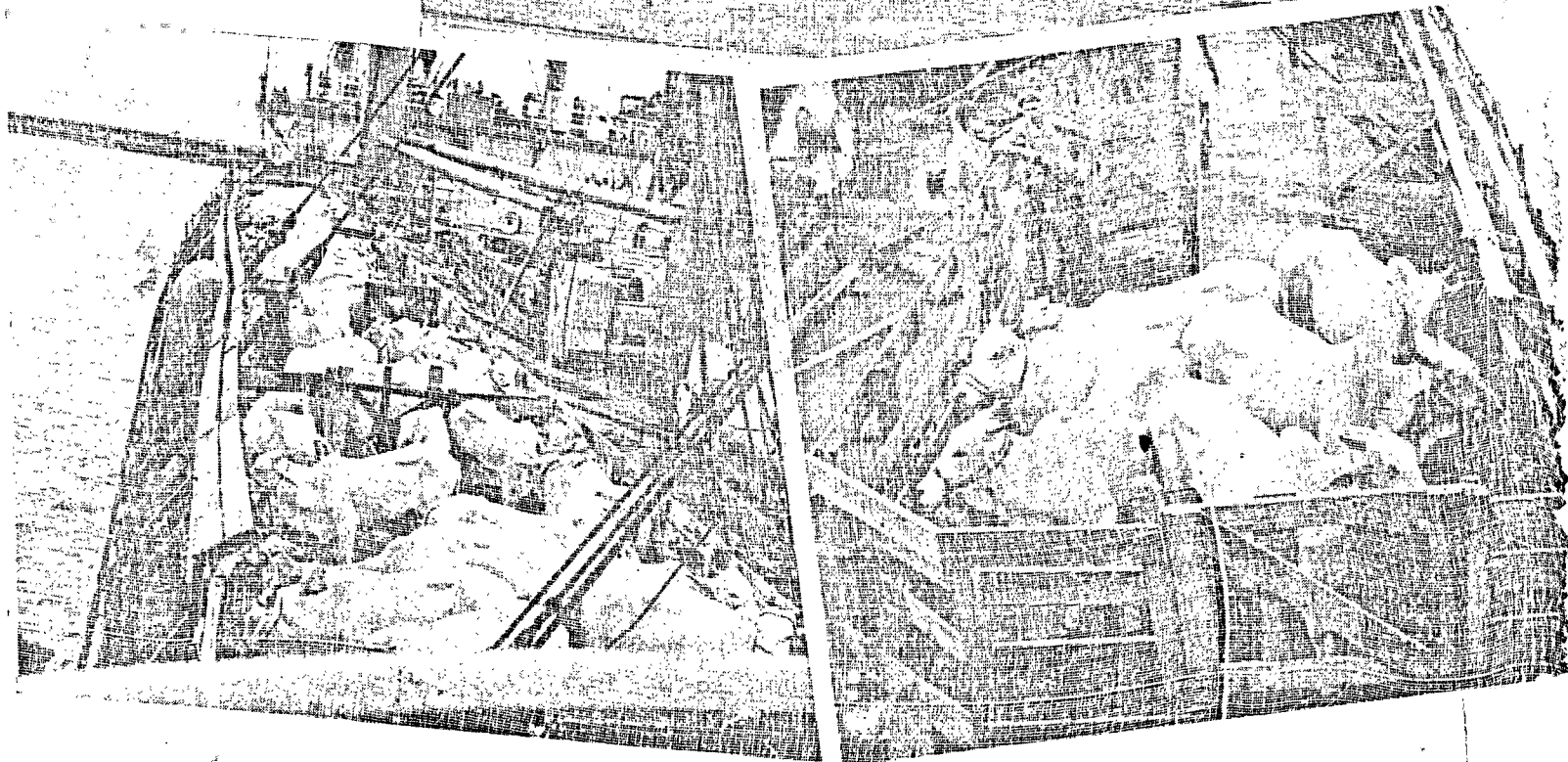
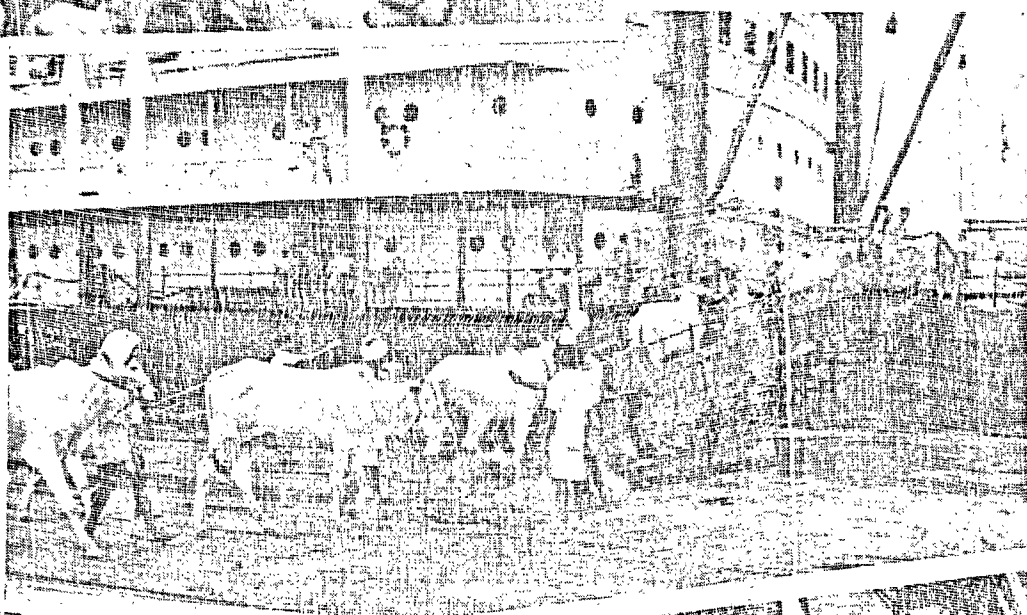
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OFF TO THE PHILIPPINES!

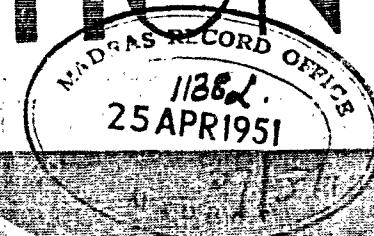
These Ongole cattle are Manila-bound, and on the first lap of their Far Eastern journey, snatch a brief rest in the yards of Madras Harbour.

The slippery gangway is strewn with straw and the animals are conducted on board. (Centre)

Deck passengers! Herded gently into sturdily built pens on the deck, the Ongole voyagers get their first whiff of the ocean, and first feel of the ship's roll. (Bottom)



MADRAS INFORMATION



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Development of Highways

By SRI M. BHAKTAVATSALAM, Minister for Public Works

As I commence my talk on the development of Highways, I know you will naturally feel more interested in the roads needs with which you are directly concerned, depending upon whether you are an agriculturist, manufacturer, trader, social worker and so on. This list can be made very long and items multiplied as there is no facet of the economic and social life of the people which is not road dependant. The need for facility of transport arises in every phase of our life that the development of roads can rightly be said to measure the progress of the country.

Till recently we were under an alien rule whose interests naturally lay more in the consolidation and maintenance of power and keeping the people under subjection. Road development under those circumstances was only a secondary concern of the then rulers. If some had been done they were more for strategic reasons than primarily for the people. The local bodies during this period, however, were able to achieve good results in this field and provide some reasonable system of road communications in this State.

A Plan Drawn up

For all practical purposes we may take that effective measures for intensive road development have been taken since 1946 after the war and after power was transferred to the people. It was during the war that the inadequacy of the communication system came to be realised and as a result of deliberations following this, a detailed plan was drawn up in 1943 at Nagpur which has come to be known as the Post-War Road Development Plan. The main consideration in drawing up this programme kept in view was the development of balance between all classes of roads, rural and urban, and also to proceed in a planned sequence.

A comprehensive programme of Post-War Road Development was drawn up for the State costing about 75 crores from which the first five-year programme has been compiled. The expenditure programme in these first five years in 8.5 crores.

According to this programme the roads have been classified as National Highways, Provincial Highways, Major District Roads, Other District Roads and Village Roads. The Government of India financed National Highways fully. The Provincial Highways and Major District Roads are financed by State Government, though at present some of these roads are still with the local bodies. The other District Roads and Village Roads which are purely of local importance form the rural roads which are to be financed by District Boards.

A Brief Survey of Progress

In the beginning of 1946 there were 31,570 miles of roads under the local bodies and 5,000 under the Public Works Department (Government). But consequent on this Post-War Road Development classification, a large mileage of the important roads (which were therefore costly to maintain) have been transferred to Government giving the lengths under Government and District Boards on 1st April 1946 as 14,000 miles and 22,570 miles, respectively.

The main work of the Government roads is in the nature of providing improvements to the surface of the roads, construction of new bridges and culverts and reconstruction of or improvements to the existing bridges and culverts.

The advent of automobile has not only increased tremendously the volume of road traffic, but the speeds have had a shattering effect on the roads. In recent years heavy truck traffic conveying merchandize has been very much on the increase. The traditional bullock cart is also there moving alongside grinding the road surface with its iron tyres, and this mixed traffic calls for better and newer types of road surfacing than the ordinary waterbound metalled roads to get over the difficulty and costly maintenance. These roads are important through roads and cannot be considered as rural roads though eventually the road system benefits all people.

Expenditure

Since April 1946 up to the end of March 1950 an expenditure of 348 lakhs on these Government roads was incurred on improvement works and a further sum of Rs. 1,279 lakhs was spent on their maintenance. Including the expenditure proposed for the current year, 1950-51, these figures will be 520 lakhs on improvement works and 1,644 lakhs on maintenance. The improvement works include 230 miles of cement concreting, 200 miles of black topping, 500 miles of new metalling and an expenditure of Rs. 100 lakhs on the construction, reconstruction and strengthening of bridges and culverts. These figures would speak for themselves of the attention paid to Government roads.

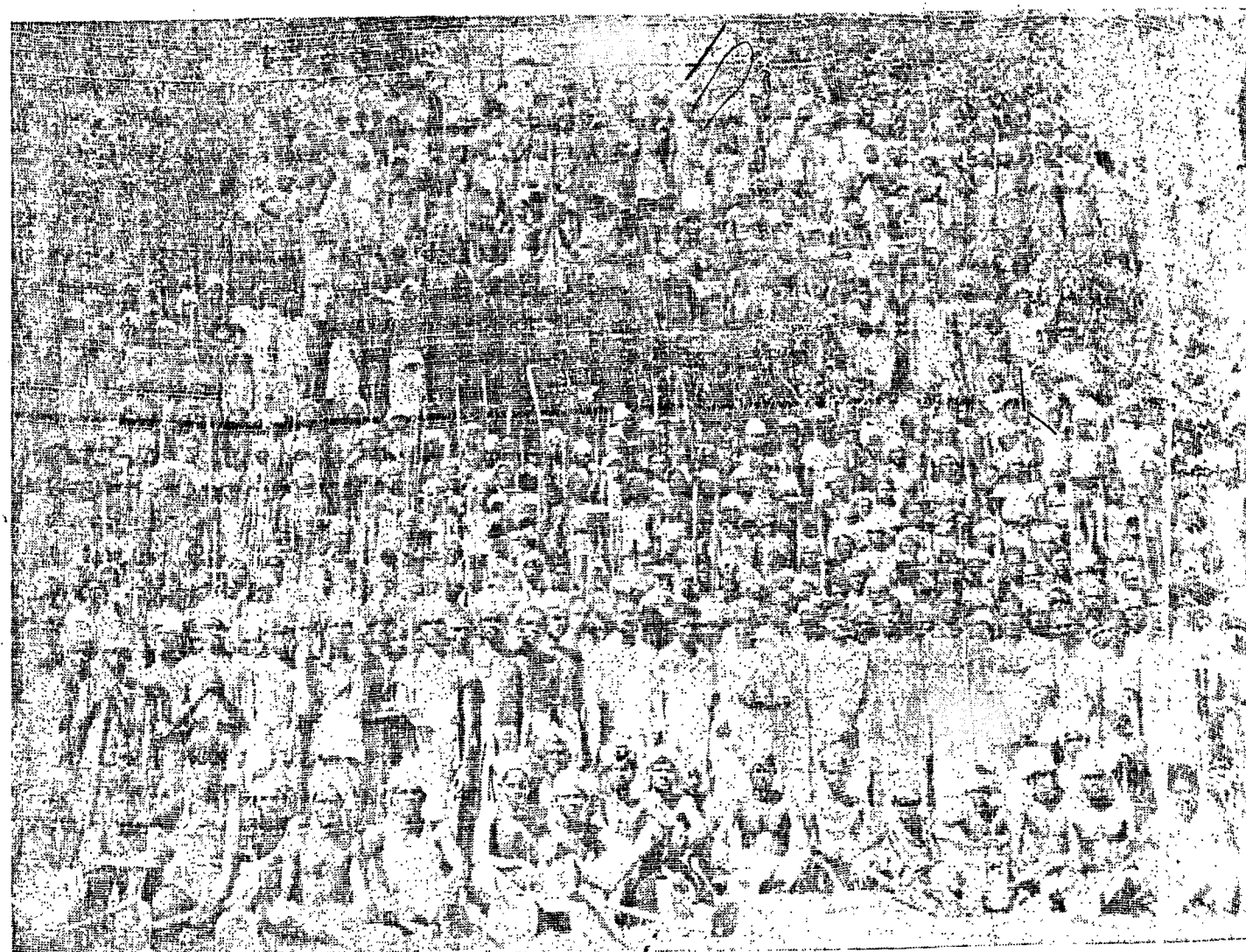
But as already stated earlier, it is necessary to bring about a balance between the urban and rural roads. The gaps in the present net work of roads is large and must be filled with new roads to form a road grid in the country. The rural roads form the bulk of these gaps.

Access Roads for Villages

The aim of the Post-War Road Development programme is to provide access roads to every village with a population of 500 or more and no village to claim more than one road as access road. There are 23,700 villages in the Madras State with a population of 500 and more out of which 11,600 are already served by roads. Eighteen thousand miles of new formations are programmed under the comprehensive programme for the balance 12,100 villages of which 10,600 miles have been included in the first five-year programme.

The actual length formed up to now against this programme is over 1,000 miles. It has been found in practice that one of the main difficulties in the way of new road formation work has been the Land Acquisition. The co-operation of the public would go a long way in hastening these works in this respect. Offer of lands free of cost will help to get over the initial hurdle; but unfortunately such offers have only been few. Where Government acquire lands paying compensation the public, can at least help by agreeing to part with their lands quickly. Considerable delays are caused by a few individuals raising objections. That is the reason why the rural road formation could not be hastened.

FREE LABOUR TOWARDS SELF-SUFFICIENCY



Self-Help : About 800 villagers took part in the construction of Madathil Keezpalit Road with zeal and without wages. The Dep ty Director of Rural Welfare (South) inaugurated the work

Need of Villagers' Co-operation

In the matter of execution of these new village roads there is great need for the villagers' co-operation. Much of this is mere earthwork which the villagers can themselves do in a spirit of self-help. The cost can be reduced considerably and work can be done effectively and in proper time then. These small works mean only small margins for contractors who therefore quote high rates for a large margin of profit and to do works at their convenience. If the villagers realize that the money given to the contractors can be effectively utilised on more roads for themselves, and come forward with their help in making the roads, we would be in the much happier position of accelerating our Rural Road programme.

Bridging the Streams

Also the improvement works on Rural roads consists mainly in bridging the numerous streams cutting across the road and also in providing reasonable surface mostly metalling and gravelling to serve as all weather roads. An expenditure of 750 lakhs has been incurred on such works on all the District Board Roads since 1946, of which 520 lakhs was given by the State as grants-in-aid. The poor financial position of the District Boards has been one of the difficulties retarding the progress on these rural roads. Works numbering 1,500 and estimated to cost 390 lakhs have been sanctioned up to end of 1949-50 under P.W.R.D. and C.R. Fund. With those proposed for the current year total number of works will be 2,300 at an estimated cost of 470 lakhs under P.W.R.D. and C.R. Fund.

Bridges and Culverts

Bridges and culverts are an essential part of roads as without these the roads will be ineffective. A large number of such bridges and culverts have been included and taken up under the improvement programmes. There are 740 such works at an estimated cost of 230 lakhs. Bridges across Canvey at Pugalur at a cost of 26 lakhs, across Pennar at Nellore at a cost of 23 lakhs of rupees, across Bharatpuzha and Kuttipuram at a cost of 12 lakhs, across Pangaswami at Takkil at a cost of 10 lakhs and across Coleroon at Anaikeeranathram at a cost of 28.5 lakhs are the important ones, already taken up for execution. After much protracted correspondence and discussions with Government of India it has finally been decided to push through the construction of bridges across Godavari and complete them in the next five years.

Social Study - The Officers of the Women's Welfare Department visit remote villages and take active part in the daily activities of the womenfolk there



The whole scheme is expected to cost 215 lakhs and on completion will meet the long felt need and cherished desire of the Andhras. The bridge across Krishna is also under consideration; it will also be taken up ere long.

Annual Expenditure

You will observe that we have spent about 25.00 crores of rupees in the four years from April 1946 on all our roads both by way of maintenance and improvements and propose to spend another 8.10 crores in 1950-51. The following are the annual expenditure figures for all roads :-

1946-47—382.18 lakhs.
1947-48—513.52 lakhs.
1948-49—722.62 lakhs.
1949-50—896.34 lakhs.
1950-51—806.56 lakhs.

The pre-war average (1936-41) of the expenditure on these roads which were then with District Board is about Rs. 146 lakhs. It may therefore be clear that even after allowing for the increase in the cost of materials and labour the expenditure on roads has been much on the increase to meet the growing demands for roads and better roads.

The magnitude of the work involved in such expenditure is naturally great and fortunately along with our other aspects of Road Development we started a separate Highways Department to look after the roads in the State. This Department has three authorities to satisfy, the Government of India, the State Government and the District Boards. The Government of India with their exacting scrutiny of National Highway Works and the District Boards with their innumerable works mostly handicapped by insufficient finances have been testing this Government Department severely, but with establishment taking about 6 per cent of the total expenditure the department has been steadily doing substantial work.

Avenue trees on Highways

There is another important feature which is always associated with Roads. I am referring to the Avenue trees lining the Highways. The fine rows of pleasing full grown avenue trees that we find on some roads were planned and planted by our thoughtful forefathers. The avenues offer welcome shade to travellers and also yield revenue from their usufructs. They also form part of the *vanamahatsava* drive. Special programmes are being drawn up to provide new avenues. Every encouragement is given both by way of bonus to labourers and grant of pattas to adjoining land owners. But the trees brought up to full growth after care and attention fall a prey to the unsocial elements who lop the branches and cut the trees for petty selfish ends. They are also ignorant of the seriousness of their action and their ultimate loss to the Nation. The co-operation of public can easily prevent and set right this evil. In fact it is the duty of public to protect these avenues to travel on roads in comfort and health.

This Government has programmed to develop the Highways in the Madras State and specially the village road formation spending nearly 8 crores every year on all the road maintenance and improvement and steadily pursuing the policy of bestowing the maximum benefit to the maximum number of people and given eventually a road pa't your door wherever you may be in the country.

—By courtesy, A.I.R., Madras.

Thirty Years of Ministerial Responsibility

By SRI B. GOPAL REDDI, Leader of the House (Legislative Assembly)

On the 17th December 1920, Lord Willingdon, the then Governor of Madras, administered oaths to Messrs. Subbarayan Reddiar, Rajah of Panagal and Sir K. V. Reddi, as Ministers of the Government of Madras. That is the beginning of Ministerial association with the Administration of the State. Prior to that all the departments of the Government were administered by Executive Councillors chosen by the Governor in his own discretion and who were not responsible to the Legislature.

His Royal Highness the Duke of Connaught formally opened the Madras Legislative Council and addressed it on 12th January 1921 and the Legislature began functioning from 16th January 1921. Thirty years have passed—a full generation. Progress of centuries was compressed into the span of thirty years. I do not think that in the history of India any thirty-year-period would have been so replete with epoch-making changes and developments. The wheels of progress were fully accelerated during this important period and in every direction we have made progress in a tremendous manner. The transformation is more patent and visible in the political field. From the beginnings of Ministerial responsibility and Dyarchy to Provincial Autonomy and later in 1946 the association of accredited leaders of Congress and the League with the Government of India, Dominion Status and finally Republic within Commonwealth, are momentous changes which even the most professed optimist could not have dreamt of in the beginning of the century.

Milestones of Progress

The abolition of erstwhile Indian States and amalgamation of them with India proper, the abolition of the ancient zamindari system, the abolition of alcoholic drinks and a new awakening in the Harijan community which culminated in the opening of temples for them are some of the outstanding milestones on the road of progress.

The Madras Budget which stood round about 12 crores of rupees has now come up to 56 crores of rupees despite loss of excise revenue. The advent of sales-tax on the taxation horizon which has become a mainstay of several of the States is also a new feature of this generation. The impounding of waters by huge dams and utilizing them for irrigation or for hydro-electric energy is also a hall-mark of this period. The opening of several schools and colleges and universities is also a welcome feature. The advent of textile mills in South India which is the beginning of industrialisation is again traceable to the multifarious activities of this generation. Thus India, and in particular Madras, have had several changes which added to the strength and vitality of the economic structure of the society.

Montagu-Chelmsford Reforms Followed

Madras can claim to have worked the Montagu-Chelmsford reforms successfully. It was based on a majority party rule on ministerial responsibility for the transferred subjects under their charge. Madras also had the convention of having a Chief Minister from the beginning in whose advice the other Ministers were appointed. It was not much in evidence in other States.

Financial Relations with Centre

The year 1921 was also a milestone in the financial relations between the Government of India and the Provincial Governments. In the preceding years what was known as the Provincial Settlement was in force. Under this system all the principal heads of revenue collected within the provinces were divided between the Provinces and the Central Government; but subsidies, both recurring and non-recurring, from the Centre to the Provinces were needed to supplement the Provincial revenues and were important feature of the financial arrangements.

The proceeds from Land Revenue, Stamps, Excise, Income-tax collected from officers, and Receipts from Major Irrigation Works, were divided equally between the Centre and the Madras Government. On the expenditure side, the charges pertaining to Stamps, Excise, Income-tax and Major Irrigation Works, were likewise divided equally between the two Governments. In respect of Famine Relief, three-fourths of the expenditure was borne by the Central Government leaving one-fourth to be borne by the Provincial Government and the Government of India also assumed full responsibility for the expenditure on Protective Irrigation Works.

Abolition of "Divided-Heads" System

This system of "Divided Heads" was completely done away with from 1921-22. There was a separation of Provincial Heads of Revenue and Expenditure from Central Heads. Thus, Land Revenue, Excise and Stamps, became wholly Provincial. As the resources left with the Central Government under this arrangement was insufficient to enable it to diminish the deficit. Of a total contribution of Rs. 983 lakhs from all Provinces, the share of Madras alone was fixed at Rs. 348 lakhs. This heavy Provincial contribution handicapped the resources of the Provincial Government seriously and made any progress practically impossible. The Provincial contribution was gradually reduced and completely abolished in 1927. It is also noteworthy that there was no separate Finance

Another picture of Women's Welfare showing a community centre at work on handicraft



Department prior to 1921-22; it was a part of the Chief Secretariat.

Even under the Government of India Act of 1919 there was separation of subjects as between transferred and reserved.

A Retrospection

When we look back, even subjects like Electricity, Forests and Irrigation were not entrusted to popular representatives, not to speak like Motor Transport; Cinematographic exhibitions were in the hands of Executive Councillors who were administering them as reserved subjects. In Madras we had four Executive Councillors and three Ministers up to 1937; of the four Executive Councillors two were Europeans promoted from the I.C.S. and two were non-officials—one a Hindu and another either a Muslim or a Christian.

The Legislative Council had a big nominated block consisting of officials and non officials and till 1923 was not allowed to have an elected Speaker, who was then called the President of the Council. The Deputy President alone was elected and the first incumbent was Mr. Kesava Pillai from Anantapur. The Leader of the House was invariably the senior-most of the Executive Councillors and no Minister could be a Leader of the Legislative till 1937.

A Survey of Cabinet Personnels

During the period under review Madras had 10 Chief Ministers, there were in all 52 persons who were Ministers up to date, including the Interim Ministers in 1937 who did not face the Legislature. This figure, of course, includes the present Ministers. In 1937 all the Departments came under the control of the Ministers. But for 6½ years from October 1939 to end of 1946, the entire administration was under the Governor and his Advisers and we had an administration which was more retrograde than the type of Government we had previous to 1920. There was a Legislature functioning and they could speak on the proposals put forward by the Government in those

years, but during the war period of Advisers' regime, Legislature, though alive, was kept in cold storage.

So when we say 52 Ministers, it is only for a period of thirty years without taking into account the 6½ years of Advisers' regime. Of the 52 persons, 16 are alas no more with us; 36 are alive and most of them still active in politics. Dr. Subbarayan who was Chief Minister from 1926-1930 became a Minister in 1937 and again in 1947. He was a Minister thrice and the total period he was in office as Minister is 7 years 4 months and he has the record of having been a Minister for the longest period. The shortest period of any Minister is one month and 17 days (and the month, unfortunately was a month of 28 days), the incumbent being our good friend Sri Bikkini Venkataratnam of East Godavari. Mr. P. T. Rajan and I, though not continuously, have just overtaken Rajah of Panagal and Sri Kumaraswami Reddiar who were Ministers for 6 years; the only other Minister who was in office for over five years was Sir A. P. Patro. Fifteen out of these 52 were Ministers for less than 12 months. There are 14 persons in the Legislature to-day either in the Upper House or in the Lower House and two are in Parliament—Sri C. Rajagopalachari and Sri Kala Venkata Rao. Two of the ex-Ministers held High Diplomatic position, one is still in office and the other has just relinquished office. Sri Rajaji who was one of the Ministers of Madras, as everyone knows, held the highest office in India.

Presidents and Speakers

We had 9 Presidents of Council, including two Speakers and Sri Ramachandra Reddi held the office of President for the longest term, for over six years; Sir P. Rajagopalachari was the first President nominated. Of these 52, three were Government servants and later became Ministers after their retirement; 25 Lawyers, 2 Doctors and one Professor. Eighteen are Telugus, 5 Malayalees, 2 Kannadigas and the rest Tamils.

It is really refreshing to recollect what has been achieved during the past thirty years and let us hope that in the next thirty years emphasis will be laid more on economic development.

Mahatmaji as A Diet Reformer

"If a vegetarian became ill, and a doctor prescribed beef-tea, then I would not call him a vegetarian. A vegetarian is made of sterner stuff. Why? Because it is for the building of the spirit and not of the body. Man is more than meat. It is the spirit in man for which we are concerned. Therefore vegetarians should have that moral basis—that a man was not born a carnivorous animal, but born to live on the fruits and herbs that the earth grows. I know we must all err. I would give up milk if I could, but I cannot. I have made that experiment times without number. I could not, after a serious illness, regain my strength, unless I went back to milk. That has been the tragedy of my life. But the basis of my vegetarianism is not physical but moral. If anybody said that I should die if I did not take beef, tea or mutton, even under medical advice, I would prefer death. That is the basis of my vegetarianism. I would love to think that all of us who called ourselves vegetarians should have that basis. . . . Therefore, I think that what vegetarians should do is not to emphasise the physical consequences of vegetarianism, but to explore the moral consequences.

—Harijan, 20th February 1949.

The Census and Its Importance

Dr. A. LAKSHMANASWAMI MUDALIYAR, Vice-Chancellor, University of Madras

The term census is borrowed from a Roman institution of quite a different character. The Roman census was a register of adult male citizens and their property for purposes of taxation, the distribution of military obligations and the determination of political status. This register, although subject to periodic revision, was essentially continuous unlike the modern census which attempts a complete enumeration at a particular point of time and has no direct relation to any previous enumeration.

Importance of Census

The scientific importance of a census lies in large part in the fact that it furnishes a basis for study of changes in the number of people through births and deaths, immigration and emigration, the variations in rural and urban populations, changes in their status through marriage and, to a certain extent, affords a study of the economic condition of the people, their principal means of livelihood and the degree of literacy and the incidence of disease. Such a scientific study seems to have been undeveloped in the ancient world; and, in fact, it was not till about the 15th century that an attempt was made even in a localized city to take the census of the population. The earliest of these preliminary efforts was a municipal census of the entire population taken in Nuremberg. The honour of introducing the modern census has been claimed by several countries, notably Canada, Sweden and the United States.

Decennial Census

It must be stated, however, that it was the drafters of the American Constitution on 1787 who inserted a provision in the Constitution that an enumeration shall be made within three years after the first meeting of the Congress of the United States and within every subsequent term of ten years. The provision for a decennial census grew out of the protracted controversy between the large and small States of the United States of America. Under the Articles of Confederation then in force, each State had one vote and the Congress one Chamber. In the Constitutional Convention, the small States insisted on retaining their equality; the populous and wealthy States demanded a weight in the councils of the nation proportional to their population and wealth. The compromise which was adopted provided for a Legislature of two Chambers, in one of which, the Senate, the claim of the small States should be represented while in the House of Representatives the claim of the large States was allowed.

When this agreement was reached, it was a short step to recognize that a periodic readjustment of the number of representatives in the Lower House to changes in the population or the wealth of the States was desirable in a country where growth was rapid and uneven. One thus sees that the decennial census, with which we are all now familiar, arose out of a political demand and was to meet the needs of democracy. It is not surprising that to-day, when we are launching on one of the great experiments in democracy, we should also be greatly interested in the census that is to be taken in a few short months.

Data about Social Status

It may be mentioned that, until the 19th century, the statistical data gathered by countries of Continental Europe were usually treated as secrets of the State; but, along with the growth of democracy in the 19th century, there was not only an attendant spread of census taking but the desirability of making these facts public was soon realized. The first English census was taken in 1801 and it reported not merely the population classified by sex but also the number of families and inhabited houses and the number of persons chiefly employed in agriculture, trade and manufacture or handicraft. At a time, when consequent upon the attainment of Independence, the Governments at the Centre and the States have to look to many conditions pertaining to the ordinary citizen and to improve such conditions, it will be realized that it is of the utmost importance to have reliable data so that a planned method of approach may be available to solve many of the problems that face the country. It would, for instance, be of very great importance to know the extent to which illiteracy is prevalent in the different States.

Statistics about Linguistic, Religions and Economics

It would likewise be of great interest to know the different languages that are spoken by the people of the State and the religion and the nationality of the different individuals constituting the community. Periodic census had been taken in India for sometime now and valuable reports have been produced dealing with various particulars about the population, their economic level, their primary means of livelihood, the secondary occupations that they may have, the extent of prevalence of agriculture, the incidence of industries and the number employed in industrial labour, together with certain details regarding some of the less well-known tribes of India, living in the remoter parts of the country.

Citizens Should Co-operate

It will thus be seen that the taking of a census should be considered not as the business of the officials or others responsible but that all citizens should actively co-operate with the enumerators furnishing them with full and detailed information in all respects. Census operations in most civilized countries is regarded primarily as a citizen's responsibility and the enumerators are given the utmost co-operation by volunteers, by the individual citizens and by every member of the State, so that as full and frank an information as may be possible may be collected about every individual and the official report drawn up in a manner which may be found useful to succeeding generations. It is no doubt true that there are certain penal conditions imposed on people who attempt to falsify the census. But it ought to be sufficiently clear to fill, from what has been stated above, that such penalties should never come into operation and that it should be the duty and the obligation to cheerfully accept to satisfactorily answer all the questions put by the enumerator, in furtherance of a proper scientific collection of all possible available data during the census period.

(Continued on page 13)

South-East Asia: Impressions of A Tour

By SRI J. M. LOBO PRABHU, Secretary to Government, Public Works Department, Madras.

Before the last war, most people knew South East Asia only as the background for the stories of Somerset Maugham. The War itself took this area in a quick flash, the Japanese armies advancing nearly as fast as they later fell back. Since the war, Burma, Malay, Indonesia and Indo-China have been constantly in the news. What is more important they constitute with China and Japan, the footboard of the stage of world conflict. Round the periphery of China, since it became Communist, all the countries live in the twilight between war and peace.

I visited these countries even as the spotlights of history began to move. I was within a few miles of Korea, a month before the present drama of war opened. I met many of the figures in that drama, notably General Mac Arthur, Admiral Bedford, Vice Admiral Joy and Lieutenant General Robertson. In Burma, I was within sound of gun firings, and in Singapore, I saw the panic following a bomb thrown at the Governor. In Japan I saw the clash of American troops with the Communists, and the consequent departure of Soviet plenipotentiary. I was in San Francisco when the war news touched off the moth-balled American Navy. It is possible that the future will record that the year which is now passing out was the most tumultuous in the history of East Asia.

Historical and Cultural Ties with India

South East Asia is closely related to India by history, culture and religion. Since the beginning of this era, the South Indian Kingdoms of the Cholas, Pallavas and Kalin-gas maintained a regular trade for 1,500 years in ships, reputed to carry even 700 persons. Conquest followed trade, and the kingdoms of Sriraja and Borubadur ruled Indonesia, Malay, Siam, Cambodia and Burma for centuries. Architectural remains particularly the world's largest ruins in Ankor, Cambodia, bear witness to greatness of the culture introduced by India. The language, customs, clothes and food show obvious traces of Indian influence. In Siam, for instance, I saw the Coronation of the King by Brahmins, according to Hindu ritual.

Buddhism—A link with India

Buddhism, the religion of the largest portion of the population is another link with India. In modern times, the conquest of Burma and Singapore by British from India, and their subsequent Government on the same pattern have added another strata of Indian influence, on this area. Lastly, the Independence of India has flowed over to this area and has likewise made them free. In their freedom, they have looked to India for leadership in all International matters. South East Asia stands to India therefore in most intimate relationship. The presence of large numbers of Indians, particularly traders, is a standing reminder of this relationship.

Travel is Adventure

Travel is the only field of adventure still left for the generality of our race, in this age. I was ready therefore in visiting twenty countries in various stages of travail and turmoil for some risk and discomfort and it always

looked as if I was going to get a full measure of them. In the China Sea I went through two typhoons; in one country for which my passport was not quite correct, I was told that if I was found out, it would be easier for my host to dispose me off than explain me; in America, once it looked as if my plane would run out of petrol before it would find the aerodrome in the storm, in East Germany, I was warned that any moment I might be inside a Soviet prison. The anti-climax of it is, that not a hair of my head was touched and I returned home without losing even a collar stud. Is danger then such a stuff as dreams are made of?

Affairs in Burma

Anyway, Burma is compounded of confused dreams. Since Aung-Sang, who wrested freedom for Burma was killed, there has been no peace in the land. The Karans, who are Christians, the Communists, of two varieties but with the same sinister purpose, the Volunteer Army of the people have been fighting each other and the Government. The results are not very sanguinary but trade is effected, and production of rubber, tin, zinc is at a standstill, while the rice surplus is reduced from three to one million tons.

Yet in Rangoon there are no signs of distress. In the evening the streets and restaurants are filled with couples, the women in clothes, which literally drape them in flowers. The Pagodas exhibit the joy, the Burmese find in religion. They come in thousands carrying flowers, candles, paper umbrellas, singing and dancing, to Sheo Dagon Pagoda, which rises some 500 feet above the city, a shattering dome of gold. They collect here and there to see a street show, or eat at a mobile stall. I saw the Red rally on the First of May. It was just a kind of fair, very different from the precise, business-like rally of the Reds, I later saw in Tokyo.

Economic life in Burma

In spite of run-away prices the Burmese are well fed, at least in Rangoon. They are not anxious for foreign help, Communist or Capitalist. The country is just sitting pretty. One Minister known for his piety and his conscious imitation of Mahatma Gandhi's life said to me that the Burmese people believe that no harm can come to them, as recently the relics of Buddha had been displayed in Burma. Another Minister said that if Communism came to Burma it would have to wear lungis, as the Burmans could never give up their way of life.

Indians in Burma

Indians continue to play an important part in the life of Burma. They developed agriculture in Central Burma and at one time owned nearly 90 per cent of the houses in Rangoon. There was some show of a fight on both sides immediately following independence, and even now there is some formal discrimination against all non-Burmans, but those Indians, who want to stay seem to have come to terms with the Burmans who cannot do without them. There is of course great admiration for India and a general feeling persists that India will be always by Burma's side.

Life in Siam

Siam, like Burma tends to follow an easy, joyous way of life, with this difference that by orders of Government in 1933, the Siamese wear European clothes. At one time the order was strictly enforced and all without hats when they entered public places were enabled to hire them from itinerant hawkers. Now hats are not much in evidence but European clothes are generally accepted for their own utility and effect. The women look very attractive with their hair permed and then peach brown skin set off by rouge on their lips. There is quite a reproduction of Western night life, Bangkok having some twelve dance halls, where partners, known as tax dancers can be hired. In music and art, also European influences are beginning to dominate. The King, who was recently crowned, has written European music, which I myself heard later in New York's Broadway.

Bangkok—a Modern City

Bangkok is in some respects more modern than Rangoon. At least one street, Rajadaman Avenue shows a line of many storeyed buildings. The houses of the poorer people, like houses in Burma are built of wood, often on stilts on account of the marshy nature of the ground. Following European clothes, European style of furniture became necessary and is now common. It is argued by some that the simple expedient of changing to European clothes has removed an obvious difference between the East and West, giving the Siamese a sense of equality, and of new efficiency. The special feature of Bangkok of course is the canal system. Klongs, as the canals are called, run along-side nearly all streets, and connect most houses by water with each other and the river. House boats are to be found in all the bigger klongs, while small boats travel nearly everywhere. There are many houses standing on stilts in the water, and there is a floating market.

Amiable Siamese

The Siamese are a friendly people. I enjoyed the hospitality of Prince Dhani, the King's uncle. I had so much attention from him, his two sisters and daughters that I had to explain I was only a globe trotter, carrying no particular post of Government with me. His charming reply was "You know so much that you do not require a post".

Siam is an independent country, the only one to be so in Asia for hundreds of years. Of course, there is occasional political trouble, in which the army and navy take part on opposite sides, but everything ends peacefully, as the Siamese seem determined not to take politics seriously.

A Mixed Population in Malay

The position is different in Malay, where the population is very mixed, Malays and Chinese, 40 per cent each. Indians 10 per cent and the others 10 per cent. The Chinese are naturally more progressive and either from force or conviction tend to help the Communists, who are engaging the British in hostilities with the very arms they gave them to fight the Japanese. The Malays like hunting, farming, fishing and are not attracted by trade or service. Indians, hold quite an important place in the trade of Singapore, but the majority are labourers in the various rubber plantations. The British maintain that they cannot withdraw from the Government until the plural society becomes more homogeneous. In the meanwhile, the soaring prices of rubber and tin seem to keep every one happy.

A City of Beautiful Nights

Singapore shows the widest variety of commercialised pleasure. For the common people, there are nightly carnivals known as "Worlds," where food, dancing, music, and the pleasures of shopping are lavishly provided. One variety of dance, which is also fashionable in Siam is the Ramwong, in which the partners do not touch each other but show their reactions to the music in various movements of hands and feet. In a sense, Singapore is a city of beautiful nights. All the streets are powerfully lit of course for security reasons, and till late hours life flows joyously in shops and saloons.

Natural Beauty of Hongkong

Hongkong is richly endowed with beauty by nature and man. The Island rises some three thousand feet from the sea, with seven rows of roads, parallel to the beach, and thereafter many roads wandering to the peak generally wrapped in mist. The houses are both beautiful and expensive. I spent some of my time in a house belonging to a Chinese refugee which rises seven storeys, and has on its roof, a swimming pool with artificial waves. Nearly all the wealth of the old China seems to have poured itself in Hongkong. Many storeyed buildings are rising on all sides.

The night life is the most gorgeous in the East, while shops and hotels include many of the latest American touches. Hongkong has become the one open port for China and therefore combines all the trade and life of the many prosperous ports in pre-Communist China. There is a small but very prosperous Indian business community. There are also some Indians in Government service. These are claimed to be some of the advantages of remaining in the Commonwealth. In any case, the imperial preference enjoyed by Indian imports gives our trade a favourable competitive position.

Landscape of Japan

Nature has made Japan, as pretty as a picture. The landscape combining, sea, mountain, lake, with the natural love for beauty and order of the Japanese, is a perpetual feast, wherever one may see it. The Japanese themselves are pleasant, with a sense of exaggerated politeness in the men and feminine grace in the women. They possess what is notably absent elsewhere in Asia, a devotion to work for its own sake. In the numerous factories I visited, no supervisors are employed to keep labour at its tasks; in hotels the attention of the serving maids is almost embarrassing. Naturally, this has enabled Japan to recover from the devastation of War, of which now few reminders are left, even in Hiroshima, which the atom bomb destroyed. Industrial production is reaching pre-war levels, and it is said that everyone is better fed and the women better dressed than ever before.

Japanese gratitude to U.S.A.

The Japanese themselves admit that they owe their recovery to America, and particularly to one man, General Mac Arthur, to whom they give more the same adulation, they once gave to the Mikado. He has not only secured large funds from the American Congress, more than 2,500 million dollars, but has introduced two remarkable changes, first the freedom of women and second democracy, both political and economic. Personally, I found him to possess the true humility of greatness. Those who see him from

Closing of Tank Breaches By Bull-Graders

On account of heavy downpour of rains in short time (about seven inches in an hour), many tanks in Roddam firka in Penukonda taluk were breached in many places and all the water in the tanks has to go out as a waste. The authorities of the Agricultural Department in the district have moved two bull-graders promptly to this area and closed the breaches within a short time and thus saved water in some of the tanks from the subsequent rains which is sufficient to raise paddy crop in an area of 224 acres by these machines. In the case of some tanks, the breaches are numerous and the whole tank-bund effected completely and the length of the breach vary from 70 feet to 285 feet up to a depth of 8 to 10 feet.

If this work has to be done by manual labour, it may not be possible to close the breaches even for years, even with

great cost. On seeing this work, people from other parts of the taluk are rushing for these machines to level their lands which are uneven, deepen their tanks which are silted up and form big bounds to prevent soil erosion. The Department is able to do very useful work in connection with the Grow More Food campaign.

Work Done in Brief

1 Number of tanks breached ..	5
2 Number of breaches in the tanks ..	12
3 Total length of the breaches closed ..	1,600 feet.
4 Number of bull-graders worked ..	2
5 Number of hours worked ..	266 hours.
6 The area that can be raised with paddy with the water saved in the tanks by closing the breaches.	224 acres.

Flood Moderator at Panjapatti

The Panjapatti Reservoir was constructed in 1919 at a cost of Rs. 3½ lakhs mainly to serve as a flood moderator and to protect valuable wet lands on both sides of Kulittalai Kattuvvari from submersion. Incidentally, it was intended to irrigate an ayacut of 1,889 acres. Its storage capacity was 225 million cubic feet. It breached due to the rains of October 1930 and proposals to close the breach and restore the reservoir were under consideration from 1931. As a result of heavy rains in September 1937 and the floods in Kulittalai Kattuvvari, lands in five villages on the banks of the Kattuvvari were badly damaged.

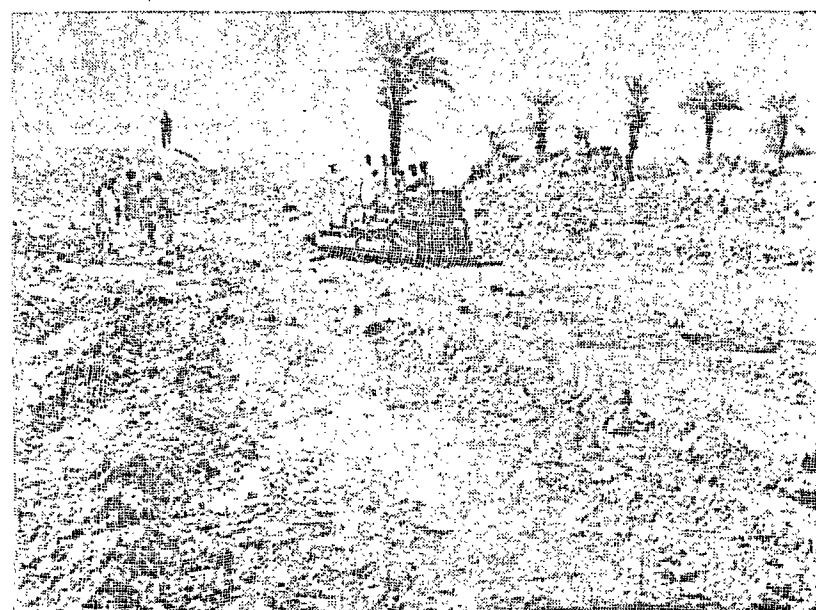
To put an end to the frequent flood ravages, the proposal to restore the reservoir as a flood moderator with no irrigation was approved by the Government in 1942 at a cost of Rs. 1½ lakhs and that work was completed in 1944. Ever since the restoration of the reservoir there had been no heavy floods, and hence the proposal to provide facilities to store up water for irrigation in the tank which has just been approved. The expenditure involved in the last-mentioned work is estimated at Rs. 930. About 300 acres can thus be brought under irrigation, and additional food grains to the extent of 150 tons of rice extra annually is expected to be produced.

Thermal Station at Madanapalle

The Government have sanctioned a scheme at an ultimate estimated cost of Rs. 15.7 lakhs in five years for the establishment of an oil engine generating station at Madanapalle with the necessary distribution system for supply of power to Madanapalle and neighbouring hamlets, viz., Chippili, Vempalli, Kammappalli, Bandamidi-Kammappalli, Basinikonda and to the Sanatorium at Arogyavaram. This scheme is for the initial development of the area and for the building up of load with a view to extend Mettur Hydro-Electric Supply or Mysore supply later on.

Abolition of Rural Rationing

The Government have abolished with effect from January 1951 informal rationing in the rural areas of all deficit districts in the State except the districts of Malabar and The Nilgiris.



The work of closing tank breaches in Penukonda taluk is being done by a bull-grader. It saves labour and does the work quickly and efficiently.

Bull-grader closed tank breaches in Penukonda taluk



A Cheap Method for Propping Sugarcane

Sugarcane is a tall growing plant, but without sufficient strength to stand erect when fully grown. When the cane lodges, there are many disadvantages. Apart from the growth and quality being poor, the damages due to jackals, rats, and breakages are heavy, sometimes amounting to 20 per cent and more of the total yield. The cane growers of the Godavari and Visakhapatnam districts, fully realize the value of propping the canes. They use 4,000 to 8,000 bamboos per acre, and on wages about 120 to 140 men from fourth to eighth month of the crop and prevent the canes from lodging. At the prevailing rates, this propping operation costs Rs. 400 to Rs. 600 per acre.

Cheap Method Evolved

The Indian Sugar Committee of 1920 pointed out that while propping is helpful in increasing yields, the present method as adopted by the ryots of Godavari and Visakhapatnam districts are very costly and that alternative cheap method should be explored. This problem evaded solution by till now, but during the last season, a new method of propping canes was under test at the Gudiyattam Research Station, and during the current year, this cheap and new method has a natural spread among the cane growers.

This method consists of bringing two to three canes from opposite rows, together at a height of 4-5 feet and these are bound by a rope made of the dried or green cane leaves from the same plant. The rope is continued to convenient lengths of 30 to 40 feet and within each loop, canes from opposite rows are brought into the loops alternatively.

The Census and Its Importance

(Continued from page 7)

Accuracy of Census

The test of the accuracy of a census is difficult because there is no standard more trustworthy by which its results can be measured. But a census is sometimes discredited by the inconsistencies between its different results or by divergencies between its figures and those of earlier or later enumerations. The accuracy of a census is ordinarily judged by the accuracy with which the population has been counted; but, a complete census is composed of answers to many enquiries, each with its own degree of error. In some countries, it has been suggested that it is best to publish tables with little comment and then leave the public to make their own interpretation. While in some controversial fields such an attitude may be justified, it has been made abundantly clear that census statistics must be gathered with flesh and blood and must be given some life so that the ordinary reader may peruse it with interest and arrive at conclusions which we may well try to verify by a closer scrutiny of the figures contained in the detailed reports.

Judicious Report

The interpretations of census should probably be limited to those inferences which would be accepted as almost certain by anyone competent to weigh the evidence and which seem to be of general rather than local importance or interest. The Census Commissioner, who finally prepares the report, has, it will thus be seen, a very difficult task ahead of him. On more than one occasion,

About 20-25 men, finish one acre in a day and this method of propping does not cost more than Rs. 25 to 30 per acre.

Benefits of Cane-Propping

In Vuyyur factory area this operation is carried out at Rs. 23 per acre on contract. This new method of propping proved so impressive to the cane growers, that they have taken to it on their own initiative before the department could launch on extension work. The advantages of this method are:

(1) By adopting this method a saving of over Rs. 350 per acre can be effected as compared to the present bamboo propping.

(2) In southern districts where propping is not usually done, yield of cane is increased by over 5 tons per acre by this propping.

(3) Damages due to rats and jackals which go up to 20 per cent are practically nil, when canes are propped.

(4) Less water is required to irrigate the fields which are propped.

(5) Propped canes are better in quality, and as such, there is more outturn of sugar and jaggery.

(6) Less labour is required to harvest propped canes.

(7) This method of propping facilitates examination of all canes in the field and control measures against pests and diseases can be adopted with ease and with better effect. It also facilitates removal of late shoots, which generally contribute to lowering of juice quality.

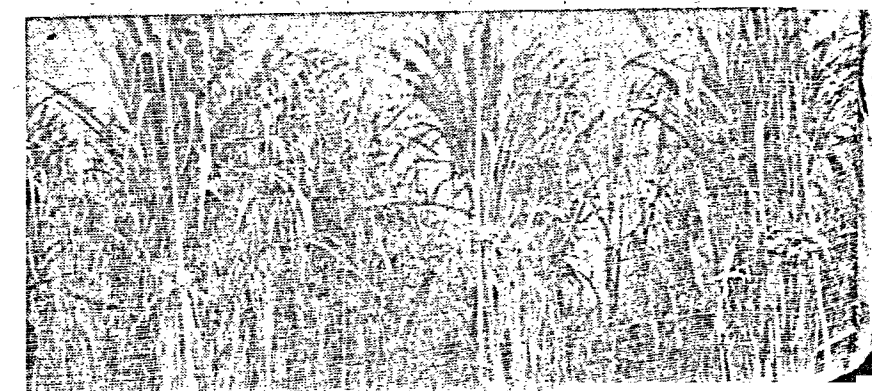
Cane growers are advised to contact the Sugarcane Specialist, Anakappalli, or the Cane Development Staff in the different districts.

statements have been challenged and opinions called out of such statements have been seriously criticised. It will be wise if some of the methods adopted in other countries are followed in our country and, following the census operations, those responsible for the report adopt a judicious policy in the presentation of their statements and in the inferences that they may draw.

But, for any report to be worth the while of any reader, the first need is to give whole-hearted co-operation to the people responsible and to give all available data and it is hoped that every citizen will not only furnish the data, when called upon to do so by the enumerators, but would likewise enthuse all those, with whom he may come into contact, to follow a similar policy and make the first census taken in independent India a model of its kind and well worth the trouble and expenditure incurred thereon.

— By courtesy, A.I.R., Madras.

Cheap method of propping sugarcane. Propped with the leaves of the same plant.



afar are apt to regard him as a God. The American soldiers have a song for him.

"It is only a rumour now
But soon it may be a fact
And voice will be heard in heaven
Saying "Move out God, it is Mac".

MacArthur thinks that Japanese technical help and production is required for the co-prosperity of Asia. I ventured to add that American dollars were also necessary. Otherwise the resurgent Japanese production may affect the markets now dependent on India and United Kingdom.

Political Outlook

My general impression of east Asia was that the people were happy. The secret of this may be first, the Buddhist religion which disposes the people to an attitude of joyous insouciance, to a freedom from fear, to a philosophy that even the greatest of tribulations have compensations, death itself being a kind of feast. Second, the whole population is possessed with a sense that it is now free and equal, that their rich lands are their own, that the great powers, Communist or Capitalist are competitively engaged, not to exploit, but to develop their potentials.

The world balance between Capitalism and Communism is the most significant fact in the economy of the East. To this extent, Communism is not dreaded anywhere being in some quarters regarded as the force, the fear of which ended imperialism in Asia. Malcolm Macdonald, the British High Commissioner and Bevin the British Foreign Secretary themselves have conceded this position by saying that their choice was between Communism and Nationalism. The strategy of Communism is to capitalise human and natural resources by the use of force. The strategy of democracy should be generous use of the superior resources of industrialised civilisation to uplift the areas which they exploited before. England appears to be willing to do her share; the other countries including America have to regard Asian development as an inescapable responsibility. If they fail, Communism may win, even without striking a blow.

India, though more articulate than the rest of Asia also requires help to develop her human and material capital. In a way, she offers the best starting point because she is

better organised to utilise any help given. She is also accepted, even in Japan, as the leader of Asia, capable not only of protecting but of progressing Asian interests. It would appear that the hour of destiny is striking for democracy in Asia. Unless the more advanced countries of the world realise their own responsibilities, it may be also the hour of destiny for the World.

—By courtesy, A.I.R., Madras.

Beware of Counterfeits

The Police are in possession of authentic information about a number of firms in Ludhiyana engaged in the manufacture and sale of cycle parts and accessories, cheating the public by branding locally-made cycle parts with counterfeit stamps of foreign countries and selling the articles, as genuine at high prices. The Police have unearthed a large quantity of goods and several counterfeit moulds used for embossing the following:—

"Raleigh".	"Special English".
"Hercules."	"Hercules Patt."
"Japan Special."	"German Patt."
"B.C.W. Normal."	"Japan Patt."
"Paris."	"Walton and
"Made in England."	Brown. Made in
"Made in Germany."	England."
"112."	

The public are informed that this kind of fraud has extended to other trades like cutlery, knives, surgical instruments, sewing machine parts, tools, medicines, and they are warned to be very cautious while purchasing goods.

The businessmen indulging in such trade, are also warned to desist from such malpractice as otherwise they will render themselves liable to prosecution.



THE TROPHY, a huge shield, was snatched away by the Madras Contingent. The Officer Commanding, Madras Contingent, receiving the shield

Gandhiji on Food Shortage

I have little doubt that if the mercantile community and the official world become honest, if only in face of the impending calamity, we are such a vast country that we can just tide over the difficulty even if no help comes from the outside world, which is itself groaning. Grain and cloth dealers must not hoard, must not speculate. Food should be grown on all cultivable areas wherever water is or is made available. Flower gardens should be used for growing food crops. This has been done during the period of war. The present is, in some respects, worse than the war period. Before we have eaten up the grain we have in stock, we must economize like misers. All ceremonial functions should be stopped. Women can play the highest part in the alleviation of the present distress by economizing in their households."

—Harijan, 17th February 1946.

"Food crisis should be regarded as a certainty: In the circumstances, the following things should be attended to at once:—

Every person should confine his daily wants regarding food to the minimum, consistent with his or her health requirements; and where, as in cities, milk, vegetables, oil and fruit are available, grains and pulses should be reduced as they easily can be. Starch can be derived from starchy roots such as carrots, turnips, potatoes, yam, bananas, the idea being to exclude from present diet and conserve those grains and pulses which can be kept and stored.

Vegetables too should not be eaten as an indulgence or for pleasure, when millions are denied the use of these things altogether and are now threatened with starvation due to shortage of cereals and pulses.

Everyone who has access to any water should try himself or herself to grow some edible for personal or general use. The easiest way to do so is to collect clean earth, mix it with organic manure where possible—even a little bit of dried cowdung is good organic manure—and put it in any earthen or tin pot and throw some seeds of vegetables such as mustard and cress, etc., and daily water the pots. They will be surprised how quickly the seeds sprout and give edible leaves which need not even be cooked but can be eaten in the form of salad.

Above all, black-marketing and dishonesty should disappear altogether and willing co-operation between all parties should be the order of the day in so far as this crisis is concerned."

"People will find it unbearable to have their rations further reduced when they are already not getting enough to eat. But if we accept, as I do, that the Government figures are correct, foresight demands, and it is our duty, to swallow the bitter pill and ask the people to do likewise, i.e., we should all eat less so that we can hold out till the next harvest."

—Harijan, 24th February 1946.

"Today there is a lot of wastage in food going on in big cities like Bombay in the form of feasts and ceremonies. It is the sacred duty of every man, woman and child to conserve every grain of food and every drop of oil and ghee in this crisis. One should eat no more than necessary to keep the body in health and fitness when millions are faced with the prospect of death through starvation. The foodstuffs thus saved can be distributed among the needy poor—not as alms but as remuneration for honest labour."

—Harijan, 3rd March 1946.

"It is always well to cut down the ration of sweet vendors rather than that of individuals. In these hard times, I would not mind if sweet-making were even prohibited. Sweetmeats are not a necessary part of a wholesome diet."

—Harijan, 28th April 1946.

"To save food in order that it will be available for famine areas under the present system of rationing appeals to very few. There is so much of black-marketing and corruption that one feels that what one saves will find its way to the black-market. There would be a good psychological appeal if the foodgrains saved are collected and guaranteed to be sent to the famine areas. This will have to be organized."

—Harijan, 9th June 1946.

"For the moment, however, my object would be fully served if all responsible men in India would definitely tell the people in their respective provinces, districts and States; not to look beyond India for supply of food but to grow what they can themselves and learn to eke out a living from their own produce. . . . We need fear no starvation for want of life-giving vegetables plus a little milk for vegetarians, and fish, flesh or fowl for non-vegetarians."

Let India realize that as yet we have no appreciable quantity of food from outside our shores. Many are willing to help but they are themselves for the most part sufferers or have more calls on them than they are able to cope with.

The transport difficulty is very real for all of them and our own will commence when the foodstuff reaches our shores. Internal transport and distribution constitute a problem by themselves. It is, therefore, practical wisdom to brace ourselves for the struggle and declare with one voice our resolve that we shall grow our eatables for ourselves and perish bravely in the attempt if we must."

—Harijan, 29th September 1946.

"We hear nowadays people trying to secure foodstuffs from foreign countries. As a matter of fact, if people will help themselves, then Government is bound to move and this is what I will call real democracy, which is built up from below."

—Harijan, 9th February 1947.

A Special Sugarcane Sub-committee Formed

Government had constituted a Special Sugarcane Sub-Committee with Dr. T. S. Venkatraman as Chairman, for the purpose of examining the technique of cultivation of varieties of sugarcane suitable for the several factory areas of this State and to suggest ways and means of improving the quantity and yield of sugarcane, at the same time bringing about a reduction in the cost of cultivation.

The Committee has recently finished its labours and submitted its report. The printed report can be had from the Special Agricultural Demonstrators for sugarcane stationed at places listed below or from the Superintendents of Sugarcane Liaison Farms at Samalkot, Hospet, Kulittalai or Nellikuppam. The price of each copy is Re. 1-2-0.

PLACES AT WHICH THE SPECIAL AGRICULTURAL DEMONSTRATORS FOR SUGARCANE ARE STATIONED :

Number.	Headquarters of Special Agricultural Demonstrators.	District.
1	Chodavaram	Visakhapatnam district.
2	Bobbili	Srikakulam district.
3	Peddapuram	East Godavari district.
4	Ramachandrapuram	Do.
5	Vuyyuru	Krishna district.
6	Hospet	Bellary district.
7	Hindupur	Anantapur district.
8	Chittoor	Chittoor district.
9	Madanapalli	Do.
10	Chandragiri	Do.
11	Punganur	Do.
12	Cuddalore	South Arcot district.
13	Villupuram	Do.
14	Vridhachalam	Do.
15	Gudiyatham	North Arcot district.
16	Vellore	Do.
17	Karuru	Tiruchirappalli district.
18	Ariyalur	Do.
19	Coimbatore	Coimbatore district.
20	Udamalpet	Do.
21	Namakkal	Salem district.
22	Nilakkottai	Madurai district.
23	Coondapur	South Kanara district.
24	Mangalore	Do.

Kallar Reclamation Advisory Committee

An advisory committee to assist the Special Deputy Collector, Kallar Reclamation, Madurai, in framing schemes and in dealing with general questions relating to reclamation of Kallars has been constituted by Government with the following members :—

Deputy Registrars of Co-operative Societies, Madurai and Dindigul.

District Educational Officer, Madurai.

District Agricultural Officer, Madurai.

Deputy Superintendent of Police, Usilampatti and Dindigul.

Sri S. P. Peya Thevar.

Sri O. Vellaichami Thevar.

Sri S. Thinakarawami Thevar.

Sri Sami Aiyah alias Subba Naidu.

Sri V. Ramaswamy.

Cultivation of Railway Lands

The Government have decided that all railway lands which have been under cultivation for five years or more should be granted on lease in open auction for a period of three years and in special cases the lease be renewed in favour of the previous lessee without auction.

According to the existing regulations, railway lands which have been under cultivation for five years or more are granted on lease in open auction on an yearly basis. It has been felt that the grant of an annual lease after the initial lease of five years is not a sufficient inducement for the lessee to manure the lands and making the best use of it. It was therefore considered that leasing of such lands for longer periods would make the lessee look after the land better and get the best yield out of it.

Achievements of Agricultural Research

The Koilpatti Agricultural Research Station was started in the year 1900 with the object of improving the local agriculture of the tract comprising the districts of Madurai, Tirunelveli and Ramanathapuram. The improvement was sought to be effected by a careful study of the local crops and the cultural, manurial and rotational practices in the tract.

New strains in Cotton

Attention was first paid to the improvement of cotton, the commercial crop of the tract. After years of study two strains A-10 and C-7 were evolved and distributed—A-10 for tracts north of Koilpatti and C-7 for areas south of Koilpatti, where the sowing season is later than in north. These two strains were later (in 1934) replaced by a single strain K-1 which was found to be suitable for both the tracts in addition to possessing better lint length, colour, earliness and spinning quality. Still later, another strain K-2 was isolated which was evolved by hybridization. This strain is more cosmopolitan than the previous ones and has a long staple (15/16 inch). It is also capable of withstanding and recovering from heavy untimely rains, better than the previous strains evolved. This strain being popular is multiplied and distributed to the cultivators from the year 1948 and has so far spread over more than 150,000 acres.

Higher yield in Cumbu

Cumbu is the principal food crop of the farmers especially in Tirunelveli district. Cumbu K-1 giving 7 per cent higher yield than the local variety was evolved and is under general distribution in the tract.

Better Irungu Cholam and Ragi

Irungu Cholam is exclusively grown for fodder in this tracts with a very high seed rate. The strain Irungu Cholam K-1 is an outstanding strain and gives 14 per cent increased yield over the local. Further work on this crop has resulted in the evolution of another strain A.S. 7081 which is a cross between Periamanjali Cholam and Irungu Cholam. Trials have indicated a bright future for this strain. Similarly the strain Cholam K-2 has been evolved under irrigated Vellai Cholam and this strain is popular in both season Chitrai Pattam (March sowings) and Thai Pattam (January sowings) of the tract. In the former season, 15 per cent increased yield and in the latter 45 per cent increased yield of grain over the locals have been obtained.

Irrigated Ragi is the next food crop of importance and Ragi K-1 which gives 18 per cent more yield than the local is also found to be resistant to piricularia.

Manurial and Cultural experiments

A good number of experiments, both manurial and cultural, were carried out on this station, with the object of finding out the optimum manurial and cultural treatments to be given to the major crops cultivated in the tract. As a result of such experiments, the following useful findings have been obtained :—

(1) Regarding the preparatory cultivation, a shallow ploughing for cotton and keeping the fields free from weeds in the case of millets was sufficient to produce normal crops.

(2) Irungu Cholam has a depressing effect on the yield of succeeding cotton or cumbu crops (Cholam-effect).

(3) Mixing and sowing the Irungu crop with indigo does not affect the yield of Irungu. The indigo crop is allowed to grow after the harvest of Irungu and is then ploughed in with early rains. By this practice the Cholam-effect mentioned above is mitigated.

(4) Among the various mixtures tried with cotton, cotton plus coriander, cotton plus horsegram and cotton plus groundnut (bunch variety) affected the yield of cotton. Among these cotton plus groundnut mixture is found to be economic.

(5) Twelve pounds seed rate of cotton, 60 lb. seed rate of Irungu Cholam and 5 lb. seed rate for Cumbu has been found to be the optimum.

(6) Application of nitrogenous manure (ammonium Sulphate of groundnut cake) definitely increases the yield of cotton. The yield is progressively increased as the supply is increased from 20 to 100 N. level. It is interesting to note that the succeeding crop of millet is also benefited by the residual effect. The application of 100 N. level almost doubles the yield of cotton and the succeeding millet crops.

The above results clearly indicate that the great work done by the Research Station and its achievement under various items enumerated above, have really added to the economic uplift of the ryots of the region and the station has to be really congratulated at its ensuing Golden Jubilee Celebration.

—Young India, 18th July 1929.

Green Leaves

Villagers in many parts of India live on dhal and rice or roti, and plenty of chillies, which harm the system. Since the economic re-organization of villages has been commenced with food reform, it is necessary to find out the simplest and cheapest foods that would enable villagers to regain lost health. The addition of green leaves to their meals will enable villagers to avoid many diseases from which they are now suffering. The villagers' food is deficient in vitamins; many of them can be supplied by fresh green leaves.

MAHATMA GANDHI.

—Harijan, 15th February 1935.

The Ambasamudram Rice Research Station

The Rice Research Station, Ambasamudram, was opened during the year 1937 on a temporary basis and lands were taken on lease. The Station was started with an area of 12 acres (9.49 wet and 2.19 dry lands) which later, increased to 16.10 acres. The additional area was leased out with the main idea, for the multiplication of improved strains released from the station.

During the course of these 12 years, pure line selection work was successfully done in six of the important local varieties of the district and seven improved strains giving an average increased yield of 10 to 35 per cent over locals, have been released so far. Three more strains are in the final stages of trial and will be released most probably during the course of next season.

The above improved strains are very popular in the district and have spread within such a short period to nearly 156,000 acres out of 351,140 acres under paddy in this district. And this roughly works out to nearly 50 per cent of area under paddy. These improved strains spreading to such a large extent have added nearly 36,200 tons of additional production of paddy per year to the State valuing at Rs. 81,12,600. This is really creditable for such a short period of a decade.

Much more would have been attained but due to limited area of the Farm, it was not in a position to supply large quantities of paddy seeds that were in demand in the various districts of the State. It is therefore, essential to make the Farm a permanent one with an additional area of another 50 acres for multiplication of improved seeds of strains evolved and released from the Station.

Better yield : Under the intensive cultivation scheme, increased yield per acre is realised through intensively manured field.



Groundnut and Oil Prices

In September 1950, the Government issued a Press Note regarding the continuous and steep price in the prices of groundnuts and groundnut oil. As it was then believed that the rise in prices of these commodities was due to speculation, the Government appealed to all concerned to co-operate with them in putting it down. It has again been brought to the notice of the Government that prices of groundnut and oil are still ruling high. Normally during this part of the year, the prices should be much less as the new crop will be coming on the market.

It is believed that the present high prices are due to unusual speculative activities in the important groundnut markets by certain merchants especially in Madras City and Adoni. Heavy hoarding and cornering of stocks by millers and exporters are also said to be resorted to in certain quarters. This is a situation which the Government cannot possibly allow to develop as that would affect a large section of the crushing industry. The Government therefore desire to warn all concerned that they would not hesitate to take strong measures to put down hoarding and cornering of stocks leading to an artificial inflation of prices if the market conditions do not improve.

Ramanathapuram District

Government have appointed a Special Officer to draw up a co-ordinated plan for the economic development of the Zamindari area in the Ramanathapuram district. As this area, which covers a major portion of the district, is in a neglected condition, the Government consider that immediate steps should be taken to develop the area and bring it in line with the more developed and advanced tracts. The appointment of a Special Officer to draw up a plan, is a first step in this direction.

A Gift to Government

The Government have accepted with thanks the offer of Sri Chilakala Venkatarathnam, Narasaraopet, to construct a ward of ten beds for males in the Government Hospital, Narasaraopet, and to hand over the ward to Government for maintenance.

X-Ray Block For Machilipatnam Hospital

The Government have accepted with thanks the offer of the Krishna District Committee of the Provincial Welfare Fund, to donate a sum of Rs. 25,650 towards the cost of construction and provision of an X-ray block in the Government Headquarters Hospital, Machilipatnam, Krishna district, and to hand it over to Government for maintenance.

Co-operatives and Ryots

By The Deputy Registrar of Co-operative Societies, Tiruchirappalli

Distribution of Fertilisers

The distribution of Chemical Fertilisers to ryots was done in a large part till recently through the Agricultural Department. This work has now been transferred from the Agricultural Department to Co-operatives. I shall now narrate briefly how the chemical fertilisers reach the ryot from the source of supply.

Every year the Government of India arrange for the receipt of Chemical Fertilisers from abroad and distribute them among the various States in the Indian Union according to the requirements of the latter. Ammonium Sulphate is mostly imported from foreign countries while Super Phosphate is procured mostly from the manufacturing firms within the country. The allotment for this State is 134,000 tons of Ammonium Sulphate and 33,900 tons of Super Phosphate for the current year.

Out of this, 34,000 tons are to be distributed by manure-mixing firms and the balance of one lakh of tons is to be distributed to the ryots as straight fertilisers by the Co-operative and Tender firms, on a 50 : 50 basis. Similarly, in respect of super phosphate, 18,900 tons go to manure-mixing firms and the Co-operative and Tender firms are to distribute 10,000 and 5,000 tons, respectively. This State quota is split up on a district-war basis by the Joint Director of Agriculture and based on this district allotment the Joint Director of Agriculture makes allotment to Co-operatives as and when shipments arrive at the port carrying fertilisers.

Machinery of Sales

In the Co-operatives set up of the distribution scheme, there is a wholesaler for each district, i.e., the Co-operative Wholesale Stores or the Marketing Federation as the case may be and a net work of primaries as retailers. As and when shipments arrive at the port, the Joint Director of Agriculture makes the allotment to each district and intimates the fact to the wholesaler, i.e., the Co-operative Wholesale Stores. On intimation from the Joint Director the Co-operative Wholesale Stores remit the cost of the stocks into the treasury and issue clear despatch instructions to the Joint Director of Agriculture as to the various centres to which the stocks have to be moved and the quantity to be moved to each centre. The clearing agents who are Messrs. Imperial Chemical Industries (India), Limited, and the Sri Rama Vilas despatch the stuff accordingly. The stocks so received are distributed among the primaries for distribution to ryots according to local demands.

Distribution aimed to benefit ryots

The aim of Government is to make the fertilisers available to ryots as cheaply as possible at nearby centres. For this purpose a target of 100 retail centres for each district has been fixed and in some districts this number has been exceeded. There are now about 1,000 co-operatives selected for the distribution of chemical fertilisers. Besides retail depots opened by Co-operative Wholesale Stores in

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The Co-operative movement has become a live force in this State contributing to the general welfare of the people in all spheres of life. They are dispensing credit to members who are in need of it, they enable them to construct and own houses with State aid, they cater to their needs in respect of food and clothing, and in short they pervade every branch of economic activity which contributes to the social, moral and material welfare of the community. In times of food scarcity, they are carrying on equitable distribution combating black market activities and acting as check shops. Now they have taken up the scheme of distribution of Chemical Fertilisers and Iron and Steel to ryots to enable them to grow more food.

It is needless for me to emphasise that our present need is "Food and More Food". Politically, we are today an independent Nation. But economically, we are still dependant on others for our food. To get over this, our Government have launched a self-sufficiency programme and it is our duty as citizens of the State to contribute to the success of this plan. Self-sufficiency can best be achieved by bringing a large acreage under the plough and also by increasing the productive capacity of land. Agricultural Research in this direction has shown that the application of chemical fertilisers to lands increases the productivity by 15 to 50 per cent. Government are therefore taking special steps to popularise the use of chemical fertilisers in stepping up food production.

Early Manuring

The object of manuring is to provide the crop with the necessary plant food elements essential for its growth. Most of our soils are deficient in Nitrogen and Phosphate and therefore, unless these deficiencies are supplied, adequate growth of the plant cannot be assured. For maintaining the fertility of the soil and for securing better crop yield, farm-yard manure has been used by ryots for centuries. But now with the progress in research, other fertilisers have become an essential features of modern agriculture. These fertilisers supplement but not supplant the dung and farm yard and green manures used since early days. If our country is to attain self-sufficiency with regard to food and if the fertility of the soil is to remain unimpaired, the supplies of farm-yard manure have to be supplemented by increased use of chemical fertilisers.

Modern Fertilisers

The fertilisers most commonly in demand are Ammonium Sulphate and Super Phosphate. The former contains 20.6 per cent Nitrogen which is useful for improving the vegetable growth of plants. Phosphates help considerable development of the root system, hasten the ripening process and improve the quality in grain. The application of chemical fertilisers (especially Ammonium Sulphate and Super Phosphate), in the correct proportion will yield the maximum results. For every acre, 50 lb of Super Phosphate and 100 lb of Ammonium Sulphate should be mixed with 5 tons of farm-yard manure or 300 lb of green manure be applied. This will give an increased production of 2 bags of paddy per acre. Application of Super Phosphate and Ammonium Sulphate in proper proportion will not create any "soil sickness."

Benefits of Multi-Purpose Co-operative Society

Denduluru Multi-Purpose Co-operative Society

Denduluru is a village in Eluru taluk of the West Godavari district. It is about 5 miles from Eluru and is connected by Metal Road. An ordinary Co-operative Credit Society on unlimited liability basis was registered for the benefit of villagers in 1918 and the society commenced work on 29th November 1918. It is now nearly 32 years and is one of the oldest societies in the district.

Membership and Share Capital

There are 594 members on the rolls of the Multi-purpose Co-operative Society and it must be said to the credit of the society that almost all families in the village are represented in the Society. The paid up share capital of members is Rs. 12,878.

Borrowings Loans and Deposits

The maximum borrowing power of the Society is 1.5 lakhs. The society has been able to obtain local deposits to the extent of Rs. 23,590. It has also borrowed from the Co-operative Central Bank to the extent of Rs. 99,157.

Loans to Members

There are 3 kinds of loans surety, mortgage and produce loans. The individual maximum borrowing power is Rs. 2,000. The society has taken care to see that almost all the needy members are supplied with credit. There are now loans amounting to Rs. 1,05,765. The smallest amount of loans is Rs. 50 and the biggest amount is Rs. 2,000. Small ryots and workers like Upparas, Yerukulas, Vegetable Growers have received the same attention from the Society as the big ryots.

Reserve Fund

The society has built up a Reserve Fund of Rs. 10,120 of which Rs. 8,529 have been invested in the Eluru Co-operative Central Bank and Rs. 1,600 in National Savings Certificates.

Other Activities

The Society has undertaken distribution of grams, dhall, sugar, cloth, kerosene oil, etc.

The Society has been selected for distribution of agricultural implements (cart tyres included) and chemical fertilizers. It is doing the business fairly well.

In spite of its other activities the Society has not been unmindful of the thrift campaign which is so essential for the economic betterment of the ryots. It has been collecting small amounts of thrift from members and has so far accumulated Rs. 698 towards thrift fund.

Extension of Cultivation

The society has proposed to take up a proposal for cultivation of fallow land of about 1,700 acres, by hiring a Tractor at half the cost from the Agricultural Department and the proposals are under consideration. The proposal has been supported by the Denduluru Firka Development Committee.

The Uppuda Co-operative Society

The Uppuda Co-operative Society was registered on 23rd November 1919 and started on its work on 9th January 1950. It has been gradually developing its sphere of activity in all directions ever since its starting and on 30th September 1950 it had a membership of 927 with a paid up share capital of Rs. 7,225.

A cash credit loan of Rs. 11,500 has been sanctioned by the Central Bank of which Rs. 9,930-9-0 were drawn and outstanding. A Government loan of Rs. 2,000 has been sanctioned to the society for the construction of a godown in 1947 and the first instalment of this loan will fall due only in 1952. The maximum borrowing power of the society which was Rs. 40,000 has been resolved to be raised to Rs. 50,000 in the general body meeting held on 19th August 1950.

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Gandhiji—Jesus of Modern Age

Gandhiji acted exactly in the same way as Jesus did in the by-gone days. While conducting the campaign in South Africa in 1908, Gandhiji decided after a thorough consultation with General Smuts that the Indians should undergo registration. On February 10, as he was going to the Registration Office, Mir Alam, an Indian Pathan, accosted him abruptly. Evidently Mir Alam did not like Gandhiji's plan. In Gandhiji's own words: "Mir Alam asked me, 'Where are you going?' I said, 'I propose to take out a certificate of registration, giving the ten finger prints. If you will go with me, I will first get you a certificate with an impression only of the two thumbs and then I will take one for myself, giving the finger prints.' I had scarcely finished the last sentence when a heavy cudgel blow descended on my head from behind. I at once fainted with the words, 'Hai Rama' (Oh God), on my lips, lay prostrate on the ground and had no notion of what followed. When I regained consciousness I saw Mr. Doke bending over me. 'How do you feel,' he asked. I replied, 'I am all right but there is pain in the teeth and ribs. Where is Mir Alam?' He said, 'He has been arrested along with the rest.' I said, 'They should be released.' Jesus had exclaimed, 'Father! forgive them.' Gandhiji uttered, 'They should be released.' Satyagraha entails great suffering and the world knows how patiently and calmly Gandhiji bore physical and mental tortures.

[Gandhian Ethics—by B. G. Ray—page 41]

Advantages of Self-Help

A review of the important activities of the Rural Welfare Department during the month of November 1950 is given below:

NAGIRI FIRKA, CHITTOOR DISTRICT

The Grama Seva Sangham, Parameswaramangalam, contributed a sum of Rs. 500 for constructing a reading room, Rs. 200 towards the cost of the reading room building site, Rs. 425 towards the cost of a radio set and Rs. 300 for purchasing a breeding bull. The Grama Seva Sangham in Jagannadhapuram village contributed Rs. 230 for running a short training camp of village workers. A training camp of village workers was conducted for six days from 21st November 1950 and as many as 22 workers were given training. One spinning demonstration was held.

KALASAPAKKAM, KADALADI AND THURINJAPURAM FIRKAS, NORTH ARCOT DISTRICT

The villagers of Kadaladi and Thurinjapuram firkas have promised to pay one-third of the estimated cost for 12 road works and 25 well works sanctioned in those firkas in addition to free gift of lands required for the above works. The villagers of Periakalambadi constructed a school building at a cost of Rs. 4,000. Three elementary schools and six adult night schools were opened during the month. The villagers of Melapur, Kadaladi, Kattakarampalayam, Northampoondi, Sorokalathur, Arapakkam, Veeralur and Kothandavadi contributed 50 per cent of the cost and maintenance charges of battery radio sets. The villagers of Melapur constructed a reading room at a cost of Rs. 1,500.

GURUVAREDDIPALEM CENTRE : GUNTUR DISTRICT

A share capital of Rs. 25,000 for organising a full fledged Multipurpose Co-operative Society at Chimakurthi and Rs. 10,500 for organising Multipurpose Co-operative Society at Rudravaram was collected.

KUMBLA, MANJESHWAR AND MULKI FIRKAS

Thirty acres of land in Kumbla firka was terraced by a bull-grade. Forty-five compost pits were dug in the same firka. Artisans were supplied with free tools during the month. One water trough and a footpath were constructed in the Manjeshwar firka and the villagers contributed one-third of the cost of the works. In addition to this the villagers themselves constructed one culvert and a footpath without grants from the Government. An agricultural and Cottage Industries Exhibition was held at Mulki.

KURNOOL FIRKA, KURNOOL DISTRICT

Two adult schools were started and drainage to a length of 100 feet was constructed by the people at their own cost.

TIRUPPUR CENTRE : COIMBATORE DISTRICT

The villagers of Ganapathipalayam were constructing a school building without any Government grant. Two village roads which were estimated to cost more than Rs. 4,000 were taken up for execution with a Government grant of Rs. 1,000 only, the balance being met by the contributions from the public.

ALUR, HOLAGUNDI AND CHIPPAGIRI FIRKAS, BELLARY DISTRICT

The villagers of Chinnaaharivanam collected Rs. 1,545 for the construction of a Vakkarani. The villagers of Gazzalaballi have consented to contribute Rs. 2,500 towards the construction of a village entrance. The villagers of Bellara and Kurukunda offered to contribute Rs. 3,000 each for the construction of a community centre. Sports were conducted and prizes were distributed to the winners.

DENDULUR FIRKA, WEST GODAVARI DISTRICT

A Rural Co-operative Housing Scheme was opened at Rangapuram. A short training camp for village workers was conducted at Gopannapalem from 24th to 30th November 1950 and 28 workers were trained at the camp.

HINDUPUR, PARAGI AND MADAKASIRA FIRKAS, ANANTAPUR DISTRICT

A new school building was constructed by the villagers at Ralahalli at a cost of Rs. 2,000 with a Government grant of Rs. 300 only. One of the ryots gave about half an acre of land free to the school. An adult night school for women was started in the Harijan Colony at Paragi.

PAYYANUR CUM NILESHWAR CENTRE : MALABAR DISTRICT

A cattle show and cattle fair were organised under the auspices of the Rural Welfare Department and prizes were awarded to the best animals. A short camp of the Kasturbha National Memorial Trust was opened at Payyanur for training girls in Rural Development work.

Grow More Food : H.E. the Governor of Madras is seen here sowing cholam seeds



Constructive Work by Non-official Agencies

The intensive Rural Reconstruction work is now being implemented by the Government in 84 selected firkas in the State. With a view to extend the work to additional areas and in order to render substantial aid to and promote the activities of non-official agencies, the Government have decided that rural development work should also be entrusted to non-official agencies engaged in doing constructive work. To start with, five non-official institutions engaged in doing constructive work will be entrusted with rural development work in the areas in which they are now doing such work.

The Government will pay grants on the following terms and conditions:—

(i) The non-official institutions engaged in doing constructive work should select a compact area not exceeding the size of a revenue firka, in which they are now doing constructive work for doing rural development work on the lines indicated in the General Plan for Firka Development.

(ii) The non-official institutions should engage themselves on the following items:—

(1) Provision of communications, (2) provision of drinking water facilities, (3) improvement of sanitation, (4) improvement of agriculture, (5) development of Khadi and other village industries and (6) other items of the constructive programme such as Adult Education, establishment of Multi-purpose Co-operative Societies, etc.

(iii) The non-official agency may employ its own staff. For this purpose, the Government will pay a subsidy of Rs. 4,000 (rupees four thousand only) per annum or the expenditure actually incurred by each institution, whichever is less, subject to the condition that the expenditure on staff and office contingencies does not exceed Rs. 300 per mensem and Rs. 4,000 per annum respectively. The claim for payment of subsidy under these heads should be fully supported by proper acquittances, bills and vouchers.

(iv) Grants will be made at 50 per cent of the actual expenditure incurred by the non-official institutions on works, subject to a maximum of Rs. 20,000 (rupees twenty thousand only) for each institution, excluding the subsidy to be paid on staff and office contingencies referred to in sub-paragraph (iii) above. The expenditure incurred on works by the non-official institutions for which grants are claimed should not be less than twice the amount of

the grants claimed and should have been spread over an initial period of not less than one year.

(v) The assistance and the advice of the officers concerned of the several departments of the Government will be made available to these institutions whenever required and as far as possible.

As the object of the scheme is to encourage the growth of the spirit of self-help initiation and ambition in the villagers by giving them an opportunity to work for their own improvement or advancement, the non-official agencies should take up for execution only those works for which the villagers benefited make a contribution either in cash or in kind or by way of labour. Credit may be taken for the value of the contributions made by the villagers towards the minimum share of 50 per cent of the expenditure which the non-official institutions should bear on their own account. As far as possible, the works should also be entrusted for execution to the local villagers to the exclusion of profit earning outside agencies.

The institutions should submit details of the works proposed for execution, together with an estimate of the cost, to the Government through the Collectors of the districts concerned for sanction. Once the works are approved and executed, the grants will be sanctioned by the Collectors and disbursed on the post-execution system with reference to the actual expenditure incurred by the institutions from their funds and certified to by the departmental officers concerned.

A lump-sum grant of Rs. 1,000 (rupees one thousand only) will also be placed at the disposal of the Director of Rural Welfare in respect of each of the five institutions selected. The Director of Rural Welfare will have full discretion to utilise this amount for the objects specified under items (1) to (6) in sub-paragraph (ii) to paragraph 2 above. Such grants will not, however, exceed a sum of Rs. 200 on any particular item of work in respect of any one institution.

The applications for the selection of non-official institutions for being entrusted with rural development work as envisaged in the foregoing paragraphs should be sent through the Collectors of the districts concerned who will forward them to the Government with their recommendation together with a statement of receipts and expenditure in respect of each applicant-institution.

Love Thy Neighbour

Whenever Bapu talked with any one, he was careful to keep in mind that person's way of life, his religious predilections and his likes and dislikes.

One day he received a letter from a Christian gentleman in which the correspondent had asked a question regarding Swadeshi.

Bapu wrote in answer, "Swadeshi is merely a biblical injunction put into action. Has not Christ said, 'Love thy neighbour as thyself'? If a man forsakes his neighbouring shop-keeper for one far off, he is forgetting his own neighbourliness and following the dictates of self-interest. The shop-keeper who is his neighbour has opened a shop on the strength of the patronage he hopes to get from his neighbour. The principle of Swadeshi enjoins that we shall fulfil our duty towards our neighbours, and not neglect the obligations laid upon us as social beings."

(K. Kalelkar's—*Stray Glimpses of Bapu*—pp. 131-132.)

Educational Round-up

Medical Inspection of the Students

The Government have sanctioned the introduction of the scheme for the Medical Inspection of the students in the following nine Government Colleges in the State as their strength exceeds 500 students:—

- (1) Presidency College, Madras.
- (2) Government Arts College, Madras.
- (3) Government Arts College, Rajahmundry.
- (4) Government Arts College, Anantapur.
- (5) Government Arts College, Kumbakonam.
- (6) Government Arts College, Coimbatore.
- (7) Government Victoria College, Palghat.
- (8) Government Brennen College, Tellicherry.
- (9) Government College, Mangalore.

They have also sanctioned the following staff temporarily for a period of one year in each of the Colleges, in the first instance, and other connected recurring and non-recurring expenditure for the successful working of the scheme:—

(i) One part-time Medical Officer on a remuneration of Rs. 100 per mensem.

(ii) One compounder on Rs. 35—1—60.

(iii) One servant on Rs. 15—1/5—16—1/3—20 borne under the contingent establishment.

Proposals for the implementation of the scheme have been called for from the Principals of the nine Government Colleges in question and the scheme will be introduced in the Colleges as early as possible.

Personal

Sri D. Sadasiva Reddi, on return from his recent visit to the United Kingdom, has resumed duty as Director of Public Instruction and Commissioner for Government Examinations, on 19th November 1950. Sri L. Bullayya, who was deputed to the United Kingdom for Library Training has returned and has taken charge as Special Officer for Libraries in the office of the Director of Public Instruction, Madras, relieving Sri R. Janardanam Naidu, who has retired from service. The latter has been appointed by Government as Honorary Organiser for Libraries.

Miscellaneous

Teachers who have passed the Nursery Montessori and Kindergarten T.S.L.C. Examination of the Secondary Grade are permitted to be employed in Secondary Schools to handle classes I and II. Manual Training Instructors who hold the Manual Training Certificate of the Teachers' College, Saidapet and who have had five years' teaching experience in recognised schools of this State are permitted to appear privately for the T.S.L.C. Examination of the Secondary Grade provided they have secured the marks prescribed for the Higher Elementary trained Teachers in the S.S.L.C. Examination for the purpose.

The Madras Public Libraries Act, 1948

The inaugural meeting of the (Provincial) State Library Committee was held on Friday, 24th November 1950, the Hon'ble Minister for Education presiding. The Hon'ble

Minister for Local Administration and the Director of Public Instruction were also present. The Committee decided about the formation of sub-committees, with a view to giving speedy effect to the spread of Library Service in the State. Madras is the first State to initiate this scheme of Library Movement.

Warning to Public: Doping Cases on the S.I.R.

The public are warned that since September 1950, there has been an outbreak of doping cases on the South Indian Railway. Young and inexperienced passengers waiting on Railway platforms are befriended by a pair or group of strangers who, after gaining the confidence of the passengers, persuade them to take coffee or tea mixed with some stupefying drug. While the victims become unconscious, they are relieved of the cash and jewels in their possession.

The platforms of Dindigul, Lalgudi, Manamadurai and Madurai Railway stations have been chosen as their favourite haunts for the commission of such offences. On September 6, 1950, a case was reported at Dindigul and few days later there was another case at Lalgudi; in both of these places, a group of 5 or 6 criminals operated. Another incident occurred at Manamadurai on October 2, 1950, for which two young persons were responsible. A similar case was reported at Dindigul on November 20, 1950. The criminals concerned in these cases are aged between 20 and 25.

The above cases would clearly show that there is a gang engaged in the commission of such offences. The public should be cautious not to take tea or coffee offered to them free by any one on any Railway platform or in a moving train. They should see that no opportunity is given to any stranger to contact or make friends with them and that, if any suspected individual approaches them, they should promptly hand him over to the nearest Police. They should also warn their relatives and friends in order to prevent them from falling a prey to the nefarious activities of these criminals.

A special staff of the C.I.D. is vigorously at work to trace the gang and bring the offenders to book. The public are requested to render their wholehearted co-operation by promptly communicating any useful information to the Police and in helping them to eradicate the evil altogether. Persons who secure the arrest of the criminals will also be suitably rewarded.

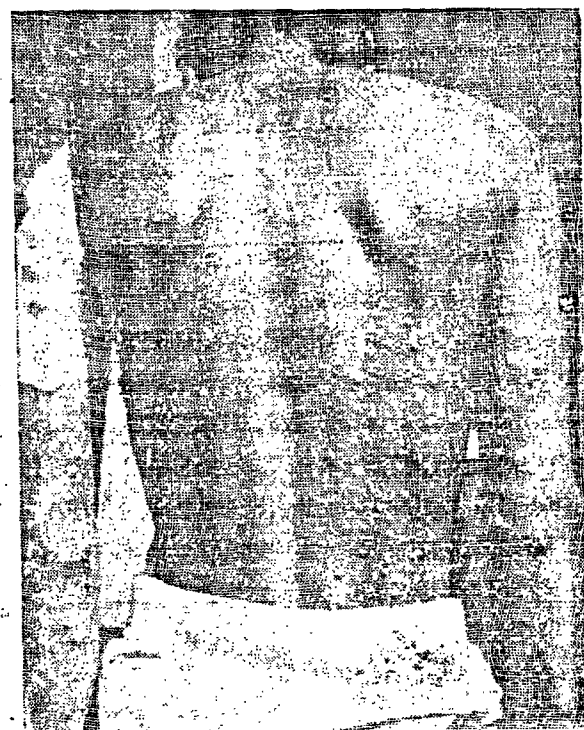
Sulphone Therapy in Leprosy

By Dr. R. G. COCHRANE, M.D., F.R.C.P. (Lond.), D.T.M. & H., lately Honorary Director, Leprosy Research, Chingleput

Today the average well-informed citizen in the Madras State knows more about leprosy than many persons in other lands. In fact one can say that the ignorance with regard to leprosy and the prejudice against it is becoming far less in Madras than in many cities in the West. As a result of this increased knowledge information with regard to new discoveries in the realm of treatment is speedily reported but the public is not always able, rightly, to evaluate the claims for new remedies, mostly of the sulphone group which appear in the press from time to time.

In order to help members of the general public to understand the present position with regard to the treatment of leprosy and assess its value, the history of the sulphone remedies will be briefly related. In the year 1907 certain German workers discovered in the course of their researches on Aniline dyes a by-product named diaminodiphenylsulphone. This substance remained on the shelves of the industrial chemist for twenty or more years when British workers in their search for more powerful means to kill the organism of that mortal disease, septicaemia, (blood poisoning) tried D.D.S. or D.A.D.P.S. as it is called for short. In streptococcal infection in mice it was found that this drug was lethal to these organisms. Unfortunately, when hopes were raised that at last a drug had been found to cure mothers (for it was in connection with maternal deaths that search was made for effective drugs) from that most killing of all diseases, child-bed fever, it was discovered that while this drug would kill the germs responsible for death, the substance itself was liable to show serious toxic effects and so diaminodiphenylsulphone was again put back on the laboratory shelf and the sulphonamides took pride of place!

Case of Leprosy before Sulphone Therapy



Another disease which causes the greatest concern to Public Health workers is Tuberculosis and the search for effective anti-tuberculosis drugs is being continuously pursued by research workers. It was, therefore, not surprising that sooner or later diaminodiphenylsulphone should be used for this condition, and again the same problem arose: it was too toxic (poisonous) for general use. Once the effectiveness of this drug was discovered, chemists set about trying to find ways and means whereby its toxicity would be reduced. It was not long therefore before other drugs were produced which were more easily tolerated. It is sufficient to mention that the drugs of the sulphone group which are up to the present most commonly in use are Promin, Diasone and Sulphetrone.

Lowering the Cost for Mass Treatment

In 1946 it was realised that effective though the sulphones are in the treatment of leprosy, the cost of the drugs at that time was so prohibitive that it could not be used on a wide enough scale to benefit the masses. Work therefore was commenced in Madras, as well as in Calcutta, to endeavour to reduce the cost of these new and powerful remedies in order to bring them within the reach of the great number of sufferers of leprosy who were too poor to pay for treatment, and make them available to Government so that the "Sulphones" could be used on a mass scale. Two lines of research were followed: (a) To discover whether by injection the sulphones would be cheaper than those given by mouth (b) to re-investigate the position of diaminodiphenylsulphone. As a result of this work, it was found that a watery solution of sulphetrone of a strength of 50 per cent, and in a dosage of approximately 3 ccs. twice a week, produced clinical results comparable to those seen with the more expensive remedies when given by mouth and the cost of sulphone therapy thereby was reduced from between Rs. 300—400 per case per year to approximately Rs. 20 per year per case.

It is thought now by some workers that still smaller dosage of this preparation may be effective and work is being carried out in centres of leprosy research in India to ascertain whether half the present dosage, that is 2 gms. per week, will not be effective. If this is proved to be the case, then the cost will be as low as Rs. 15 per year.

It was natural when these drugs were discovered for workers again to turn their attention to the parent substance and work was commenced in 1946 on the injection of a suspension of D.D.S. in groundnut oil. The initial dosage was found to be too high and in consequence serious toxic results were seen. Workers in West Africa, following this work, began to use the parent substance by mouth. It was found, unlike some of the proprietary sulphones, when given orally that the parent substance was almost completely absorbed and therefore provided a safe dosage was discovered it should be possible to administer this by mouth and in this way obviate the necessity for injections. While some workers advocate the widespread use of D.D.S. in this manner, others consider the dangers of serious toxic results arising are so great that they are of opinion that unless carefully supervised, this drug should not be administered except under the

careful control of a doctor. In other words, it is too risky for patients to take tablets away to their homes. If more recent work indicates that tablets given twice or three times a week are as effective as those given every day, then the widespread mass treatment by oral administration of D.D.S. becomes a possibility.

Danger of Anaemic Conditions

One complication has to be remembered in this connexion, that work in South India shows that even in as small a dosage as 0.5 gm. D.D.S. (a tablet the size of an M and B tablet) gives rise to anaemia in a majority of cases so treated and therefore, all workers advocate that if D.D.S. is used, patients should be given iron and also yeast tablets (yeast contains a high percentage of Vitamin B. Complex). This therefore, introduces a complication into treatment which (a) increases the cost (b) increases the difficulty of treatment. It may be because the food position in South India has been extremely serious during the past four years, owing to the failure of the monsoon, that the South Indian is more liable to show toxic signs than the better fed and nourished persons in North India. It does mean, however, that the final story has not been told with reference to D.D.S. and that while it is hoped to discover a dosage which will not be toxic, it is considered at present that the use of D.D.S. should be restricted to conditions where the danger of over-dose are reduced to the minimum. In all fairness it must be stated that many workers consider that D.D.S. is the drug of choice and their experiments in mass therapy will be viewed with considerable interest.

It can, however, be claimed that research work in which workers in INDIA have played a prominent part, has led to the possibility of the organization of widespread treatment of leprosy by the new sulphone drugs, but until the supply of this drug is more readily available, the benefits of these new treatments will not be available for the masses. Work is being carried out in India to undertake the preparation of these drugs so that ultimately this country will not be dependent on foreign sources for its supply. Until however, there are facilities in India for the manufacture of sulphone preparations it is hoped that an increasing liberal policy will be adopted so that no cases needing sulphone therapy will be denied it for lack of the drug.

Action of Sulphones

It will now be asked, is it known how the sulphones act in leprosy? In the first place it must be remembered that all cases of leprosy are not suitable for sulphone therapy. For instance, in those cases which show mutilation, deformity and scarring, the result of damage to bodily tissues owing to destruction of tissues in the attempt on the part of the body to stop the disease, sulphone therapy cannot be expected to show satisfactory results. Deformity, paralysis and other distressing sequelae of leprosy have to be approached from the orthopaedic and physiotherapeutic angle. A great deal of work has been done recently by a surgeon in the Christian Medical College, Vellore, demonstrating how much can be accomplished for the patient who is deformed, by carefully devising operative and other means whereby function can be partially or completely restored.

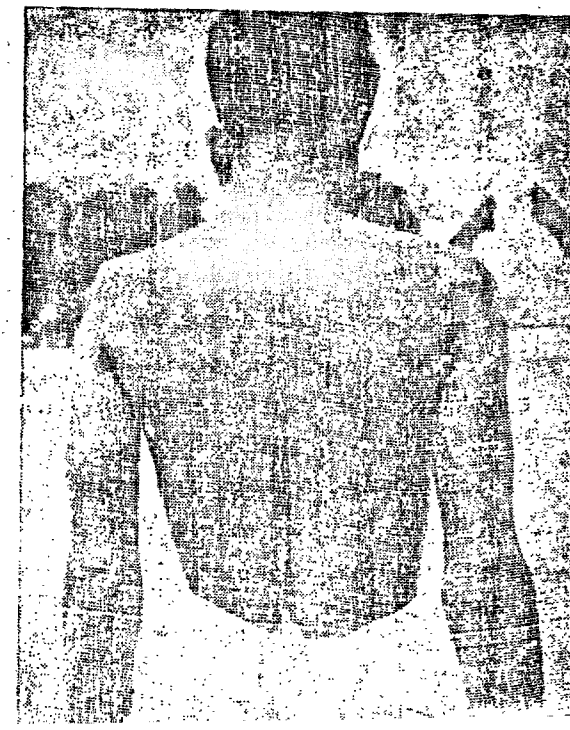
Clinical and Bacteriological Aspects

Sulphone therapy therefore should be confined to the active cases of leprosy, particularly that type of case in

which the organism of leprosy can be found in large numbers. It is known that all sulphone preparations, be they Promin, Promacetin, Diasone, Sulphetrone or the parent substance Diaminodiphenylsulphone, will show remarkable improvement, in the majority of cases of infective leprosy particularly in the nodular variety, within a period of six months to one year. Unfortunately, however, it has been shown that the number of bacilli are not reduced in proportion to the clinical improvement. The illustration shows a case which improved remarkably after six months but the bacteriological state of the patient had not changed. There, however, was no change so far as the number of bacilli were concerned, but the appearance of the bacilli had undergone a remarkable alteration, within a comparably short time. The bacilli responsible for leprosy known as the *Mycobacterium leprae* is seen as uniformly stained rods. The stain used is a red one which the bacilli retain in the presence of acid, whereas tissue cells lose their colour and can be stained blue in contrast. When a case has been given sulphones the bacilli begin to break up and ultimately within a few months no acid fast rods are seen, only granular masses.

It is believed that these granular forms develop when the bacilli find the tissue environment unfavourable to full growth and they represent a relatively active form of the organism. It is also thought that when the bacilli are broken down, the cells of the body are more able to attack the bacillus, rendering it innocuous and ultimately destroying it. The complete success of sulphone therapy may be dependent on the ability of the tissue to dispose of these residual granules and in about 40 to 60 per cent of cases the bacilli within a period of 2—5 years, disappear from the body. In a certain proportion of cases, while the bacilli become granular and the clinical improvement of the individual continues, the body does not seem to be able to dispose of the organisms, and in such cases it is not known whether sulphone therapy has to be continued for

Marked improvement resulted clinically six months later, but infectively as judged by numbers of Bacilli has not been markedly reduced



many years. It has been observed that if sulphone therapy is stopped too early, the bacilli ultimately go back to their rod like forms in a period of about 18 months.

Our knowledge of leprosy has increased very greatly and today we may claim that we are on the threshold of an era which will ultimately see the conquest of this scourge which has affected mankind for many centuries. It must, however, be remembered that our efforts to conquer this disease are continually hampered by prejudice and ignorance resulting in fear of the disease and panic measures being taken, bred of our lack of knowledge.

It is to be remembered that leprosy like tuberculosis is an ordinary disease, not a particular manifestation of Divine wrath, and therefore, our approach must be a sensible one coupled with humanitarian considerations so that full advantage may be taken of the recent advance in our final knowledge; thus the day will be brought appreciably nearer final when the conquest of this disease will be accomplished.

Composting Village Nightsoil

The Government have decided to introduce as an experimental measure the Wardha System of compost latrines for composting nightsoil in villages under the Rural Welfare Scheme in one village in each of the model firkas of Thirumangalam in the Madurai district and Dendulur in the West Godavari district. A sum of Rs. 5,000 has been sanctioned for the construction of trench latrines in each of the two villages.

Identity Certificates

In the Government's Press Release of the 29th December 1950, it was announced that the Government of Burma had agreed to the entry into Burma of Evacuee Identity Certificate holders who were to have left for Burma from Madras by steamer on the 27th December 1950 provided that their Identity Certificates were endorsed by the Burmese Immigration Officer before the 31st December 1950 and they leave Madras by the first available steamer after 27th December 1950. On a further representation by the Madras Government the Indian Embassy has now telegraphed to say that the Government of Burma have agreed that the Identity Certificates of these persons may be endorsed until the date of sailing of the first steamer from Madras to Burma in January 1951.

Tungabhadra Hydro-Electric Scheme

The Government have sanctioned a scheme submitted by the Chief Engineer for Electricity estimated to cost Rs. 733-01 lakhs initially rising to Rs. 794-41 lakhs in 10 years for the development of hydro-electric power from the Tungabhadra River on completion of the Irrigation Dam which is under construction near Hospet. The scheme envisages construction of the following:—

(a) a power house called the Dam Power House at the foot of the Tungabhadra Dam with two 7,500 K.W. units initially,

(b) a second power house called the Canal Power House at about the 15th mile of the Irrigation Canal near the Humpi ruins with two 7,500 K.W. units initially and one more unit in the 6th year of operation, and

(c) a power transmission grid connecting the power houses with the consuming centres in the Bellary, Anantapur, Kurnool and Cuddapah Districts.

The initial stage of the scheme is expected to be completed in about four years' time.

The power houses under the scheme will be designed to accommodate two more units at the Dam Power House and one more unit at the Canal Power House later on depending upon the power development.

The Uppunda Co-operative Society

(Continued from page 20)

Before the starting of the Uppunda Co-operative Stores this society was running the retail shop, but after the starting of the stores the ration depot has been handed over to the stores. The office of the stores as well as one of the ration depots are located in the society's godown. Besides the above multipurpose activities, the society has been selected as a retail distributor of fertilisers and in September last it has purchased super phosphate and ammonium sulphate worth Rs. 1,598. But since the second crop cultivation has not commenced, no sales had been effected so far.

A reading room and a library have been opened by the society for which the Uppunda Co-operative Stores donated Rs. 50 from its Common Good Fund. A grant of Rs. 40 was received from Government and a collection of Rs. 50 was made from the public. It is subscribing for a Vernacular Weekly and has purchased 44 library books. The society wants a separate godown for storing the fertilisers and salt required by it. It intends to dig a Compost pit in its own compound to serve as a model for its members. It is managed by an older Panchayat who are taking keen interest in its affair. During the quarter ending 30th September 1950 seven panchayat meetings were held. During 1949-50, the society earned a net profit of Rs. 408 after providing for the building reserve.

Another view of the profusely manured field



Minimum Wages for Tobacco Workers

The Government have notified the minimum rates of wages that shall be payable for various categories of employees employed in any tobacco (including beedi making) manufactory. The minimum basic rates of wages which will come into force are as follows:—

Class of work	Minimum basic rates of wages		
	RS.	A.	P.
(i) For rolling 1,000 beedies..	1	2	0
(ii) For rolling 1,000 cigars ..	2	0	0
(iii) (a) For converting 1 viss of tobacco into snuff ..	0	10	0
(b) For cutting 1 viss of tobacco ..	0	0	6
(c) For stripping 1 viss of tobacco ..	0	1	6
(d) For roasting 1 viss of tobacco ..	0	3	0
(e) For grinding and mixing 1 viss of tobacco ..	0	5	0
(iv) Tobacco curing industry—a minimum time rate of ..	1	4	0 per day.

Minimum cost of living allowance in addition to the basic rates of wages mentioned above, shall be paid in respect of items (i) to (iv) above, at the following rates:—

Index Number	Up to 300	301 to 325	326 to 350	351 to 375	376 to 400
Allowance per rupee of earnings ..	Nil.	One anna.	Two annas.	Three annas.	Four annas.

(v) Tobacco processing and packing (Factory labour):

(a) a minimum time rate of Re. 0-12-0 per day plus a minimum cost of living allowance of Re. 0-12-0 per day.

(b) a minimum piece rate of 8 pias per lb of stems stripped plus a minimum cost of living allowance of Re. 0-12-0 per day—the daily wages for eight hours work being not less than Re. 0-12-0 per day exclusive of the cost of living allowance.

Colonization Scheme In Tanjore

A colonisation scheme for housing Harijan and Ambalagar families in Arundavapuram village in Tanjore district has been sanctioned by Government. The colony will have a school with a building of its own and teachers' quarters as well as a hospital, a chavadi and five wells. By this scheme the Government would incur a non-recurring and recurring expenditure of Rs. 32,476 and Rs. 1,416 respectively.

An extensive plot of 54 acres, found suitable for house-building purposes, in Arundavapuram village will be divided into 200 plots of 15 cents each and leased out for a nominal annual rent of annas four for each plot. The villagers themselves are to construct their houses which are expected to cost Rs. 150 of which Government will bear Rs. 125, with mud walls using casuarina posts, rafters, thatches and countrywood doors and ventilators.

Besides house-sites, cultivation lands at 50 cents per head are also available for distribution to the colonists for supplementing their income. The scheme has been undertaken as part of the Rural Welfare Scheme of the Government.

Evacuees from Burma

The evacuees from Burma holding Evacuee Identity Certificates can return to Burma up to the 31st December 1950, on the strength of these certificates, which should be duly verified and endorsed by the Burma Immigration Officers in India. They should, however, be in possession of Indian Passports.

After the 31st December 1950, the evacuees can return to Burma only by obtaining temporary visas on their passports. They will be allowed to remain in Burma permanently if they can establish, to the satisfaction of the Burmese Immigration authorities, that they have resided in Burma for eight years out of the 10 years preceding the 1st January 1942. This residence qualification is not a statutory requirement but has been generally accepted as a working immigration principle.

Evacuees in possession of this residence qualification and in a position to produce satisfactory evidence to that effect, therefore, need not be in any hurry to return to Burma. In the absence of such residence qualification, however, they will be treated only as temporary immigrants and will not be allowed to stay in Burma beyond the period covered by the visas obtained by them.

Mahatmaji on Self-Sufficiency of Food

The first lesson we must learn is of self-help and self-reliance. If we assimilate this lesson, we shall at once free ourselves from disastrous dependence upon foreign countries and ultimate bankruptcy. This is not said in arrogance but as a matter of fact. We are not a small place, dependent for its food supply upon outside help. We are a sub-continent, a nation of nearly 400 millions. We are a country of mighty rivers and a rich variety of agricultural land with inexhaustible cattle-wealth. That our cattle give much less milk than we need is entirely our own fault.

—Harijan, 19th October 1947.

Neera Receptacles

By Sri CHANDRA PRAKASH AGRAWAL

Earthen pots are hung on the palms for collecting the trickling sweet juice after tapping. These pots are an important item in the Palm Gur industry. Seen from different aspects of village economy, hygienic, health and capital outlay, the tapper has wisely chosen the earthenware for this purpose. We have included the improvement of pots in our research programme. The porosity of earthen pots is the chief source of development of the yeast and bacterial. Juice once having entered the pores cannot be totally washed out. It remains there and hastens the fermentation of Neera.

The following is a brief description of experiments carried out in making these pots impervious and safe: (1) glazing, (2) rosin smearing and (3) painting.

(1) *Glazing*.—Certain chemicals when applied over the pot surface and melted in a strong heat cover the body of the pot to give it a hard glassy surface. The resisting quality of the glaze to the elements of nature and scrubbing and the effects of acids and alkalis depend upon the materials and the temperature used for melting the glaze.

(A) *High temperature glaze*.—Through the Director for Cottage Industries, Mysore, work was done at Government Pottery Centre, Ramnagaram, to glaze a few juice pots. The furnace was simple. The glazing materials were obtained from big porcelain factory ready ground. During this short experiment it was found out that the ordinary bazaar pot could not stand the high temperature required for melting the glaze.

(B) *Low temperature glaze*.—With the help of a Punjab potter knowing indigenous methods of glazing, efforts were made at our school to glaze the juice pots. The materials used are easily available in the market. The process was also simple but the glaze produced failed to serve the purpose. The fine crazing developed in the glaze allows the juice to get into the pores of the pot and makes it unfit.

It may be possible to find out the proper temperature of glaze, but it is difficult to say whether the same will be within the reach of the village tapper.

(2) *Rosin smearing*.—(A) *rosin*.—In one of the Bombay Government Neera Scheme Centres, trials were taken with pots coated with rosin (Biroza Hindi). This made the pots impervious but rosin imparted its unpleasant taste and smell to the palm juice, more so when the juice was heavily limed.

The Haffekin Institute of Bombay was consulted regarding the use of rosin who opined it to be harmless, but due to the resulting bad smelling we had to discard the experiments.

(B) *Lac*.—It was found out that at Bordi (Thana District) and Surat potters gave a coating of lac on the inside of pots which were used for storing pickles or collecting toddy. These lacquered pots have shown that:

(1) The surface coated becomes thoroughly impervious.

(2) No taste, colour or smell is imparted to the juice if pure lac is used for coating.

(3) The coating if done properly can last long.

(4) High atmospheric temperature does not injure the coat of lac.

(5) Lime has no action on the lac coat.

(6) It can stand low acids as found in food materials, e.g., pickles, toddy.

The chances of fermentation are definitely lessened. The unhygienic condition of the ordinary pot makes the juice taste stale while the juice collected in lacquered pot remains fresh though collected under similar conditions.

Lac is a purely indigenous product and is easily available. It is a rosin, extracted from the tree through the agency of a peculiar species of insects.

Instead of purchasing commercial purified lac in the bazaar, which is sold at a very high price, it may be possible to wash the crude lac at home and make it fit for our use. Crude lac can be had for half the cost of the bazaar lac. But in no case it should be used without washing away its colour and removing other dirt. It is the hygienic condition of the pots which counts most in preserving the juice.

At the instance of the Lac Research Institute (Ranchi) we tried to coat the pots with a solution of lac dissolved in methylated spirit. The application was found to be easy and uniform, but due to the chemical added to the spirit for making it unfit for human consumption. Rectified spirit may be more safe. But its universal adoption demands further investigation. So far, the present lac process can be safely adopted and propagated.

Devotion to Duty

Sri K. S. Ramanujachari, Inspector of Police on special duty in Krishna District was in charge of a police party that was deputed on 2nd November 1950 to Bapatla to search for two top-ranking communists of the Guntur District who were understood to be hiding there. During the encounter with the communists at their hiding place, Sri K. S. Ramanujachari received as many as eight gunshot injuries in the abdomen. Two communists, namely, Malimpati Bala Bhaskara Rao, a top-ranking communist of Nimmagadda village, Krishna District, and Moturi Venkataratnam were shot down by the Police during the encounter. The Inspector succumbed to his injuries on 8th November 1950.

Throughout the encounter, Sri Ramanujachari, displayed extraordinary courage and devotion to duty regardless of personal risk, when faced with the difficult situation. The Government desire to express their deep appreciation of the services of the late Inspector and have sanctioned the payment of an ex-gratia grant of Rs. 3,000 (rupees three thousand) to Srimathi Seshamma, widow of the deceased Inspector, as compensation for her bereavement.

Drive Against Prohibition Offenders

The following is the report on the working of prohibition in the State for the month of September 1950:

Enforcement

Cases.—During the month under review, 6,129 prohibition cases were detected as against 6,467 in the previous month. During the month there was a marked fall in the offences in Cuddapah and Krishna districts. Crime on the Malabar-Travancore-Cochin borders tended to decrease due to the introduction of prohibition in Cranganur taluk of Travancore-Cochin. The opening of an additional Prohibition Station in Mangalore town also helped to reduce the number of offences. In the majority of cases drunkenness offence was due to the consumption of spirituous preparations.

Illicit Distillation and kindred offences.—Of the total number of cases reported, 2,665 related to illicit distillation and kindred offences as against 2,930 in the previous month. Of these 1,069 related to illicit distillation and the rest to possession and sale of I.D. spirits. There was a fall in the figures under this head in most of the districts. In Chingleput a record number of cases, viz., 120 was detected in the month. In Anantapur district a person was caught carrying 4 gallons of illicit distillation arrack. In Talaricheruvu, Tadpatri, 13 sets of still implements and 600 gallons of fermented wash were seized. In Bellary district 24 cases involving 1,322 gallons of wash, nine gallons of I.D. arrack and several stills had to be treated as undetected, as the ownership of the contraband recovered in the hills and certain open places could not be established. In Salem District, the Police arrested four smugglers for possession of 72 bottles of I.D. arrack. In North Arcot district a vigorous drive against prohibition offenders was made resulting in the detection of a large number of cases. In East Godavari 12 working stills with 5 gallons of I.D. arrack and 172 gallons of fermented wash were seized.

Illicit tapping.—One hundred cases were reported in the month as against 131 in the previous month. Of these, 92 related to tapping for fermented toddy, one to permitting sweet toddy to ferment and 7 to tapping for sweet toddy without licence. Tapping offences were negligible in all districts except in Visakhapatnam and Tirunelveli, as the sweet toddy season has come to a close.

Smuggling of liquor.—Eighty-three cases were reported as against 99 in the previous month. Of these 57 related to bringing in of liquor from other states and 26 to smuggling from district to district. In Coimbatore the Police detected 22 cases of smuggling of liquor. It is reported that there is a stealthy inflow of liquor to the Srikakulam district from Orissa State. The Board has instructed the District Prohibition Officer to take necessary action in the matter. On the Pondicherry borders, 24 cases of smuggling were reported. The Police and Customs staff on Karaikal borders detected 19 cases of transport of liquor.

Intoxicating drugs.—One hundred and twenty-two cases were reported in the month as against 172 in the previous month. Of these, four related to cultivation of hemp plants, two to smuggling from district to district, two to smuggling from other states and the rest to possession and sale of drugs. During a raid in Koinajiammanapeta village in Srikakulam district, 189 nature ganja plants were uprooted and 27 tolas of unpressed ganja were seized.

In Kaikalur of Krishna district another case involving four ganja plants was detected.

Denatured Spirits.—The total consumption was 17,833 gallons as against 13,704 in the previous month. The increase in sale was due to higher consumption in Ramanathapuram which was attributed to the manufacture of colour matches for Deepavali festival. Nine cases in all of rendering denatured spirit fit for human consumption were reported in the State as against 12 in the previous month.

Border Problems.—Border patrols and vehicular checks in the month continued to be effective. With the extension of prohibition to Cranganur taluk of Travancore-Cochin, the situation on the borders of Malabar district adjoining that State improved to some extent.

I.D. Arrack Spells Death

It is reported that the Chemical Examiner to the Government has been receiving viscera in many cases of human poisoning wherein the death was alleged to be due to consumption of illicit arrack. The Chemical Examiner is of opinion that illicit arrack may contain some poisonous by-products. Arrangements are being made to supply samples to him for analysis of illicit liquor.

Amelioration.

Provision of employment to Ex-tappers.—*Jaggery Manufacturing Societies*.—Up to the end of September, 1950, 1,860 jaggery manufacturing societies have been organised with a membership of 1.41 lakhs of ex-toddy tappers. These societies have so far produced 7.91 lakhs of maunds of jaggery, worth Rs. 38.83 lakhs. During the month of September alone 10 societies were organised in the districts.

Palm Gur Development Scheme.—In the 27 training centres in the districts of North Arcot, South Arcot, Guntur, Mangalore, Tirunelveli, Malabar, Erode and Tuticorin, 852 ex-tappers have so far been trained in palm gur development. As a result of the training given and the demonstration conducted, the trainees produced 3,595 pounds of refined jaggery while the improved variety of jaggery produced by ex-tappers other than the trainees was 8,670 pounds.

Besides the jaggery manufacturing societies the ex-tappers were absorbed in Milk Supply Societies (1,753), Land Colonisation Co-operative Societies (424), Cottage Industries Co-operative Societies (188), Tenants Co-operative Societies (1,324), Labour Contract Co-operative Societies (67), other types of Co-operative Societies (47) as Agricultural Labourers (27,217), unskilled workers in Industrial concerns (3,210), as gang coolies (1,117), as watchmen, peons, etc. (325) and other kind of employments (31,167).

The ameliorative staff are making continued efforts to secure employment to the ex-tappers in big firms and some of them were persuaded to go to Lower Bhavani Project area.

Grama Sanghams.—13,476 Grama Sanghams have been organised up to the end of the month under review in this State, 5,246 are active turning out various kinds of work such as the provision of

(Continued on page 30)

State-Controlled Shikar

Advantages and Disadvantages of Licences and Close Seasons

By Lieut.-Col. R. W. BURTON, I.A. (Retd.)

In another place the present writer has said that not least among the causes for the former renown of India has been that wonderful variety of wild life which is the vanishing inheritance of the people of to-day. The present (1950) situation is, as stated by the Chief Conservator of Forests, Madras, that the large animals have nearly all retreated to their last place of refuge, the Reserved Forests under control of the Forest Department whose weighty responsibility it is to protect the flora and fauna of those areas.

Not only is this necessary to preserve and conserve such as now remains of an inheritance received from former generations, but because, prominent among the magnets for attracting tourists is the spectacle of wild life and its abundant attraction for all classes of sportsmen, photographers and sight-seers.

Within Reserved Forests

As a preliminary to discussion regarding licences and close seasons, three things may be stated:

1. *Game Preservation* means the shielding of game from man and his instinct to kill;
2. *Wild life* is a natural and National Asset which, if it is ever lost can never be replaced;
3. *It is as a poacher* that man is the Great Destroyer.

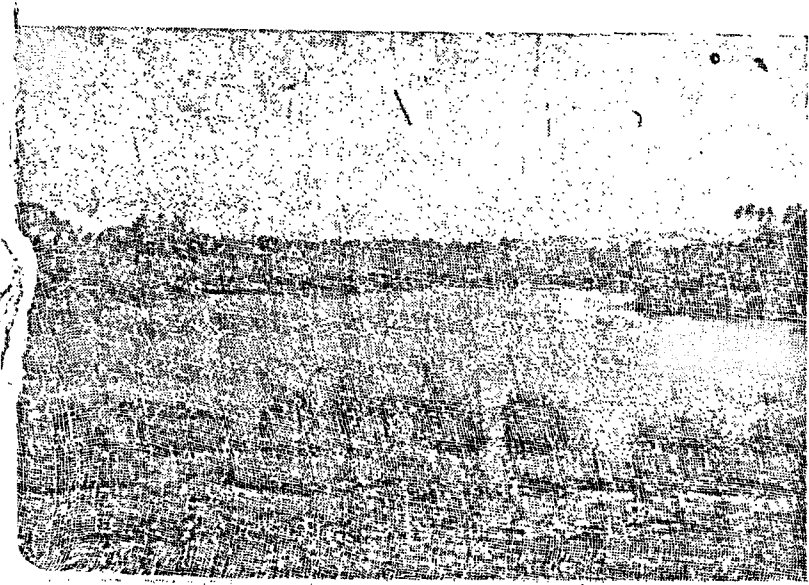
Licences and Close Seasons

What are the advantages and disadvantages of these in guarding the creatures of the forests from the forces of destruction?

The closing Resolution of the International Conference of Forestry and Timber Utilization for Asia and the Pacific which opened at Mysore on 28th March 1949 and closed on the 8th April, declared;

Resolution :—"It is recommended that forests be zoned into Strict Natural Reserves, National Parks and

FOREST is the nature's gift to man. Its preservation means the guarantee of the downpour of rain and a better yield of food for people



Intermediate Areas and a system of sanctuaries, close seasons, and rest periods within open seasons, and rest periods with open seasons be enforced.

Effective steps should be taken to check unlicensed and unrestricted forms of shooting and other forms of killing and capture and that protective measures be adopted for the preservation of threatened species by declaring them to be partially or absolutely protected, and rigorous control and prevention of the sale and exports of both live animals and skins and if necessary by a complete embargo."

It has to be presumed that the Delegates to that Conference knew their business, and the mere reading of this resolution would appear to be a complete answer to the question at issue, for it is evidently based on an acknowledged need for both licences and close seasons.

For further argument it may be remarked that in a civilized State there is acknowledged need for a system of licences in respect to many trades and occupations in order that these may be controlled in an orderly manner to the benefit and well-being of the community.

In view of all the above how can it be reasonably postulated that the forests and the game animals and birds within them can be permitted to be at the mercy of unlicensed people. Licences are essential, and have no disadvantages.

Fifteen years ago the Bombay Natural History Society published a notable Series, "The Wild Animals of the Indian Empire and the problem of their Preservation." To Part IV of that Series a former Chief Conservator (Mr. R. D. Richmond) contributed a full Report on the 16,000 square miles of the Madras Presidency Reserved Forests which was accompanied by a valuable comment written by a noted sportsman and landowner of South India.

Mr. Richmond stated :—

- (a) that one of the best means of controlling poaching is the presence in the forests of licensed sportsmen that consideration has not now (1950) the same weight;
- (b) that the prohibiting clause in the licence conditions, guards against the practice of shooting from motor cars;
- (c) that the policy of recent years to grant licences to possess arms to a greater extent has an adverse effect as most of those within reach of forests (and in these days of buses and cycles who are not?) are potential poachers;
- (d) that crop protection licence-holders are responsible for considerable damage;
- (e) that the Indian licence-holder pays little attention to the conditions of his licence; does not shoot for sports' sake, and entrusts his weapon to other parties;
- (f) that the closest attention is paid to the class of licence-holder who does not ordinarily infringe the rules while the Indian licence-holder is poorly controlled;

(g) that the jungle man is principally poacher for food and to obtain meat for sale;

(h) that the interests of the cultivator must be protected; and there is ample room in the forests for the wild animals;

(j) that all that is required is to make protection effective;

(k) that there is no public opinion on the subject of game preservation, and until this has been created little will be accomplished. Also much for which there is no space.

The Commentator did not dissent from any of the points (a) to (k) above; dissented from the view that there is no cause for apprehension that the fauna of the Madras Presidency is decreasing to a dangerous extent; pointed out that poachers are now (1935) penetrating into parts they have never been into before; that spotted deer, black buck, chinkara will be soon extinct if steps not taken in the matter, and will go the way of Nilgai, which have already gone, that damage to crops by wild beasts is very much exaggerated; that punishments of poachers are ridiculously low and Magistrates should be caused to take a more serious view; that a Forest Guard should be immediately dismissed if a poaching case in his beat is not reported by him, that the present laws in force would be very effective if properly enforced. Also he disagreed with the opinion that the appointment of a Game Warden and a Special Staff for the control of National Park and Ordinary Reserves fauna is unnecessary (as to this the former Chief Conservator's own statements controvert his own arguments on this subject).

In the above extracts much has perforce been omitted, but all that is contained in the whole Series has been passed out in the two pamphlets reproduced in Vols. 47 and 48 of the Journals of the B.N.H.S. which may be seen by those interested.

A Close Season for All Birds in Reserved Forests

Other than within those areas controlled by Games Association (Palni Hills and Nilgiri Hills) the time has arrived, for a complete embargo against killing of any game or other birds within Reserved Forests. This should be widely notified, included in all shooting licences and permits, and also enforced against all users of crop protection weapons licensed to cultivators within the reserved forest boundaries.

If wild life in Reserved Forests is to be guarded and conserved for present use and as a future National asset a system of licences and strict enforcement of their conditions is essential.

Outside Reserved Forests

It has to be admitted at the present time that outside the reserved forests practically all deer, antelope and gazelle are approaching complete extermination both in the Madras State and perhaps in most other parts of this country; while partridges and other game birds, with few exceptions, are being so persecuted that they also will gradually disappear.

It is a recognized general principle for conservation of bird resources that no exploitation of any species can be allowed without causing the disappearance of the species involved; also that they must not only be undisturbed

during the breeding season but equally during the pre-laying phases, and subsequently until the young are able to fend for themselves.

It can at once be said as to game birds that both licences and close seasons are essential for their preservation.

Vanishing Species

The Lesser Florican is believed to be approaching extinction in the Madras State; so also the Great India Bustard which is a large, stately, conspicuous bird of the open spaces and lays only one egg.

In the Madras Game Protection Act VIII of 1912 provide a close season for Bustard, Florican, peafowl, indigenous duck and teal from 1st June to 30th September; and for Jungle Fowl, and Spur-Fowl from 1st February to 30th June, while Partridges, pigeons, quail, sandgrouse are wholly unprotected.

For Bustard and Florican there should be whole-year protection, and a close season for the Grey Partridge from 1st February to 30th September. Fruit-eating Pigeons ('Green Pigeons') should have close season from 1st March to 30th September.

In his article on "Vanishing Wild Life in India" contributed to the Technical Conference on the Protection of Nature which assembled at Lake Success in August 1949 Shri K. S. Dharmakumarsingji of Bhavanagar says as regards Saurashtra State—"the bustard is almost extinct."

Birds do not recognize man-made boundaries. Only the active and continued efforts of all District Officers within whose limits the Great Indian Bustard is found, acting under the (to be) applied provisions of Rules under the Act VIII of 1912 can save the species of India, for it is an asset of India alone and found in no other country.

Tempus Fugit

More than two precious years have flown by since the pamphlet, "Wild Life Preservation—India's Vanishing Asset" was published and widely distributed to all the Governments and the Press. There is as yet no action to protect obviously vanishing species such as the Great Indian Bustard and other species threatened with extinction (References Journ. B.N.H.S. Volume 47, No. 4, pages 602-622 and pages 773-780 also Volume 48, No. 2, pages 290-299) has been taken.

Health: To supplement food deficiency expectant mothers get free milk supply at the Child Welfare Centres



Licences and close seasons useless unless enforced

Where licences and close seasons are not enforced, and edible game birds and animals are allowed to be killed in season and out of season by wandering tribes and others who sweep the land of all ground game, antelope and gazelle, as a broom sweeps the floor, all such are doomed to extermination, to that extent it can be said that licences and close seasons have no advantages as they effect nothing!

Irony apart, it is an obvious thing that all species of animals and birds outside the forests which are exploited for food and for profit must have protection against destructive forces and unscrupulous people if they are to survive. Outside reserved forests both close seasons and licences are essential, and stringent enforcement necessary.

Close Seasons in Reserved Forests

In Reserved Forests there is need to do away with some of the existing close seasons because of disregard of laws, rules and licence conditions by poachers and others. Ordinarily, as in Western countries, close seasons are wholly beneficial, for there exists efficient control. An instance. In 1921 there were in the Swiss Engadine two surviving Ibex—two only. Now, 1950, there are 650 of these animals. This has been brought about through strict conservation carried out by both Game Wardens and the hunters themselves to strictly enforce the rules.

In Madras State (and elsewhere in India):

"Wholesale poaching of game of both sexes is such a serious menace that a close season now defeats its own object by allowing the poacher unhindered scope for his pernicious activities. Further, in an examination of the close seasons (15th June to 15th October) as applying to South India, it is found that the imposition of a close season to cover big game in general is of little value." (R.C. Morris Journ. B.N.H.S. Volume 39, pp. 621-622.) He gives a list of animals and their breeding seasons and concludes: "Where lies, in the majority of cases, the protection of close season is supposed to afford?"

Poaching and the Motor Vehicles

It is to the interest of the Governments—all State Governments in this country—that use of motor vehicles for hunting and shooting in reserved forests or elsewhere be ended through the most stringent measures. All real sportsmen condemn the practice.

Licence conditions prohibit shooting at any wild animal or bird from any wheeled vehicle or in its vicinity. But more than that is required.

1. In December 1949 the Ceylon Government amended the Ordinance for protection of the Fauna and Flora of Ceylon and gave effect to the suggestion outlined in paragraph 11 (b) of the reference given in first line of this article. Thus it is made lawful for barriers to be placed across each and of certain roads for stopping and search of vehicles in respect to suspected commission of offences against the Game Laws.

That measure is also necessary in India.

2. Under the Excise Act the convicting court may order confiscation of gear and of vehicles used in commission of the offence. Shooting laws rules and licence conditions should follow that and provide for confiscation by the convicting court of both firearms and vehicles—motor or other—used in commission of the offence.

In the United Kingdom a Government Committee has this year after two years of deliberation and enquiry recommended in its report of salmon and trout poaching the forfeiture of all gear including motor vehicles on conviction. And has recommended that it would be best to make the provision compulsory on conviction and not leave it to the discretion of the lower Court.

The Electric Torch

Everywhere the electric torch is being used by poachers and others as aid to killing animals in the forests and along the roads. It is difficult to suggest how this can be stopped. Perhaps the only course is infliction of really deterrent sentences and confiscation of firearms by the courts.

Unless these two forces of destruction—use of motor vehicles and the electric torch—are halted, the larger wild life of this country is doomed to extermination.

The larger wild life of India is indeed a "Vanishing Asset."

Drive Against Prohibition Offenders

(Continued from page 27)

counter-attraction to drink and the improvement of the economic and social conditions of the villagers particularly in the direction of public health, sanitation, communication, education, agricultural improvements and the welfare and uplift of women.

Rural Credit Societies.—20,088 villagers are served by Rural Credit Societies covering a population of 70.12 lakhs, the percentage of villages and the population served being 62.85 and 16.45 respectively. The borrowings of Rural Credit Societies from the Central Banks amounted to 740.36 lakhs at the end of the month and their borrowings from others to 43.78 lakhs.

By the multi-purpose activities of 7,248 Rural Credit Societies transaction to the extent of Rs. 329.63 lakhs have been effected.

Substitute to drink.—Refreshment stalls continued to be popular in the districts.

Thrift.—During the month 1,189 hundi boxes were distributed in 243 rural credit societies and a sum of Rs. 26,807 was saved through them.

Publicity.—Intensive publicity in respect of Grow More Food, Intensive Food Production Scheme, Co-operation, Rural Uplift, Thrift, and other ameliorative measures introduced by the Government was carried on by the ameliorative staff with the aid of the Publicity vans, films, magic lantern slides and gramophone records.

Towards More Electricity

A Review of the activities of the Electricity Department:

Construction Branch

Machkund Hydro-Electric Scheme.—Progress on civil works was maintained. About 400 feet of tunnelling was done during the month on the 3,000 feet pressure tunnel bringing the total length tunnelled so far to 2,261 feet. High tension 11 KV. line to Jalaput from Machkund was nearly completed. Excavation for Diversion Dam was resumed. On the cessation of monsoon, activities on the several works increased and the labour force during the month was 4,252.

Moyar Hydro-Electric Scheme.—Maravakandy Dam and Moyar Forebay bund were completed except the earthen bund which was continued. The power-house building was under construction and machinery for the power-house was being received from abroad.

Pykara III Stage Extensions.—Construction of dam across the Pykara river was continued. Excavation of foundation on the sides of the diversion channel was taken up. Penstock pipes were being received and necessary structures for supporting pipe line were being built.

Papanasam II Stage Extensions.—Erection of the generator was almost completed and that of the turbine with accessories for the IV unit was in progress.

Madurai Thermal Scheme.—Works are nearing completion and the station is likely to go into operation in a couple of months.

Vijayawada and Visakhapatnam Power-House Extensions.—Further civil works in Vijayawada Power-House were in progress.

At Visakhapatnam laying of concrete for pedestal of V turbine was completed. R.R. wall for cooling water and other works were in progress.

Ceded Districts Scheme.—33 KV. line to Adoni from Bellary was completed. 11 KV. line to Kottur and Kottur distribution works were in progress. Guntakkal distribution works were nearing completion.

Nandyal and Tadpatri Schemes.—Excavation of well at Nandyal was in progress. Erection of nissen sheds for the power-house was continued.

At Tadpatri foundations for nissen shed were completed and superstructure work was continued. Excavation for machine foundations was completed.

Nellore Thermal Scheme.—Work on Nellore-Gudur line was in progress. The route for 11 KV. line to Gudur mica mines was finalized and materials required were being collected. The third 250 KVA. transformer was commissioned during the month.

Madras Plant Extensions.—Work on natural draught cooling tower No. 3 was continued. Steel superstructure of power-station and superstructure of office block and control room of B. Station was commenced.

General.—Works on other schemes, transmission lines and sub-stations were progressing satisfactorily.

Operation Branch

Hydro Systems.—The water conditions in the three Hydro systems of Pykara, Mettur and Papanasam were satisfactory. Supply was maintained satisfactorily. Mettur System gave some relief to Madras and Pykara systems during the month. His Excellency the Governor of Madras visited the Mettur-Power-House during the month.

An Old Robber Comprehended by Vijayawada Police

Poosarla Chittibabai, a resident of Gollapalli, was running a jewellery shop at Bobbili, a mile away from his village. Every day he would go to his shop in the morning, return to his village for his midday meal, again go to his shop at 3 p.m. and then return to the village at 6 p.m. He always carried with him a hand-bag in which he kept his gold and silver articles and chemical diamonds, balance, weights, touch stone, etc. On the evening of 3rd November 1950, when he was returning home as usual, there was a slight drizzling and used his umbrella. At that time, he met a stranger running in advance of him and offered him shelter under the umbrella. After both of them walked together for about two furlongs, the stranger suddenly pushed him down, snatched away his bag and ran across the fields. Jewels and cash worth Rs. 3,000 were taken away. The merchant lodged a complaint with the Police the same night. In spite of the meagre particulars furnished by the complainant about the identity of the accused, the police acting on the information furnished by a villager traced the assailant on 4th November 1950. He was a local convict by name Rambariki Ramulu. From the statement of the accused, the stolen property was recovered by the Police from the various places where he had secreted them from a rubbish heap in his house and from a well in which some of the articles had been thrown. The accused was charged and tried in the Court of the Subdivisional Magistrate, Parvathipuram. Evidence was also let in under section 75, I.P.C., as the accused was an old offender. Finally, the Magistrate in his orders, dated 11th November 1950, convicted and sentenced him to rigorous imprisonment for nine months and commended the work of the Police for their promptitude in detecting the crime and for recovering the entire property except the cash which was spent away by the accused in gambling. The village Munsif of Bobbili had rendered valuable assistance to the Police. The expeditious disposal of the case both by the Police and in Court needs special mention.

The generation, peakload and services connected during the month in the systems were as follows :—

Name of system.	Generation units.	Peakload.	Services connected.			
				Agrl.	Indl.	Dom.
1 Pykara System.	18,644,700	40,200 K.W.	74	5	312	
2 Mettur System.	22,920,000	38,800 K.W.	53	7	274	
3 Papanasam System.	7,247,500	20,460 K.W.	56	2	281	

Thermal areas.—Supply conditions in Madras and Andhra systems were satisfactory.

Madras System.—The generation in the three power-stations of the system was 7.90% millions. The system availed some relief from Mettur during peakload hours and also gave some relief to the Hydro systems. The peakload of the system was 27,800 K.W.

Eight agricultural, 18 industrial and 318 domestic services were connected up during the month. Seventy

D.C. loads were changed over to A.C. to give relief to D.C. mains.

Andhra Power System.—Supply conditions were satisfactory in the system. The power demand in the Ceded districts area is steadily increasing. The Gudivada-Vuyyur line was completed during the month.

The generation, peakload and services connected in the several stations were as follows :—

Name of station.	Generation units.	Peakload K.W.	Services connected.		
			Agrl.	Indl.	Dom.
Vijayawada					
Steam ..	1,769,620	4,254	12	..	15
Diesel ..	65,900	850			
Visakhapatnam.	1,003,800	2,700	1	1	12
Kakinada.	301,871	990	..	1	44
Nellore ..	158,890	480	..	..	..
Cuddapah.	42,105	161	..	..	..
Kurnool ..	69,805	230	..	..	..
Ceded Districts Scheme.	..	..	4	..	78

Co-operatives and Ryots

(Continued from page 17)

centres not covered by the primaries. This has afforded a splendid opportunity for rural credit societies, to develop their multipurpose activities. To facilitate quick delivery of stocks, the Co-operative Wholesale Stores have been asked to take stocks in their lorries, go round all the primary societies selected for this work and deliver to each society one or two tons of chemical fertilisers at a time at their very door. Periodical trips will be made and stocks with the primary societies replenished as and when required. All ryots can therefore take their requirements of chemical fertilisers from the nearest primary society or retail depot, dealing in manures. The co-operatives have cleared their quota both under Ammonium Sulphate and Super Phosphate. They have sold so far about 19,000 tons to ryots.

Intensive Cultivation

In order to maximize the use of fertilisers and thus step up food production, Government have launched the intensive cultivation scheme in the ten deltaic districts, viz., East and West Godavari, Krishna, Guntur, Nellore, Tiruchirappalli, Tanjore, Madurai, Nellore and South Arcot. An additional allotment of 20,000 tons of Ammonium Sulphate has been made to these districts to intensify the cultivation. Special staff both in the Agricultural and Revenue Departments have been sanctioned by Government to achieve maximum results in these districts. Government are also sanctioning interest free loans to ryots for purchasing manure up to a maximum of Rs. 200 per ryot. For the amounts sanctioned as loans, the ryots are given loan orders which he can present to the nearest co-operative stores or tender firms and get manures for the value mentioned therein. In the interests of ryots super phosphate is sold at half the cost to them, the other half being met by Government by way of subsidy. The ryots have to specify the survey number and extent at the time of purchase of manures from the depots so as to localize the increased yield as a result of the application of manures.

Ryots to take Advantage

With the facilities afforded by Government, it is the duty of the ryot in his own interest and in the wider interests of the State, to take advantage of them and thereby to contribute to the success of the self sufficiency programme. He should pose himself the following questions :—

- (1) Am I growing what food I need ?
- (2) Am I using more manures so as to increase the present yield ?
- (3) Am I using the required chemical fertilisers, viz., 50 lb. of Super Phosphate and 100 lb. of Ammonium Sulphate for every acre to get the maximum production out of my land ?

If he does this and is satisfied with himself, he has discharged his national duty ; if the answer is however in the negative he will be doing a disservice to himself and his family and his country. I therefore appeal to every agriculturist to strive his best in increasing the food production in his lands by a judicious use of fertilisers. Increase production ensures happiness of the family and contributes to the economic welfare of the State of which he is a citizen.

Place of Iron and Steel

Even as Chemical Fertilisers form an integral part in the "Grow More Food Campaign" launched by Government, Iron and Steel are equally necessary to carry on agricultural operations efficiently. The Co-operatives procure the specified quantity of iron and steel from the registered stock holders on the issue of permits by the Director of Controlled Commodities and sell them to bona fide agriculturists. The scheme came into effect in July 1950 and the Director of Controlled Commodities has so far issued permits to Co-operative Wholesale Stores to the extent of about 5,500 tons.

—By courtesy, A. I. R., Tiruchirappalli.

New Works Sanctioned

South Arcot District.—An estimate for Rs. 37,600 for works or Rs. 49,134 inclusive of direct and indirect charges for providing irrigation facilities to raise an early Kuruvai crop over an area of about 300 acres of low-lying lands on the right side of the Paravanar with a possible extension of another 116 acres at a later date in Andarmullipallam, Kayalpattu, etc., villages in South Arcot District. The additional food production expected as a result of the scheme is 150 tons of rice.

Madurai District.—An estimate for Rs. 52,000 for works or Rs. 67,966 inclusive of direct and indirect charges for raising the F.T.L. of the Maithalamannadikulam tank by 2 feet and for carrying out certain other improvements to the tank so as to ensure better supplies to its registered ayacut and to benefit a new extent of 133 acres in Melagudalur and Keelagudalur villages in Periyakulam taluk, Madurai District. The anticipated additional food production is 67 tons of rice per annum.

Nellore District.—An estimate for Rs. 58,000 for works or Rs. 75,460 inclusive of direct and indirect charges for the excavation of a supply channel from Thumeleru river near Polinenipole village to Pokur tank so as to provide assured supply of water to the registered ayacut of 435 acres and to the extent of 200 acres of Tiruvai Jagti lands in Pokur village in Kandukur Taluk, Nellore District. The additional outturn of foodgrains estimated at 159 tons of rice.

Tanjore District.—An estimate for Rs. 39,400 for works or Rs. 52,480 inclusive of direct and indirect charges for carrying out improvements to Bheemaodai drain in order to relieve submersion over an extent of 450 acres in Vadapathi and Arundavapuram villages in Tanjore District. The anticipated additional food production is 113 tons of rice per annum.

Cuddapah District.—An estimate for Rs. 1,87,000 for works or Rs. 2,44,135 inclusive of direct and indirect charges on the formation of a tank across Goderu river in Thippareddi village, Proddatur taluk, Cuddapah District, so as to benefit an extent of 250 acres of dry lands. The additional outturn of foodgrains is estimated at 125 tons of rice per annum.

Work Sanctioned Under the Tank Improvement Scheme during the month

Nellore District.—Special repairs and improvement to Kattakindapalli and Upplagunta tanks and their supply channel in Kattakindapalli village in Kanigiri taluk, Nellore District at an estimated cost of Rs. 42,000 for works or Rs. 54,640 inclusive of direct and indirect charges on the scheme. An additional extent of 308 acres will be benefited by the Scheme. The additional food production is estimated at 304 tons of paddy per annum.

During September 1950 the Government sanctioned the following schemes :—

Anantapur District.—The construction of a reservoir across the Pennar in Peruru village, Dharmavaram taluk, Anantapur District, at an estimated cost of Rs. 74,60,000

for works or Rs. 83,90,000 inclusive of direct and indirect charges. The scheme is expected to bring under irrigation about 6,000 acres of land mostly on the right side of the river in nine villages in Dharmavaram and Kalyandrug taluks and to produce 112,000 pallas of paddy (3,000 tons of rice). Although the revenue return will be only 0.69 per cent this scheme has been undertaken by the Government in view of the relief it is expected to give to this famine-ridden district.

Guntur District.—The detailed investigation of the 'Pedanandipad Channel Scheme.' Under this scheme it is proposed to take a new channel direct from Krishna river from a point about three furlongs above the line of Krishna anicut to irrigate 52,000 acres of high level lands situated above the present ayacut of the Krishna West High Level and Appapuram channel. The lands that can be brought under irrigation by this project lie in Guntur and Bapatla taluks of the Guntur District. The Scheme will meet also the needs of the upland taluks of Sattenapalli and Vinukonda in respect of their staple food.

Tiruchirappalli District.—The proposal to block up the emptying vent of the Panjapatti Reservoir in Kulitalai taluk, Tiruchirappalli district to a level of 426 so as to store up water for irrigation.

During the month of October 1950, the Government sanctioned the following Grow More Food Irrigation Schemes :—

Nellore District.—An estimate for Rs. 3,38,750 for works or Rs. 4,40,740 inclusive of direct and indirect charges on the improvements of supply to Hajipuram tank in Kanigiri taluk, Nellore district. An extent of 235-92 acres of dry lands and 214-83 acres of Tirvai Jasti lands will be benefited by the scheme. The anticipated additional food production as a result of the scheme is 275 tons of rice.

Guntur District.—An estimate for Rs. 2,76,000 for works or Rs. 3,42,090 inclusive of direct and indirect charges on the provision of irrigation facilities by pumping from Krishna river, to a dry block of 1,456 acres in Undavalli and

Children of fisherfolk get the benefits of education through the schools conducted by Fisheries Department. Children are seen at work in a handicraft class



Kolani Konda villages in Guntur district. The addition of yield is estimated at 728 tons of rice.

North Arcot and Chingleput Districts.—The detailed investigation of two alternative schemes for the construction of a reservoir across the Palar river in Kangundi village in Kangundi Estate limits. In addition to increasing supplies to the existing irrigation of 70,000 acres of first crop and 30,000 acres of second crop, the scheme is expected to enable the raising of second crop on another 15,000 acres in all favourable years the number of which is estimated at 16 years out 30 years.

Tirunelveli District.—The construction of a reservoir across the Muminthar, a tributary of Tambraparni River near Singampatti village in Ambasamudram taluk, Tirunelveli district, at an estimated cost of Rs. 398 lakhs. The scheme is expected to provide better irrigation facilities to existing ayacut of 79,151 acres under the Tambraparni system and to benefit 20,000 acres of land now under 321 rain-fed tanks in Ambasamudram, Nanguneri, Tirunelveli, Srivaikuntam and Tiruchendur taluks. The additional production of foodgrains anticipated from the scheme is 20,000 tons of rice annually. The project, which is to be inaugurated shortly, is expected to be completed in four years and three months. The Government have raised a loan of Rs. 1.28 crores from the interested ryots in Tirunelveli district for financing this project.

The following work was sanctioned under the Tank Improvement Scheme during the month:—

Nellore.—An estimate for Rs. 20,210 for works or Rs. 26,295 inclusive of direct and indirect charges for carrying out special repairs and improvements to Yerra Cheruvu (West Tank) of Cholaravaram village in Kavali taluk, Nellore district. An additional extent of 80 acres will be brought under cultivation yielding an additional food production of 40 tons of rice.

Borewells

1. **Mannargudi—Porvanur Village.**—In a six-inch well boring put down in Survey No. 137/3 of Porvanur village, Mannargudi taluk, Tanjore district, to a depth of 100 feet good springs were tapped between 65 feet and 100 feet below ground level as a result of which the water level rose to 13 feet to ground level. The well gave a discharge of about 6,000 gallons per hour. The approximate cost of the boring is about Rs. 955-8-0 and an extent of about 4 acres of lands will be irrigated.

2. **Athipet Village.**—In a six-inch well boring put down in Survey No. 727 of Athipet village, Ponneri Taluk, Chingleput district, to a depth of 50 feet and 6 inches to ground level good spring was tapped at 48 feet and 6 inches from ground level. The water level rose to 10 feet and 3 inches to ground level. The borehole yields at the rate of 10,800 gallons per hour. The approximate cost of the boring is about Rs. 320 and an extent of 7 acres of lands under the command of the well will be irrigated.

3. **Nallur Village.**—In a four-inch well boring put down in Survey No. 50/1 of Nallur village to a depth of 87 feet and 9 inches to ground level good spring was tapped as a result of which the water level rose to 9 feet to ground

level. The borehole discharges at the rate of 18,000 gallons per hour. The approximate cost of the boring is Rs. 346 and an extent of about 5½ acres of lands will be benefited under the borewell irrigation.

Certified Copies of Public Documents

It was brought to the notice of the Government that parties to suits or proceedings in courts were experiencing difficulties in getting certified copies of public documents for production in courts, as Revenue authorities in some districts insisted on court certificates for grant of such copies and some courts refused to issue such certificates in the absence of a rule. In order to obviate the difficulties experienced by parties in this regard and to secure uniformity in practice, the Government have laid down the following procedure:—

(1) When a person directly interested in the subject-matter of a public document applies for a certified copy thereof, such copy may be granted without any court certificate.

(2) When a person not directly interested in the subject-matter of a document requires a certified copy thereof for filing in a civil court, a certificate of the court may be insisted upon.

A party to a suit or proceeding who desires to obtain a certified copy of a public document for filing in court in that suit or proceeding but cannot obtain a copy because he is not directly interested in the subject-matter of the document, may apply to the court for the issue of a certificate. The High Court has instructed the courts to issue necessary certificates on their being satisfied that the production of a certified copy of the document is *prima facie* necessary.

Artesian well in Kammapuram village, South Arcot, irrigates 50 acres



WOMEN'S WELFARE JOURNAL ANNUAL NUMBER, JANUARY 1951.

Published by the Department of Women's Welfare, Madras.

Pages 100+iv. Price, 8 annas.

A wealth of thoughtful articles from eminent contributors marks the Annual Number of the *Women's Welfare Journal*, thereby proving that a magazine devoted to the cause of women need not be light or frivolous. Most of the articles are critical studies of social aspects with reference to women's progress. Prominent among these are articles on social service (Dr. Ehrengels), social order (Padmini Sengupta), Indian womanhood (Lizell Reymond and P. Chenchiah), art in education (Gertrude Sinha-Hirsch) and rural welfare (Dr. Natarajan). John Spiers analyses the *raison d'être* of Kathakali in terms of psychology.

Kannada, Malayalam and Hindi supplements are also included in the Annual Number. Some striking photographs and interesting reports are noteworthy features of this neatly got-up special issue.

DIRECTORY OF THE MADRAS LEGISLATURE

Published by the Madras Legislature Congress Party, Government House, Mount Road, Madras-2.

Pages 182. Price, not stated.

In his foreword to this Directory commending the publication, Sri P. S. Kumaraswami Raja, Chief Minister, observes: "Though the facts and other information in it, must have been already known, yet a compilation of all of them into a compact volume like this, giving a connected account of the same, will be desirable, as also useful." Actually one would like to go further, and state that such a volume is invaluable. It contains information available in no other volume of a similar nature. Basically the book is a political who is who, giving photographs and succinct biographical sketches of members of the Madras Legislative Council and the names of the Madras Members of the Union Parliament. The members are listed in alphabetical order, not on party lines. The information thus correlated forms a gratifying record of service and sacrifice made in the freedom struggle by the legislative representative of the people of Madras.

However, these spotted biographies do not constitute the entire book. Other interesting features include lists of members of the Council of Ministers, Government of India, the Governors of the States, Rajpramukhs of the Union, Rules of the Madras Legislature Congress Party, a list of Bills passed by the Madras Legislature from April 1946 to date, and a review of achievement of the popular Government. This last article, titled "Four Years in Harness (1946-1950)" is an ably written appreciation which summarises the progress of administration and reform undertaken by the Congress Ministry.

Photographs of a few members are lacking; it is hoped that it will be possible to include these in a subsequent edition. Attractively printed and sturdily bound, this directory will form a handy reference volume to all political workers, students of public affairs and publicists.

—P.V.S.

SPIRITUAL LESSONS

BY SRI SWAMI SIVANANDA—Fourth Edition—Sivananda Publication League, Ananda Kutir, Rishikesh, Himalayas. Price, Rs. 3.

The very fact that this book of spiritual lessons has already undergone three editions and there was need for a fourth edition is proof positive that the public at large are conscious to avail themselves of these lessons and attain the object for which they are intended. There are many thinkers among us who can give us discourses in the abstract on various philosophical problems such as the self-realisation, salvation, the law of Karma, etc., but few have the requisite knowledge to tell the practical steps by which we can reach these ideals.

It is this useful and benevolent purpose that Swami Sivananda has achieved in this remarkable publication. He emphasises once more that the goal of life, the be-all, the summum bonum of existence is self-realisation or the attainment of God consciousness. His lessons (998) embodied in this volume are intended to achieve this end. They cover a wide field and are adjusted to suit all conditions of life. They proclaim the practical wisdom of the Swamiji who has taken care to see that no individual who seeks the aid of these lessons should have reason to complain that his peculiar circumstances have not been taken into consideration when formulating these lessons.

—K.C.N.

UTTARAYOGI OF HIMALAYA

Sivananda Publication League, Anandakutir, Rishikesh, Himalayas—Price, Rs. 2-8-0.

Uttarayogi is the popular name by which Sri Swami Sivananda is known throughout India since he shifted his abode to the North on the banks of the Ganges and began to radiate his brilliance to the beings around him. From the time of Swami Vivekananda the ideal of Sanyasa has undergone a welcome change which included in its scope not only the salvation or the attainment of "eternal bliss" of the soul, but also the attempts or earnest endeavours of that soul to give the other souls also the benefit of his experience or to share the joys of his mental elevation with others also. The charge of isolation or aloofness to a certain extent bordering on selfishness was laid at the door of our ancient seers who were helping their fellow men not through any direct method known to us but through mysterious ways which partook the mysteries associated with their own condition and being. The desire to break this tradition was in Ramakrishna Paramahansa but it found fuller expression and scope in his famous disciple Vivekananda who in a dozen years accomplished what others would have taken a lifetime to do.

Swami Sivanandaji belongs to this rare group. The present publication contains appreciation of or homage paid to this divine personality whose interests or inclinations covered a very wide range as shown by the various writers who have viewed the Yogi in his different aspects. The whole book is an elevating study throwing side lights on the inner workings of a soul that found peace after searching for it for several years through different channels open to seekers after truth. While we get a glimpse of the complex personality through different angles, one misses the single picture of all-round personality that

could be conveyed only through a comprehensive biographical sketch in which its evolution and background which shone as beacon lights later, could be traced and elucidated. It is hoped this will be supplied in the next edition of this highly useful volume.

—K.C.N.

APARTHEID IN SOUTH AFRICA

By P. S. JOSHI, Johannesburg.

Pages 108.

Price not stated.

"Nearly 300,000 persons of Indian origin reside in South Africa. Their forefathers emigrated to South Africa, mainly as workers but partly as traders between 1860 and 1911. The workers were brought into South Africa under definite agreements. An essential part of the agreement between the then Government of Natal and the Government of India was that these emigrants, once settled in South Africa, were to have the same rights and privileges as any other person or were to be governed by the same laws without any distinction. With regard to these settlers the then British Secretary of State for Colonies stated: 'They were to be free men in all respects with privileges no less inferior to those of any other class of His Majesty's subjects resident in the Colonies.' Thus began Srimathi Vijayalakshmi Pandit, introducing in the United Nations General Assembly's Political Committee a draft resolution condemning the South African Government's policy of Apartheid or Total Segregation which she denounced as perpetuating racial arrogance in a manner unprecedented even in a world which has grown familiar with racial doctrines in the last two decades."

The subsequent history of South Africa forms a notorious chapter in the story of racial oppression. The division of South African citizens into white, black and coloured (which includes Indians) has now been carried to its bitter extreme of outright segregation with an attendant tyranny of denial of elementary privileges of citizenship. Indian's charges against the South African Government presented so ably in the United Nations forms by M. C. Setalvad and Srimathi Vijayalakshmi have served to bring this story state of affairs into the black limelight.

To those who would study the matter deeper to get a clear grasp of the situation and knowledge of the foul forces at work *Apartheid in South Africa* by P. S. Joshi is an excellent guide. The book is not a hysterical indictment of harassment narrating a tale of woe, or a masochistic record of governmental oppression. It is a well documented arraignment of facts and arguments in their social and historical setting, cogently developing a plaint that is inexorable and incontrovertible. So painstaking is the draft that every sentence explodes the myth of white supremacy and expounds the doctrine of human brotherhood. Mr. Joshi cites an army of authorities at every stage to clinch his arguments.

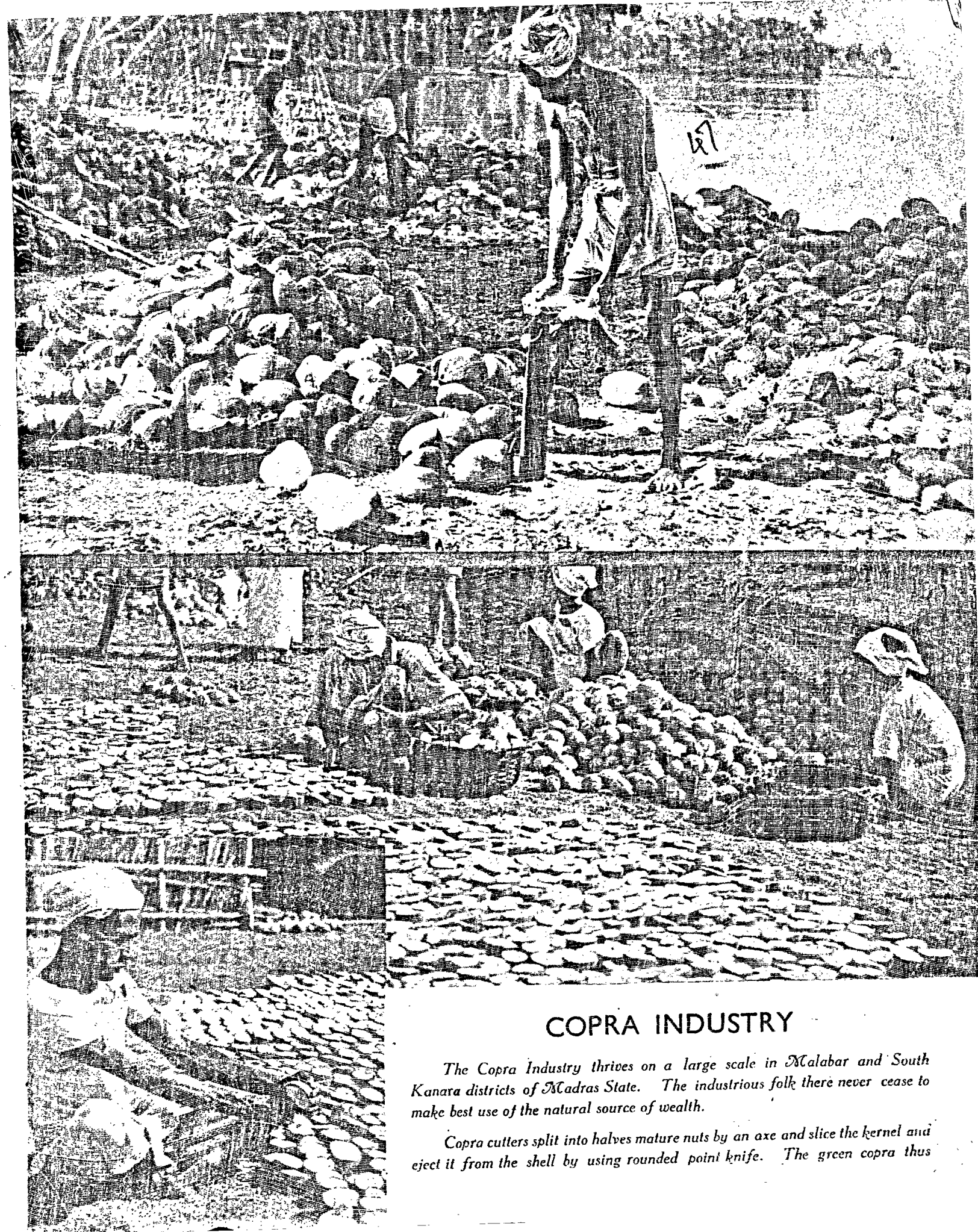
It is a major tragedy of these enlightenment times that policies which should have perished with Hitler, now prevail in the land of Dr. Malan. The volcanic nature of the situation is remarked by Professor Z. K. Mathews in his *race relations*: "The two and a half million Europeans who talk so glibly about the repatriation of one-quarter million Indians, may not realize that to the Africans nationalist the repatriation of two and a half million Europeans does not appear any more preposterous or impracticable."

—P.V.S.

Gurudev's Tribute to Gandhiji

"Great, as he is as a politician, as an organizer, as a leader of men, as a moral reformer, he is greater than all these as a man because none of these aspects and activities limits his humanity. They are rather inspired and sustained by it. Though an incorrigible idealist and given to referring all conduct to certain pet formulae of his own, he is essentially a lover of men and not of mere ideas; which makes him so cautious and conservative in his revolutionary schemes. If he proposes an experiment for society, he must subject himself to its ordeal. If he calls for a sacrifice, he must first pay its price himself. While many socialists wait for all to be deprived of their privileges before they would part with theirs, this man first renounces before he ventures to make any claims on the renunciation of others."

—Article on "Gandhi the Man" by Rabindranath Tagore.



COPRA INDUSTRY

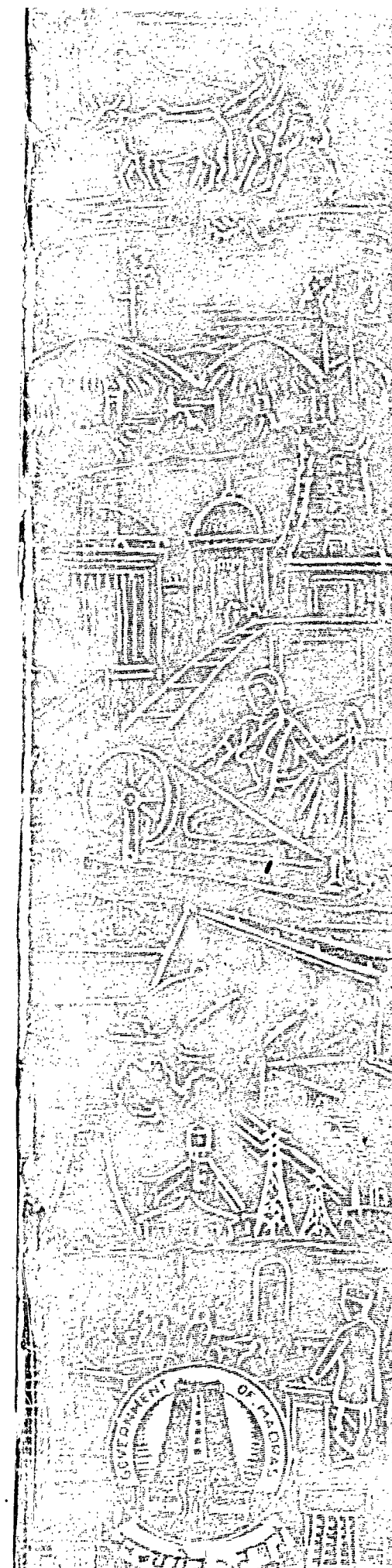
The Copra Industry thrives on a large scale in Malabar and South Kanara districts of Madras State. The industrious folk there never cease to make best use of the natural source of wealth.

Copra cutters split into halves mature nuts by an axe and slice the kernel and eject it from the shell by using rounded point knife. The green copra thus



obtained is spread in open sun-drying. The green copra is exposed to the sun and wind for four to six days during which period it turns greyish white to light brown sealing the oil inside. Coconut oil is extracted from copra in oil mills and the residue of the kernel is made into a poultry meal or cattle food.

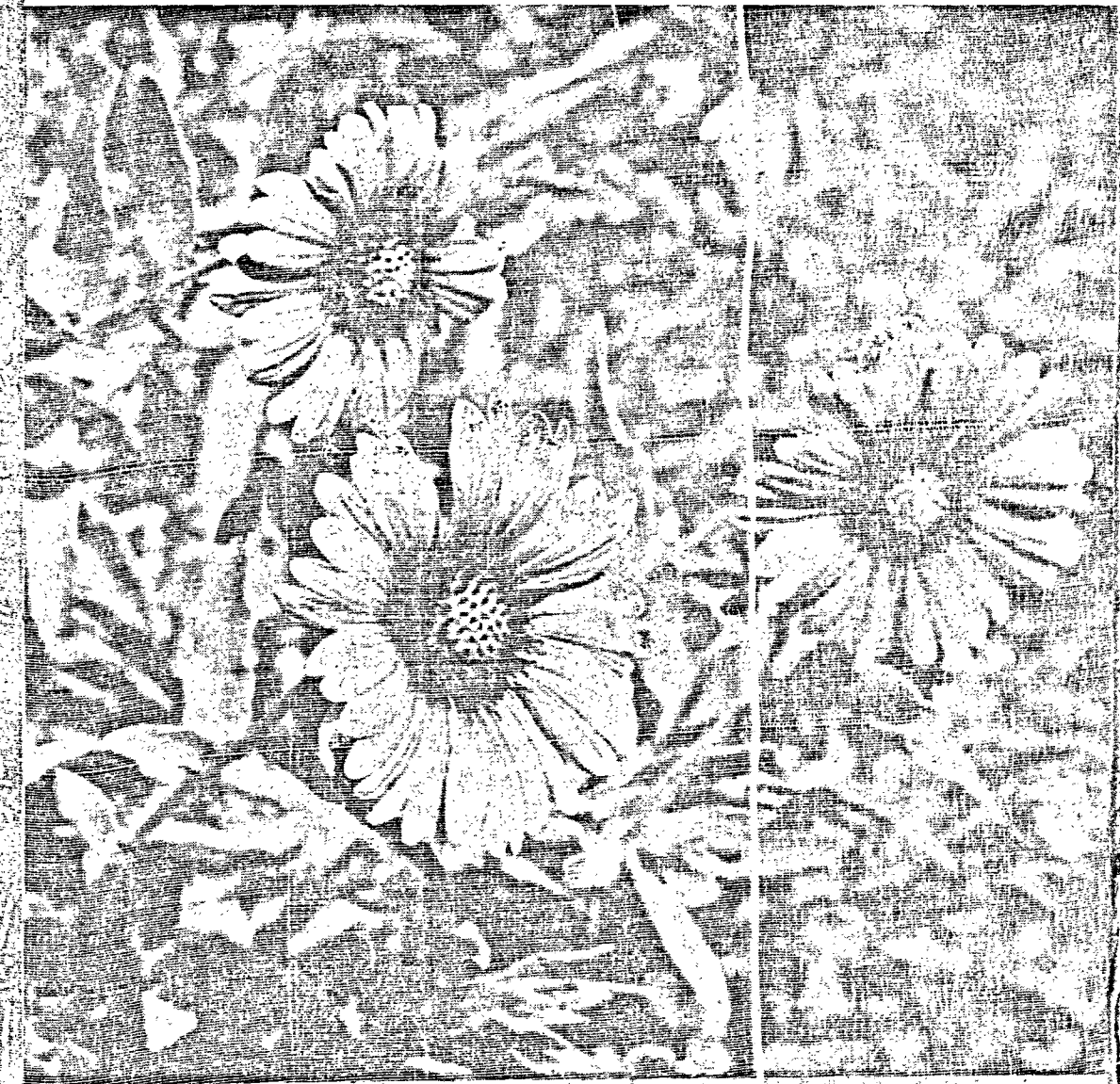
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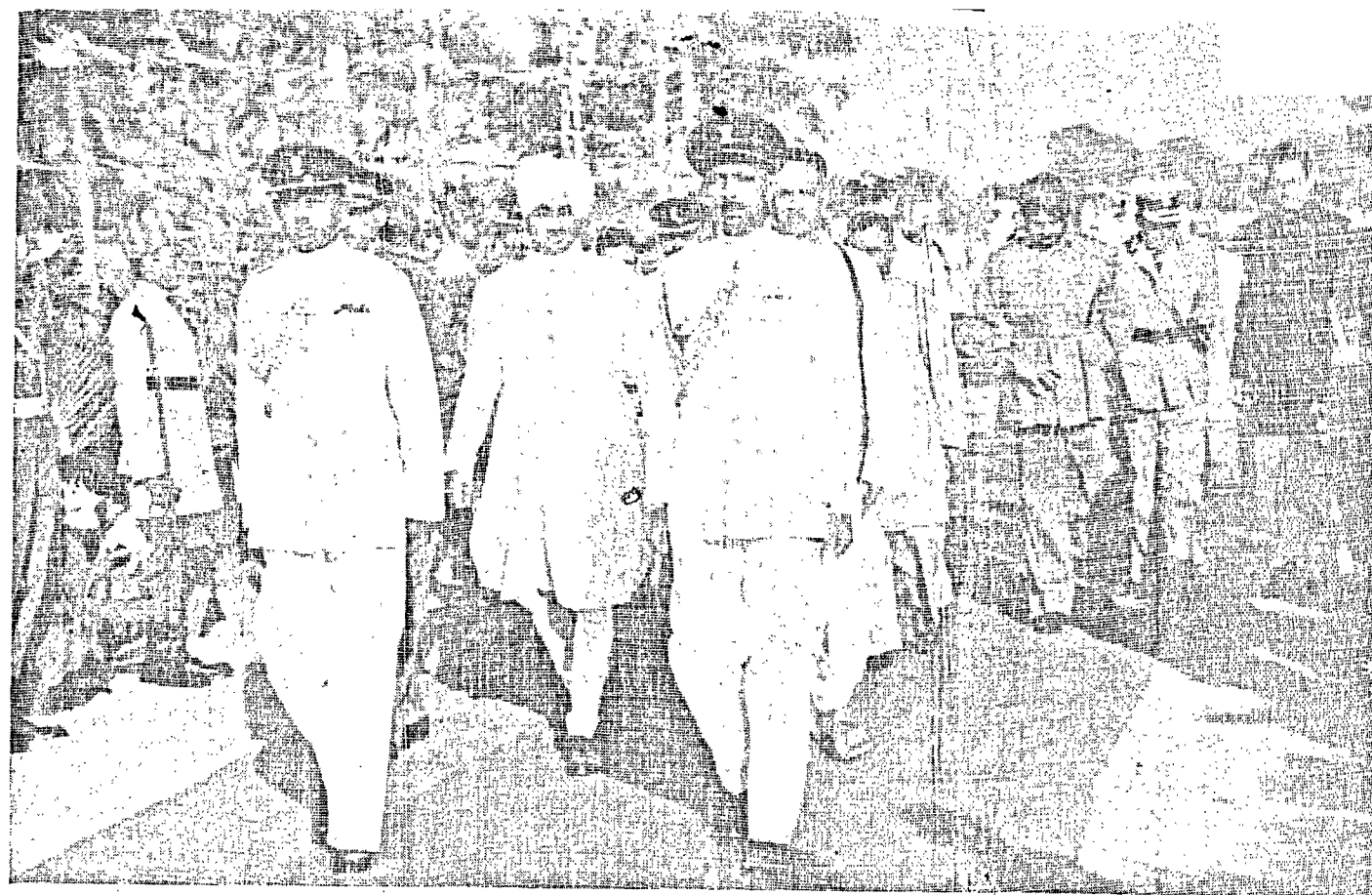
MADRAS INFORMATION



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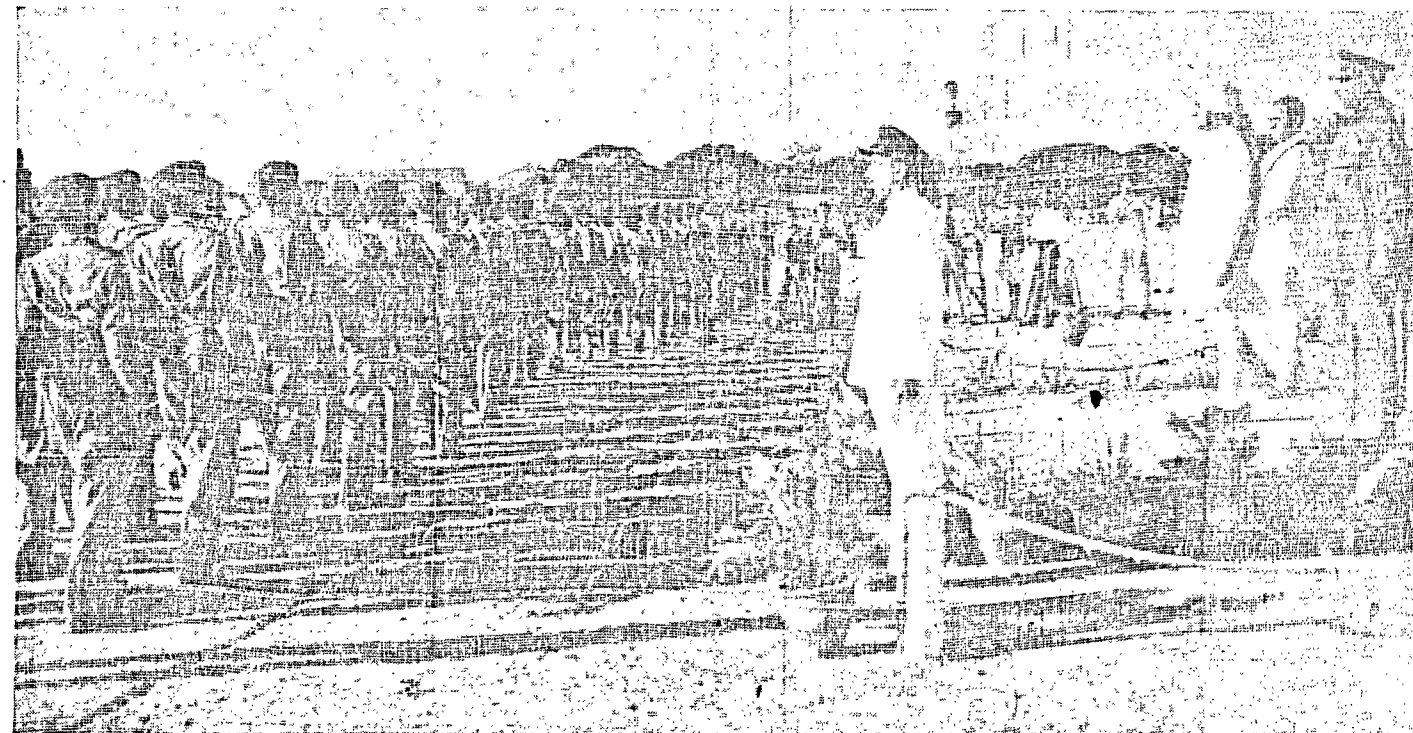


H.E. the Maharaja of Bhaonagar, Governor of Madras, and the Hon'ble. Sri P. S. Kumaraswami Raja, Chief Minister of Madras, arrive at the Island Grounds, Madras City.

REPUBLIC DAY

On January 26, 1951, India celebrated the anniversary of its first year of freedom as a Republic. In Madras State the historic occasion was observed with solemn splendour. A Military Parade was one of the features that marked the function of Republic Day, when H.E. the Governor of Madras, led the people in rededicating the State to ideals of service and sacrifice.

H.E. the Governor takes the salute at the March Past.



Madras Information

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Vol. V, No. 3

"WE SEEK TO SERVE AND NOT TO COMPETE"

March 1951

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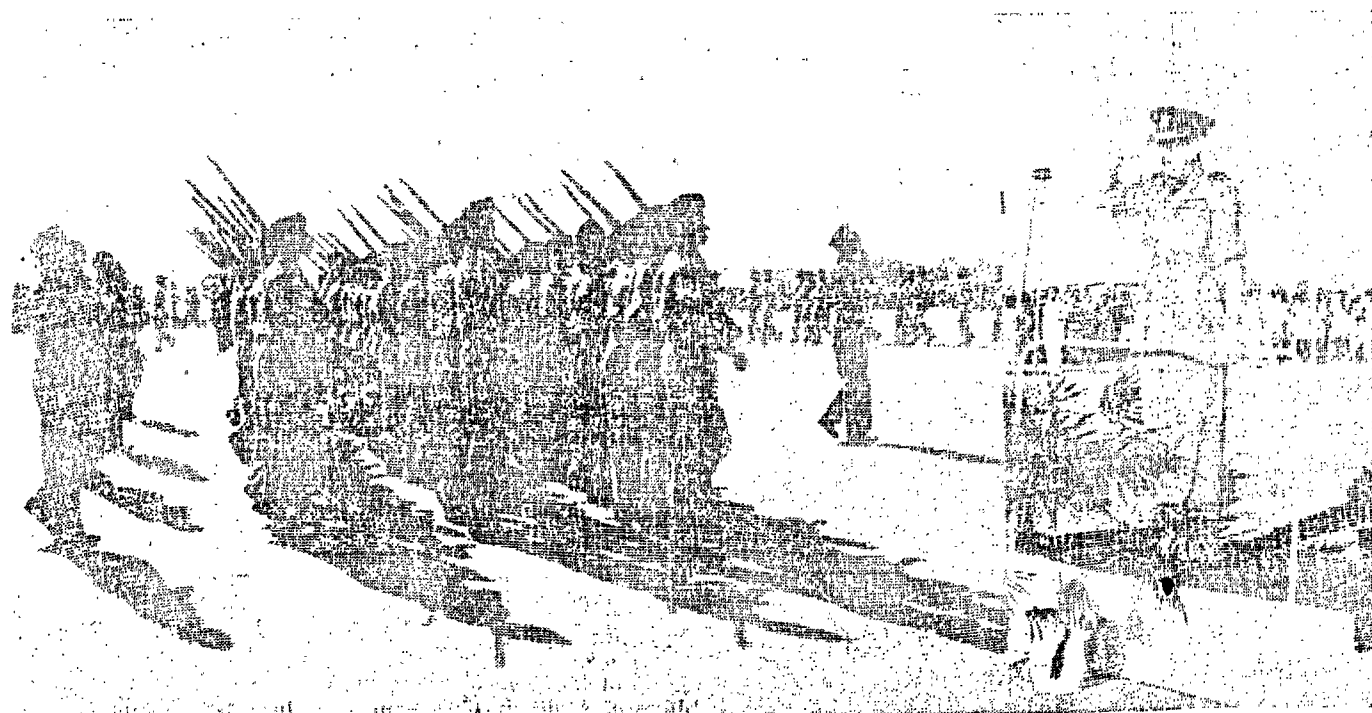
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NATIONAL SAVINGS FORTNIGHT

The National Savings Fortnight was conducted with great enthusiasm in Madras State. Sri C. P. Ramaswami Iyer presided at a public meeting held at Rajaji Hall to launch the celebration of the Fortnight. "The savings figure for the entire Indian Union has been ranging between 20 and 24 crores of rupees per year. As for Madras State, the peak so far reached is Rs. 3.23 crores in 1948-49. During the current year, we have collected up to the end of January 1951 only Rs. 1.7 crores; we hope to reach at least the level of last year, i.e. Rs. 2.73 crores," observed the Provincial Savings Officer, Madras State, in his report read at the meeting.



Air Marshal Isclaw-Chapman, Air Commander-in-Chief, Indian Air Force, recently inspected air force installations in the South. The Air Commander-in-Chief is seen above taking the salute at the March Past at the I.A.F. Base, Tambaram.

POWER

3

MADRAS INFORMATION

The Madurai Thermal Scheme

By SRI M. BHAKTAVATSALAM, Minister for Public Works

From the speech delivered by Sri M. Bhaktavatsalam, Minister for Public Works, at the opening of the Madurai Thermal Station at Samayanallur.

The Madurai Thermal Power Station starts on its career of useful service to the people of this country not a day too soon. It is going to be of immediate assistance in relieving the shortage of power caused by the failure of monsoon in the southern districts of this State.

The Madras Government, appreciating as they do the role of electricity in increasing the productive capacity of the people, had sanctioned a five-year plan costing over Rs. 30 crores. The plan is not a mere paper plan. It is in actual execution. Last year we spent Rs. 5½ crores on it and this year we shall spend Rs. 8 crores on it. This powerhouse of capacity 4,000 K.W. has been completed and is being brought to service in pursuance of that plan.

Other power plants already completed under the plan are the 5,000 K.W. one at Basin Bridge 'C' Station commissioned in 1948, the 4,000 K.W. service using Mysore power in the Ceded Districts area begun in 1949 and the Nellore Thermal Scheme with 5,000 K.W. inaugurated in October 1950. Including Madurai, 18,000 K.W. of power has thus already been made available under the plan.

Work is in active progress on the rest of the plan and the following power installations will be completed during the coming months of this year, i.e., 1951 :—

	K.W.
In March 1951—Visakhapatnam, IV unit.	1,500
In April 1951—Papanasam, IV unit.	7,000
In June 1951—Vijayawada, IV and V units.	6,000
In September 1951—Visakhapatnam, V unit.	1,500
End of 1951—Moyar Hydro I unit	12,000
	28,000

So, at the end of this year—1951—further 28,000 K.W. of power plant would have started supply.

Next year, i.e., in 1952, the following installations will be ready :—

	K.W.
Beginning of 1952—Madras Thermal Extension—First stage.	15,000
Middle of 1952—Madurai Thermal Extension, II unit.	10,000
Middle of 1952—Moyar Hydro II and III units.	24,000
	49,000

Completing the Five-Year Plan

In other words during 1952, 49,000 K.W. of additional power will be made available to the people. 1953 will see

the completion of the Five-Year plan with the following schemes :—

	K.W.
Early 1953—Pykara VI and VII units.	26,000
Middle of 1953—Madras Thermal Extension—Second stage.	15,000
Middle of 1953—Machkund—First stage.	52,000
	93,000

bringing in further power to the extent of 93,000 K.W.

All these additions are, however, not going to suffice to meet the demand for power for industries, agriculture and other uses. The Electricity Department is already working out schemes for the next five-year plan. In broad outline this next plan will comprise—

	K.W.
Tungabhadra Hydro Scheme	35,000
South Kanara Extension	6,000
Kundah Hydro Scheme	100,000
Periyar Hydro Scheme	50,000
Madras Thermal Extensions	30,000
Machkund Hydro Extensions	30,000
Making a total of	251,000

Government have already sanctioned the Tungabhadra Hydro Scheme and the South Kanara Extension and preliminary work on these two schemes has been taken in hand. The rest of the schemes will be sanctioned as and when they are ready. All these will show that Government attach great importance to electrical development in the State and are willing to give it high priority in the allocation of funds.

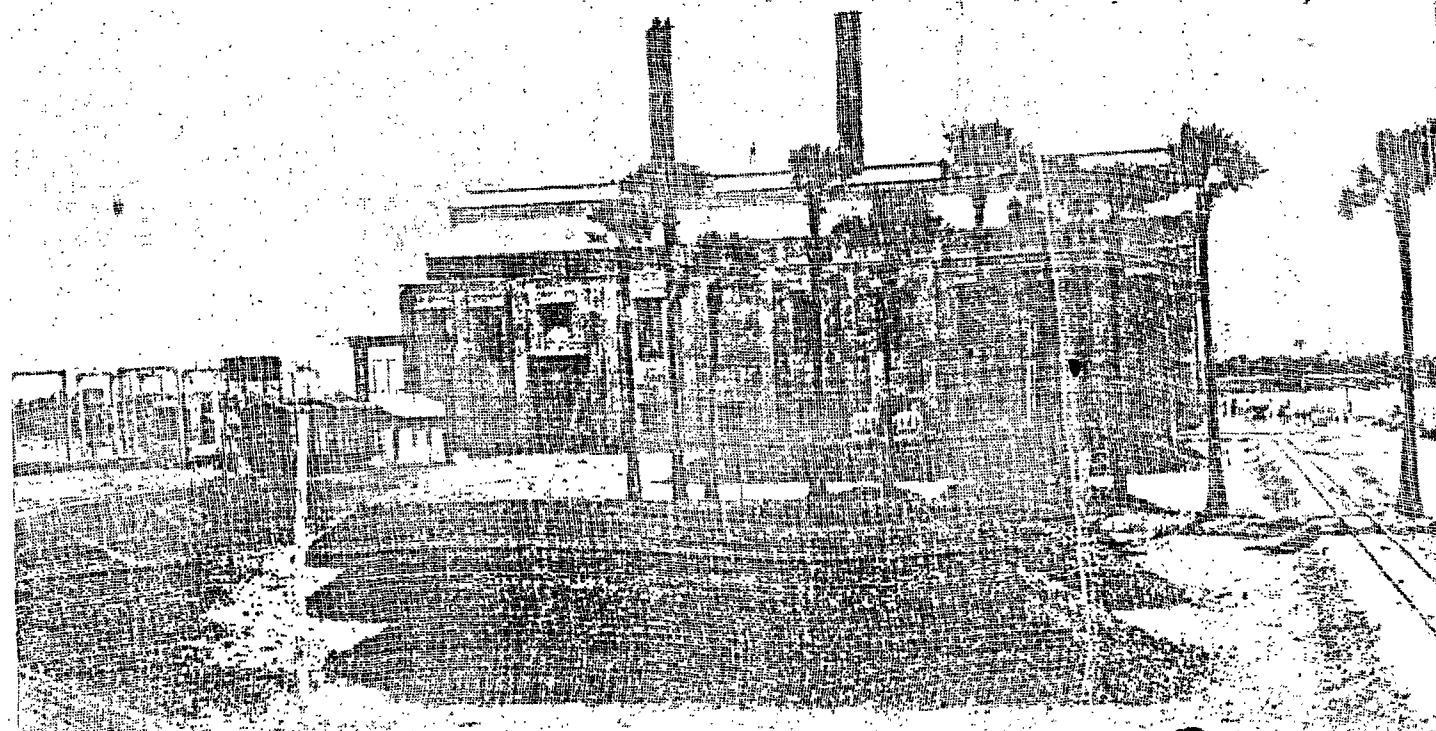
Rural Electrification

Hitherto, electrical development has, in general, been confined to cities and urban areas. Rural parts were neglected. The Government wish to correct this lopsided development and carry power in an ever-increasing measure to the villages. Madras has already achieved some success in this matter as over 1,700 villages are now electrified. Though this number is not large compared to the number of villages in the State, I understand Madras leads all other States in India in rural electrification. Mysore comes next with 450 villages to its credit.

Rural electrification is a costly matter requiring long-range plans and efficient working. There is little or no profit in it but considerable indirect benefits can flow from it to the people and to the State. Private licensees are, in general, not keen on taking up rural schemes as there is not sufficient profit incentive in it. Only Government can afford to take long-range views on this question and plan rural electrification mindful of the indirect benefits to the people and ignoring the profit motive.

SYNOPSIS OF MADURAI THERMAL SCHEME

Location	..	The Madurai Thermal Station is near Samayanallur about eight miles north of Madurai City. It abuts the Great Southern Trunk Road near the 292nd milestone from Madras. It is about one and a half miles from Samayanallur railway station.
Main features	..	The present installation consists of one 4,000 K.W. turbo-alternator set with three coal-fired boilers complete with switchgear and auxiliaries. Another set of 10,000 K.W. capacity is on order and it is likely to be commissioned in 1952.
Power Supply	..	The thermal station is designed to be an auxiliary station for supplementing the power output in the Papanasam hydro area, especially during the dry months.
Generating Machinery	..	(a) The initial installation comprises— (1) three Babcock and Wilcox boilers each of capacity 36,000 lb./hour; (2) one Parson's turbine running at 3,000 R.P.M. complete with condenser and accessories direct coupled to an alternator of 4,000 K.W. capacity at 0.8 P.F., 3.3 K.V./6.6 K.V. 3 phase 50 cycles complete with exciter switch and protective gear; and (3) one B.T.H. step-up transformer 5,000 K.V.A., 3.3-6.6 K.V./11-33 K.V., 3 phase 50 cycles complete with accessories. (b) The second stage will comprise two 55,000 lb./hour boilers of Steimullers (Germany) make, one 10,000 K.W. turbo-alternator of Hitachi (Japan) make and one 12,500 K.V.A. set-up transformer of Hitachi make complete with necessary accessories.
Transmission	..	The station is connected to the Papanasam System Grid Pasumalai Receiving Station by means of a six-mile long 33 K.V. transmission line with necessary terminal equipment.
Estimated Cost	..	Initial cost is Rs. 64.32 lakhs for the 4,000 K.W. installation; ultimate cost is Rs. 131.60 lakhs with the addition of the 10,000 K.W. set.
Construction	..	Begun in July 1947. Commissioning of 4,000 K.W. set and initial supply in February 1951.



Tightening of Austerity Measures

The public are aware that due to the difficult food position in the country and the need for conserving cereals by preventing wastage of foodgrains, the Government have been enforcing certain austerity measures which restrict the number of persons to be fed at marriage parties to 50 and at other parties to 30. In view of the successive failure of the monsoons for the last four years, the food position this year has become more difficult and there is now greater need for conserving cereals by tightening up the austerity measures. The Government have therefore issued, in supersession of the previous orders, an order called the Madras Guest Control Order, 1951, which imposes the following restrictions:—

(1) More than 24 persons (excluding the host and the members of his household) should not be fed at parties other than marriage or funeral parties. No extra rations will be granted for the purpose.

(2) More than 50 persons (excluding the members of the household of the person giving the party) should not be fed at each of the two principal meals on the marriage day. On days other than the marriage day, more than 24 persons (excluding the host or hosts) should not be fed in connexion with the marriage. Extra rations, if asked for, will be granted for feeding 50 persons for each of the two meals on the marriage day only.

(3) More than 50 persons (excluding the members of the household of the person giving the party) should not be fed at a party if any on the funeral day (i.e., the day after the death of a person on which feeding of guests

might have been ordained by custom or religious usage. Extra rations, if asked for, will be granted for feeding 50 persons for one meal on the funeral day.

(4) Subscription dinners or parties held by bona fide clubs or associations for their members are exempt from the rule, provided the number of guests (non-members of the club or association) who take part at such parties does not exceed 24. No extra rations will be granted for the holding of such parties.

(5) Feeding of delegates attending conferences held under the auspices of recognised bodies or associations and feeding of school and college students during educational tours organised by schools and colleges are also exempt from the 24 persons' limit.

(6) Every caterer and host providing food for more than 20 persons at any party shall notify sufficiently in advance in writing to the Rationing Officer or the Taluk Supply Officer of the area concerned, giving the following particulars:—

(a) Number of persons proposed to be served with food;

(b) particulars of the menu to be served;

(c) place at which party is to be held; and

(d) the date on which the party is to be held.

(7) The above restrictions do not apply to the serving of any one or more of the following items to any number of persons at any party:—

“Drinks, nuts, fruits (fresh and dried), potato chips, preparation of pulses or of gram or of any products of pulses or gram, sweet potatoes, bananas, tapioca, ground-nut-atta, sugar, gur, shakkar, salt, ghee, products of oil or vegetable oil or other foodstuffs without any admixture of wheat, rice, jawar, bajra, barley, ragi, maize or other controlled cereals.”

2. The public are informed that the above restrictions are applicable to both rationed and non-rationed areas of the State and that they will not be relaxed. Persons who participate in parties held in violation of the above restriction will also be liable to prosecution. The public are requested to co-operate with the Government. When they wish to give a party to more than 50 persons at marriage and funeral parties and more than 24 persons at other parties, they are advised to restrict the menu to the exempted items mentioned above [sub-paragraph (7) of paragraph 1].

Statutory Rationing to be introduced in Municipal Towns in Surplus Districts

With a view to taking preliminary measures such as enumeration of house-holders, etc., for the introduction of statutory rationing, the Government have extended with effect from January 23, 1951, the Madras Rationing (Preparatory Measures) Order, 1947, the Madras Rationing Enquiry Order, 1947, and the Madras Rationing Order, 1947; to the following municipal towns and their suburbs in the surplus districts of the State:—Guntur, Rajahmundry, Kakinada, Eluru, Vijayavada, Machilipatnam, Nellore, Tanjore, Kumbakonam and Nagapattinam.

25 per cent Cut in Rations

The Government of India have made arrangements for import of the necessary quantity of foodgrains from foreign countries to meet the deficit in the country as a whole. However, owing to the present international situation, difficulty is experienced in getting sufficient shipping, and the arrivals are therefore not expected, for some short time, to be quite sufficient to maintain the present overall ration of twelve ounces. The Government of India therefore announced that there should be a temporary 25 per cent cut, on an all-India basis, in the present scale of rations.

While implementing this decision by reducing the overall scale of rations from twelve to nine ounces, with effect from 28th January 1951, this Government thought it very necessary to increase the rice content of the ration from six to seven ounces. The Government, however, wish to make it clear that the cut in the overall ration is purely temporary, and that the Government of India would continue their efforts to maximise arrival of grains from abroad, so as to restore the cut as early as possible.

Abolition of Rural Rationing

The Government have ordered the abolition of rural rationing of rice and millets in all the districts except in the highly deficit districts of Malabar and the Nilgiris and the Hosdurg Sub-taluk of South Kanara District. Intensive procurement of paddy and rice will be confined only to the delta areas of East Godavari, West Godavari, Krishna, Guntur and Nellore and Tanjore Districts and also to the deficit districts of Malabar and the Nilgiris. Procurement of paddy and rice on an easy scale of levy will be made in the delta areas of South Arcot, Tiruchirappalli, Madurai and Srikakulam Districts and in South Kanara District. There will be no procurement of paddy and rice in the remaining districts of Visakhapatnam, Anantapur, Bellary, Cuddapah, Kurnool, Chittoor, Chingleput, Salem, North Arcot, Ramanathapuram, Coimbatore and Tirunelveli, the upland areas of East Godavari, West Godavari, Krishna, Guntur, Nellore and Tanjore and in the non-deltaic areas of South Arcot, Tiruchirappalli, Madurai and Srikakulam Districts. Inter-district bans on movement of rice will continue to be in force.

So far as millets are concerned, intensive procurement will be given up throughout the State except in Malabar and the Nilgiris Districts. In South Arcot and South Kanara, however, there will be procurement of millets to the limited extent of meeting the requirements of the statutorily rationed areas, industrial and panchayat board areas in those districts. Present inter-district ban on the movement of millets will continue to be in force with some relaxation as indicated below.

Movement of Millets

There will be no movement of millets into South Kanara which is self-sufficient in foodgrains. In regard to Malabar, the Nilgiris and Madras, no movement of millets on private account except in lieu of rations will be allowed. Srikakulam, Visakhapatnam, East Godavari, West Godavari, Krishna and Guntur will form a zone and movement from one district to another within the zone will be on permits which will be issued freely by the Collector of the district concerned, on application by anyone who is a licensee under the Madras Foodgrains Control Order. On import, the importing merchant should give intimation to the Collector of the quantity imported so that he may keep trace of the stocks and see that they are not hoarded or sold in the blackmarket at exorbitant prices. The remaining districts will form another zone for the purpose and the same procedure will apply here also. Persons owning lands outside the statutory rationed areas where they live and who have produced millets, will be allowed to import their requirements of millets up to the maximum overall scale of rationing.

The Madras Foodgrains Control Order will continue to be in force in all the districts and the trade will be licensed. The Collectors will continue to have powers to requisition stocks either from the trade or from the producer. The Essential Articles (Restricted Acquisition) Order will be enforced throughout the State in order to prevent hoarding of stocks. The Madras Foodgrains Price Control Order fixing the village site and wholesale prices will continue to be in force in all the districts and the provisions thereof will be enforced strictly. The Government wish to

make it clear that deterrent penal action will be taken against any producer or dealer who sells foodgrains over and above the prices fixed in that Order. The Government will not hesitate to take action under the Preventive Detention Act in extreme cases of blackmarketing.

No "Starvation Deaths" in Srikakulam

Representations have been received by the Government alleging starvation deaths during November 1950, in Srikurram, Ampalapadu, Vatsavalasa and other villages of Srikakulam District. The Government have investigated the causes of the deaths in each of the cases. The alleged starvation death in Srikurram village of one Rayapureddi Annayamma has been found to be due to paralysis, a fact certified to by the doctor who attended on the deceased. Again, it has been alleged that four persons died of starvation in Ampalapadu village in the same district in the first week of November 1950. On enquiry it has been found that the deaths were all due to natural causes.

In two cases deaths actually occurred not in November but in August itself when the food position was good. In one case the death occurred in October 1950 and in the fourth case it was found that there was no one in the village by name Bevara Appalamma. The alleged starvation death in Vatsavalasa village of one Thamada Gurayya has also been found to be due to discharge of blood, an ailment from which he was suffering for the past two or three years.

It will thus be seen that the allegations are baseless and have no relation to facts. The Government regret to note that such statements without any basis whatever should have been made by responsible local people without verifying the facts.

Composting Scheme Sanctioned

The Government have decided to introduce as an experimental measure the Wardha system of compost latrines for composting nightsoil in villages under the Rural Welfare Scheme in one village in each of the model firkas of Thirumangalam in the Madurai District and Dendulur in the West Godavari District. A sum of Rs. 5,000 has been sanctioned for the construction of trench latrines in each of the two villages.

Ex-Gratia Payment to Hotel-Keeper

The Government have sanctioned a compassionate grant of Rs. 300 to Sri K. Ananda, hotel-keeper, Attavar, Mangalore, who has suffered on account of a Communist outrage on 20th May 1948.

Sri K. Ananda represented to Government that during the disturbance following the arrest of a Communist leader on 20th May 1948, his hotel became the target of attack by a mob, as he had given shelter to Police officers, and that as a result he suffered damages to his property. The Government considered the representation and sanctioned an ex-gratia payment of Rs. 300.

Food Offences and Punishments Awarded

During the fortnight ending 15th November 1950, 279 cases of prosecutions were disposed of in Madras State except in the Districts of North Arcot, Chingleput, Madurai, Ramanathapuram, Visakhapatnam and Srikakulam in respect of food offences. Of these one was disposed of in the Nilgiris District, two each in Chittoor, West Godavari and Krishna Districts, three in Kurnool District, five each in Anantapur, Cuddapah and Nellore Districts, eight in Tiruchirappalli District, ten each in East Godavari and Malabar Districts, 16 in Guntur District, 20 in South Arcot District, 23 in Coimbatore District, 26 in Tanjore District, 27 in Madras City, 33 in Salem District, 39 in Tirunelveli District, 42 in South Kanara District and nil in Bellary District.

Particulars of cases in which heavy punishments were awarded in the districts are described below :—

Krishna.—T. Subba Rao, Bandar, was awarded six months rigorous imprisonment for doing foodgrains business in wholesale without a licence.

South Arcot.—Muhammad Ismail Sahib was fined Rs. 250 for illicit import of paddy.

Malabar.—Pakhath Chonu Amma, Pullavar Ansum, landlord, who failed to sell surplus paddy to Provincial Co-operative Credit Society was fined Rs. 200 with three months rigorous imprisonment in default.

Coimbatore.—Batcha Sahib who enumerated ten persons who were residing in non-rationed area and got ration card was convicted and sentenced to pay a fine of Rs. 200.

(ii) Muthuswami Gounder was fined Rs. 200 with three months rigorous imprisonment in default for illicit import of rice.

Salem.—Periathambi was sentenced to pay a fine of Rs. 200 in default to undergo rigorous imprisonment for two months, for illicit import of foodgrains.

(ii) Periaswamy and Krishnappa Mudali, son of Rangaswamy Mudali, trader, were each fined Rs. 200 or one month rigorous imprisonment in default, for unauthorised purchase of foodgrains.

(iii) Palaniappan was fined Rs. 200 with one month rigorous imprisonment in default, in each of the three cases for unauthorised purchase of foodgrains.

West Godavari.—Kalagara Subbanna and Kalagara Meneyya of Dommeru were each fined Rs. 200 with two months simple imprisonment in default, for purchase of paddy without licence.

Guntur.—Morla Manikyarao, B. Venkataramiah of Chatragaddapadu and B. Venkateswarulu of Kollur were each fined Rs. 200 or two months rigorous imprisonment in default, for hulling paddy without licence.

(ii) Pedali Sitharamayya, Kamma, cultivator, Uppalapal, who sold 27 bags of paddy to an unlicensed dealer, was convicted and sentenced to undergo simple imprisonment for one day and also fined Rs. 300 with three months simple imprisonment in default.

Anantapur.—Bhatlu Sesham Raju, cultivator, was fined Rs. 200 for illicit transport of paddy.

East Godavari.—P. Subba Rao was sentenced to pay a fine of Rs. 200 with three months rigorous imprisonment in default, for illicit transport of paddy.

(ii) Kani Sethi Reddy, Aneparthi, was fined Rs. 500 with 2½ months rigorous imprisonment in default, for giving over polish to rice and unauthorised possession of rice.

FOOD OFFENCES DURING THE FORTNIGHT ENDING NOVEMBER 30, 1950

During the fortnight ending 30th November 1950, 711 cases of prosecutions were disposed of in Madras State (except in the Districts of Anantapur, West Godavari, Madurai, Ramanathapuram, Visakhapatnam and Srikakulam) in respect of food offences. Of these, two were disposed of in Krishna District, five in Cuddapah District, six in Kurnool District, 11 in Bellary District, 14 in Chittoor District, 17 in Guntur District, 23 in South Kanara District, 24 in Nellore District, 29 each in East Godavari, Tirunelveli and Tiruchirappalli Districts, 37 in Madras City, 45 in Tanjore District, 50 in Malabar District, 51 in Coimbatore District, 71 in South Arcot District, 76 in Salem District, 96 each in North Arcot and Chingleput Districts and nil in the Nilgiris District.

Particulars of cases in which heavy punishments were awarded in the districts (except Coimbatore and Guntur) are described below :—

South Kanara.—S. L. Lobo, son of Diaga Lobo Vial, Puttur, who was in possession of foodgrains more than his requirements, was fined Rs. 200 with three months rigorous imprisonment in default.

Madras City.—Ranganatha Mudaliar, cultivator, Vanniamangalam, North Arcot District, was sentenced to undergo one day simple imprisonment and also fined Rs. 250 in default to suffer rigorous imprisonment for one month, for illicit possession of 312 measures of rice.

Salem.—Ramasami Pillai was fined Rs. 200 with two months rigorous imprisonment in default, for purchase of rice other than on a ration card.

Subramania Chetty was fined Rs. 200 with two months rigorous imprisonment in default, for failure to reduce rations.

Tiruchirappalli.—Muthusamy Goundan was fined Rs. 200 with two months rigorous imprisonment in default, for illicit import of foodgrains.

Abdul Azeez Sahib was convicted and sentenced to imprisonment till the rising of Court and also fined Rs. 200 with six weeks rigorous imprisonment in default, for non-declaration of stocks of 21 kalams of paddy and drawal of rations.

North Arcot.—Manicka Mandiri who sold paddy without authorisation was sentenced to pay a fine of Rs. 350.

Cultivation of Ragi Mixed with Cotton

In the districts of South Arcot, North Arcot and Chittoor, the usual practice is to plant ragi in the month of January and dibble later, at the time of first hoeing the spreading variety of groundnuts, at the time of the harvest of the ragi crop. Sometimes, Cambodia cotton is grown after the harvest of ragi in March. Experiments were conducted at the Agricultural Research Station, Palur, and observations made on the cultivators' lands in all the three districts by planting cotton of the Uganda type along the ridges separating two contiguous beds and the irrigation channels. The seeds were planted after pre-treatment with coddling and red-earth at a distance of six to eight inches on the inner sides of the ridges on the same day as the ragi was transplanted. Lift irrigation was given after three days.

Subsequent interplanting of groundnuts and treatment of the crop were in no way different in such mixed cropping and it was observed to grow well and did not in any way interfere with the ragi or groundnut. Their yields were not affected and cotton gave 200 to 475 lb. of kapas per acre, depending on the dates of planting, soil fertility and frequency of irrigations. The harvests of cotton crop were completed by the time the groundnut was ready for lifting. No special treatment of cotton will be required in such mixed cropping except for irrigation, intercultural operations and manuring given to ragi.

Although Uganda cotton was found to be a good type for mixing with ragi and groundnuts raised under irrigation during the summer, another variety called Punjab 216F which had a short duration, was found more suitable in the areas where water was the limiting factor or where the bunch groundnuts had to be harvested earlier than in spreading variety. The quality of Punjab 216F being very much similar to that of Uganda cotton, should be preferred in such areas.

No Clash with Food Campaign

The cultivation of ragi mixed with cotton does not clash with the food campaign because it does not affect the yields of ragi. But on the other hand, it helps in producing more cotton of good quality which is very much in short supply at present. Similar qualities imported from East Africa and Pakistan are quoted at Rs. 900 per bale of lint. The farmers of the districts of Nellore, Chingleput, Chittoor, North Arcot and South Arcot can help in the production of more cotton and relieve the pressure on foreign exchange experienced by the Government of India in raw cotton imports and benefit themselves by earning an increased profit of Rs. 50 to 200 per acre.

Seeds of both Punjab 216F and Uganda-1 are stocked in the depots of the Agricultural Demonstrators in all the five districts named above. The seeds are sold at controlled prices and if any further information on the cultivation of cotton mixed with ragi or groundnuts is required, the farmers are requested to contact any one of the following officers:—

1. Cotton Extension Officer, Coimbatore.
2. District Agricultural Officers, Nellore, Chingleput, North Arcot, Chittoor and South Arcot.
3. Assistant Cotton Extension Officers, Coimbatore and Kolpatti.

Manure Problems in Rural Madras

We have the largest livestock population in the world, yet we are short of adequate farmyard manure. The total livestock population of the Indian Union was of the order of 268.44 millions of which Madras accounted for 49.8 millions or 15 per cent of the total. In the existing food shortage, the need for conservation and development of the manurial resources in our countryside is more urgent than ever. It is often complained that the shortage of farmyard manure is due to faulty preparation and storage and also to diversion of a large share for fuel purposes. Often vague generalisations are made regarding the availability and diversion of farmyard manure for such purposes.

At the instance of the Compost Development Committees of the Centre and the State, this Government have therefore sanctioned a scheme for assessing manurial supply vis-a-vis our requirements. As a preliminary, it is proposed to conduct a pilot survey in the Chingleput district under the direction of the Economic Adviser to determine the size of the sample for the State-wide survey to be undertaken later. Such a survey will also help to watch the progress of the Compost Development Scheme.

Plan of the Survey

The plan of the survey is to select a certain number of villages by the principle of random sampling. One hundred and fifty villages have been selected in Chingleput district by the method of stratified random sampling, taluks being the strata and the number of villages selected at random from each taluk being proportional to the livestock population in the taluk. It is proposed to collect information from all the householders in the 150 villages. A questionnaire has been drawn up which seeks information regarding the extent of land cultivated by each householder, number of livestock owned by him, the quantity of manure produced, its storage and utilisation. Five Economic Investigators have been appointed for conducting the enquiry.

This pilot survey is to be completed in a period of six months. As the number of householders to be enquired into might run to nearly 33,000 and the time available for the enquiry is short, Government solicit the co-operation of all householders and non-official agencies in the selected villages to help the Investigators in their work and make it a success.

Dowlaiswaram Anicut

The Government have confirmed the existing rates of fees levied for allowing traffic of private and public motor vehicles over the Anicut across Godavari at Dowlaiswaram.

State Food Advisory Committee

Janab Abdul Latif Farookhi, M.L.C., has been appointed as a member of the State Food Advisory Committee in place of Dr. V. K. John.

Palmiculture

By SRI S. V. KAMAT

We have been persistently saying that five crores of palms are standing to be tapped for Gur manufacture. Statistics show that the utilisation of these palms would produce one million tons of Gur. This production would either augment the poor per capita consumption of Gur in the country or help to release proportionate sugarcane land for cereal crops.

Though the Indian farmer has been stigmatised as not up to the mark as compared with his brothers in the Western countries, minute observation shows that with the meagre means at his disposal he has not been lagging behind to utilise the gifts of Nature. Then why has he turned his back to this immense potential source of sugar? Following are the few shortcomings that have deterred him from exploiting it:

- (a) Tradition had installed a prejudice in him that all that these palms were capable of exuding, is an intoxicant drink (toddy). The cultured intelligentsia abhorred to have any connexion with them.
- (b) As a natural corollary of (a), the toddy trade was mainly handled by selfish, short-sighted persons.
- (c) Intricate Excise rules in force forbade anyone to tap the trees without specific permission.
- (d) The widely scattered trees made it almost difficult to collect juice for boiling into Gur.
- (e) As it was difficult to preserve the juice for a longer period, it was not possible to tap distant trees to start the industry on a large scale. Hence the capitalists were disinterested in the industry.
- (f) The height of the trees entail excessive labour and time, especially the palmyras and sago palms.

Measures to Combat Difficulties

To combat and overcome the above difficulties, the following few measures are taken:

- (a) Propaganda.
- (b) Scientific analysis of Neera shows that it contains no alcohol. This fact was broadcast by personages like Mahatma Gandhi and other leaders by declaring that the sweet palm juice can be preserved and converted into Gur and sugar having no trace of intoxicants.
- (c) Excise rules were conveniently altered so as to suit the Palm Gur industry.
- (d) Training camps subsidised by State Governments have been started where large numbers of palms exist, so that the rural workers are fully acquainted with the technique and thus enabled to utilise trees for Gur manufacture.

Various State Governments are undertaking schemes for regularly planting palms so that it will be convenient for the villager to take to the industry. Historical accounts and mature experience go to show that if a tree is properly taken care of, it yields juice earlier and in greater quantity. This has been amply proved in the case of coconut on the coastal areas. More than 50 years ago, Sir James Watt has recorded in his *Dictionary of Economic Products of*

India: "While watered and manured the tree (coconut) in good soil begins to yield when it is five years old and in bad soil when it is eight years old."

(e) Research is being conducted for increasing the keeping quality of Neera which, however, is a very sensitive juice, quickly reacting to the variations of climate. But there are other factors also which totally go to make Palm Gur manufacture wholly a decentralised industry. If the present tendency of capital is shy to invest in such rural ventures where no abnormal profits could be obtained, the industry will have to be organised on co-operative lines. This is mainly done in Madras after the promulgation of Prohibition. Though the co-operative movement in this State is not properly organised in all the districts, some of them have been showing commendable results and it is hoped that others will soon follow suit. In other States the industry has not yet magnified but in the near future the Madras model will have to be copied out with necessary modifications.

(f) It has been possible to bring out species of low statured coconut palms that bear fruit at an early stage. The scientific brains have nullified the idea of growing pigmy palmyras through some process of cross-breeding.

The fatigue caused in climbing up and down each palm can be considerably reduced by the device of aerial ropeways. The tops of the trees of two consecutive trees are tied together with a pair of ropes, one above and one below, so that the tapper can walk along from one tree to another. This method presupposes planned palm planting, otherwise the cost of ropes in contacting distant trees would be too exorbitant to be practical. Besides, it is difficult to walk on such elongated ropeways.

(Tad Gud Khabar)

Medals for Census Workers

It has been the custom in the past for formal recognition to be accorded by State Governments to the services rendered by enumerators, supervisors and other Census workers in an honorary capacity. In this State, such recognition has taken the form of certificates issued under the authority of the State Government in the case of non-officials, and appreciative remarks in their personal files in the case of officials. In connection with the forthcoming Census, the Government of India have decided that, besides the recognition as in the past recorded under the authority of State Governments, Census work distinguished by outstanding zeal and quality should receive all-India recognition through the issue of 1951 Census Medals awarded in the name of the President on an all-India basis. The details of the scheme and the procedure that will be followed to implement the decision will be announced shortly.

Drive Against The Drink Evil

The following is the report on the working of Prohibition in the State for the month of October 1950 :-

Enforcement

Cases.—During the month 6,926 cases were detected as against 6,129 in the previous month. Dasara and Moharam festivals gave an impetus to illicit distillation. The vigorous drive launched by the preventive staff in all suspected localities led to the detection of a large number of cases. Offences for drunkenness continued to be on the increase.

Illicit distillation and kindred offences.—Of the total number of cases reported, 2,997 related to illicit distillation and kindred offences as against 2,665 in the previous month. Of these, 1,253 related to illicit distillation and the rest to possession and sale of illicitly distilled spirits. Hindu and Muslim festivals during the month gave a fillip to offences under this head. In Bellary District 16 sets of complete distilling implements with 940 gallons of fermented wash were seized. In Pulivendla of Cuddapah District a raid was conducted from 30th September to 2nd October 1950 on a village notorious for I.D. and about 1,190 gallons of wash and five gallons of I.D. arrack were unearthed.

Twenty-four cases involving 70 bottles of I.D. arrack and 70 unclaimed mud pots containing 400 gallons of wash were detected during a raid on the villages of Odaya-patti, Sanarthoppu and Jamugumalai. In Salem Taluk the Police seized 48 bottles of I.D. arrack from a seller of Andipatti. In Visakhapatnam Town three cart-loads of still implements, 170 gallons of wash and about 2½ gallons of illicit arrack were unearthed. In Rajahmundry Town two cases involving 23 gallons of I.D. arrack were detected. In Masulipatnam Circle of Krishna District, 25 raids were conducted and 78 cases were detected.

Illicit tapping.—One hundred and sixteen cases were reported as against 100 in the previous month. In Bellary District, where sweet toddy tapping is not permitted, six cases of illicit tapping involving 215 date trees were

detected. The Board of Revenue has issued necessary instructions to the District Prohibition Officer to take special steps to put down such offences.

Smuggling of liquor.—One hundred and twenty-four cases were reported as against 83 in the previous month. Of these 116 related to bringing in of liquor from other States and eight to smuggling from district to district. On Karaikal borders 17 cases of smuggling were detected. In Srikakulam District 35 cases of smuggling of liquor were detected. Thirty-four cases were reported on the borders of Pondicherry involving 18 gallons of brandy and ten gallons of French arrack. An undetected case involving 24 gallons of French arrack was reported from the Kandamangalam Chowki near Villupuram.

Intoxicating drugs.—One hundred and fifty-five cases were reported as against 122 in the previous month. Of these, seven related to cultivation of hemp plants, one to smuggling of drugs from district to district, 14 to smuggling from other States and the rest to possession of drugs. In Nallamalai Hills, Kurnool District, one case of illicit cultivation of 25 hemp planting was detected. One undetected case involving 4,000 ganja plants was also reported. In Visakhapatnam a case involving 20 mature ganja plants was detected. In Nandyal Town, seven seers of hill ganja was detected. In Anantapur three seers of compressed Mysore ganja were recovered. At Egnore Railway Station a passenger coming from Kodakanal with two seers of Travancore ganja was arrested. The Excise and Prohibition Intelligence Bureau reported eight cases involving 18 seers and 18 tolas of ganja. A careful watch of the activities of a gang in Choolaimedu, Kodambakkam, resulted in a very good case of detection involving 157 seers and 49 tolas of opium.

Denatured spirits.—The total consumption was 17,377 gallons as against 17,833 in the previous month. Twelve cases of rendering denatured spirit potable were reported during the month as against nine in the previous month.

Border problems.—The Border patrols and vehicular checks during the month continued to be effective.



Ex-tappers at Uddanapuram listen to officials advising them to form a co-operative society for jaggery manufacture

Amelioration

Provision of employment to ex-tappers—Jaggery manufacturing societies.—Upto the end of October 1950, 1,840 jaggery manufacturing societies have been organised with a membership of 1.46 lakhs of ex-toddy tappers. They produced 52,139 maunds of jaggery worth Rs. 3,18,423 during the month. During the month of October alone, nine societies were organised in the districts.

Palm Gur Development Scheme.—In the 144 training centres in the various districts 940 ex-tappers have so far been trained in the manufacture of jaggery by the improved methods. As a result of the training given and the demonstrations conducted, the trainees have so far produced 73,786 lb. of refined variety of jaggery, while the jaggery produced by the ex-tappers other than the trainees was 25.45 lakhs lb.

Other vocations.—The ex-tappers were also absorbed in milk supply societies, cottage industries societies, other types of societies and as agricultural labourers, as gang coolies in the Engineering Department and as unskilled workers in the industrial and commercial concerns. The ameliorative staff are contacting the major employers and the big business concerns in the City of Madras to give free training to some of the young men of the tapper community in their institutions so that they may acquire business knowledge of the trade in course of time.

Rural credit societies and grama sangams.—During the month, 15 gram asangams were organised in the districts, bringing the total of such sangams so far organised to 14,018; 4,161 of them were active, turning out various kinds of work such as the provision of counter-attractions to drink and the improvement of the economic and social conditions of the villagers particularly in the direction of public health, sanitation, communications, education, agricultural improvements and the welfare and uplift of women.

One hundred and fifty-two rural credit societies amended their by-laws for undertaking social and recreational activities during the month, bringing the total number of such societies at the end of the month to 6,465. They did good work such as opening libraries, reading rooms, etc.

A total of 20,235 villages are served by rural credit societies covering a population of 69.45 lakhs, the percentage of villages and the population served being 63.70 and 16.61, respectively. By the multipurpose activities of 8,046 rural credit societies, transactions to the extent of Rs. 355.05 lakhs have been effected.

Thrift.—The Collector, South Arcot, sanctioned Rs. 1,000 from his discretionary grant for the manufacture of 400 hundi boxes for being distributed free to members of societies in the rural areas.

A sum of Rs. 27,287 was saved through hundi boxes during the month.

Propaganda.—Intensive propaganda in favour of Grow More Food production schemes, compost manure, co-operative rural uplift and other ameliorative measures introduced by the Government was carried on by the amelioration staff with the aid of the propaganda vans, films, magic lantern slides and gramophone records.

Substitute to drink.—Coffee and tea stalls continued to be popular and new stalls were opened by private individuals in the districts.

Radio set for Yenadi Colony

The Government have sanctioned the installation of a standard radio set at the Yenadi Colony, Sidhipuram in Nellore District, for the benefit of the Yenadi families and others residing in the colony.

Electrical Engineering Diploma

The Government have directed that the All-India Diploma in Electrical Engineering be deemed as equivalent to B.E. Degree in Electrical Engineering of the Madras University. The Government have also passed orders that the holders of the All-India Diploma in Electrical Engineering may be appointed to posts in the Madras Electrical Services and the Madras Electrical Subordinate Services only when suitable candidates possessing B.E. Degree in Electrical Engineering of the Madras University are not available.



Ex-toddy tappers of Bogapuram and neighbouring villages in Visakhapatnam District, ready to join the palmyra jaggery manufacturing society at Bogapuram

Quality Soaps From Kozhikode

The Kerala Soap Institute, Kozhikode, is one of the several important industrial concerns run by the Department of Industries and Commerce, Madras, and has established its name as a pioneer soap factory in India. Its products, *Willingdon, Sandalwood, Rose, Vep, Coaltar, Washwell, Vegetol, Shaving stick, Insecticidal soap*, etc., are well known throughout the Indian Union, Pakistan, Ceylon and Burma for their pure quality and competitive prices. Even persons from foreign countries have spoken appreciatively of the products.

But the manufacture of quality soaps is only one of the objectives of the Institute. The other important objects are to train students in soap manufacture, to help developing soap industry in the country, to do research work on edible and non-edible oils and fats with a view to their industrial utilisation and carry on experiments on cultivation and distillation of essential oils. The contribution made by the Institute in these fields is described below briefly.

One of the main objects of the Government in running this Institute is to train young men as experts, foremen and soap boilers who can manage small factories and thus encourage the spread of the industry in India. In the year 1927, a scheme for a regular course of training was inaugurated and since then several batches of apprentices have passed through the portals of this Institute. Soap manufacture, analysis of oils, soaps, manufacture of essential oils, etc., form the chief subjects for study.

Theory and Practice

There are a few technical institutes in India where the theory of Oil Technology dealing with the subjects of oil refining, soap and candle making, etc., is taught. But this Institute occupies a unique position as probably the only one of its kind in India where theoretical knowledge combined with practical training is imparted in a factory which works on a commercial basis. This is



Soap slabs are chipped into slices for drying

the main reason why this Institute attracts students from the furthest corners of India.

Till now over 300 students have been trained, several of whom have come from distant parts of India from Kashmir in the North, Assam in the East and Travancore in the South and also from Pakistan, Ceylon and even Africa. Many of the trained students have set up small factories near their homes or have secured suitable employment in other factories, dotted all over India and Ceylon.

It is highly gratifying to note that in this period soap industry in the Madras State as well as in other parts of India has advanced very rapidly not only as regards quantity but also in the quality and variety of soaps produced. This is due mainly to the good work that the Institute has been doing for the last three decades and more in the matter of training of suitable personnel, and also in giving advice and instruction, whenever sought, to private persons to enable to establish new factories and thus to promote and popularise the industry on proper and scientific lines.

Research in Oils and Fats

Though the main activity is concerned with the manufacture of soaps, the Institute has been devoting not a little attention to the field of research in oils, fats and connected industries. The Institute has conducted a number of experiments on oils and fats. Work has been carried on various minor and non-edible vegetable oils and fats and they have been successfully developed to find uses in the manufacture of soaps, paints, varnishes, insecticides and the like. Some of these oils are Tobacco seed, Ganja seed, Pongam, Punna, Safflower, Margosa, Maroti, Eluppai, Kusum, Cashew Shell and fats such as Dupa fat and Kolium butter.

Special mention may also be made about Kusum Oil which has been exhaustively experimented upon, the results of which have been published in the form of bulletin issued by the Department of Industries and Commerce, Madras. The oil has very good drying properties and it can be used in paints and varnishes in place of linseed oil. The paints prepared from the oil have a better appearance and permanence than those made with linseed oil. As a varnish oil also the oil is found satisfactory. The oil polymerises well and the polymerised oil can be made use of in preparing other industrial products.

Simple Methods of Refining Oils

The Institute has also published a bulletin on simple methods of refining oils on a cottage industry scale which deals with the refining of the more common oils such as coconut, groundnut and others without the use of very elaborate appliances and machinery. It describes a simple method of removing the rapidity, free fatty acid content and other impurities present in ordinary commercial oils. The methods are so simple that they can be easily done even by laymen without entailing much cost.

Another very important line on which considerable work has been done is on the designing of a proper roaster for roasting cashew nuts and for the preparation of a superior quality of cashew shell oil. The roasting of cashew nuts is a major industry on the West Coast,

especially in South Kanara, Malabar, Cochin and Travancore. At the request of some cashew roasting firms, the Institute took the work of designing an economical cashew roaster for small-scale purposes. Ordinarily, in country roasters the nuts get overheated and the valuable oil is spoiled or destroyed. The details of the roaster and of the methods of roasting are published in a bulletin titled "*Cottage Cashew Roaster*" issued by the Department.

Essential Oil Distillation

Till recently the Institute had been carrying on the distillation of essential oils on a commercial scale. Various essential oils as Vetiver, Kasturi Manjal, Cinnamon leaf, Seodary, Mullilam, Lemongrass, Orange Ginger were distilled at the Institute in locally made stills and stills of English make. The oils produced compared very favourably with those made by other reputed firms. Extensive field experiments on cultivation of vetiver, cinnamon and on a smaller scale ocimum have been undertaken by the Institute. An article on the cultivation of distillation was published in an eminent American journal, *American Perfumer and Essential Oil Review*.

This work on the cultivation and distillation of essential oils have been followed up by other firms and some of them are understood to be doing very well. The Institute continues giving information and advice to anyone interested in the distillation of essential oils. Two model distillation stills are kept in the Institute for demonstration, experimental and educative purposes.

Insecticides

Fish oil and vegetable oil insecticidal soaps are two of our main products, which are very popular. We have also been manufacturing other insecticides as leech (a special preparation for leech bite), Paris green, Calcium arsenate, Lime sulphur, wood preservative, trees banding compound, pyrethrum extract and others. The last mentioned was being carried on a large scale for the last 2-3 years but there is a temporary lull now due to want of chief raw materials, viz., Pyrethrum flowers.

For the benefit of the public, the Institute has been preparing and issuing through the Department of Industries and Commerce, Madras, several bulletins on Industrial and Technical subjects connected with Oils and Fats and Soaps. The following are the bulletins published so far:

1. Soap making by the Cold Process (in English, Tamil and Telugu).
2. Simple methods of Refining Oil (in English, Tamil and Telugu).
3. Groundnut and its uses (English).
4. Cottage Cashew Roaster.
5. Distillation of Cinnamon Leaf Oil (English).
6. Kusum Oil (Safflower Oil) (English).
7. A Note on the Working of a Dogma Oil Mill (English).

Thus in many lines of work concerning Oils and Fats which is one of the major economical resources of the State, the Kerala Soap Institute has been doing very useful service by stimulating and encouraging and helping the starting and working of connected industries and by the dissemination of knowledge by the issue of technical leaflets and bulletins such as those referred to above.



Oil is pumped into storage from barrels

Chemical Fertilisers

The Government have decided to extend the scheme for concentrating the supply of chemical fertilisers to second crop paddy (Dalwa) in the districts of East and West Godavari.

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The Araku Valley Scheme

By SRI K. BHUSHANAM, B.Sc. (Ag.)

Araku Valley is a narrow strip of land about seven miles in length, two miles in width and is situated on the Visakhapatnam-Jeypore Road at a distance of about 71 miles from Visakhapatnam. It has an altitude ranging from 2,500 to 5,000 feet. A stream called Pathalagedda, which is a tributary of the Machkund River, runs in the middle of the Valley and the land slopes gently towards the stream from either side. The Valley is 5,705 acres in extent, is very thinly populated by the hillmen. The annual rainfall is about 52 inches distributed as follows:—

	Average of four years.
	INCHES.
Hot weather period (January to May) ..	9.76
South-west monsoon (June to September) ..	31.54
North-west monsoon (October to December) ..	11.15
	52.45

There are hailstorms in April-May, strong gales in May and October and frost in winter. The minimum and maximum temperatures range from about 56°F in winter to about 100° in summer. The soils are poor (sandy loam) with poor retentive power, often subject to denudations and the holdings are scattered. Ragi, Samai, Paddy (dry and wet) and Niger are the principal crops grown in the Valley.

Work Done (1944 to 1949)

In 1944, a scheme was sanctioned with the immediate object of growing potatoes, and exotic and indigenous vegetables for supply to the Army at Visakhapatnam, and the ultimate object being development of the Agency (inhabited by Bhagatas, Mukadoras, Kondadoras, Runas, Dhombas, Porajas, etc., who speak mostly Oriya) under the administrative control of the Agent to the Governor.

Potatoes and vegetables were grown over an area of two acres and five acres, respectively, and the produce was supplied to the Army. In 1944-45, the staff were increased and an area of 239 acres was grown under potato and 55 acres

Rainfed plantain crops are a satisfactory feature



under vegetables. The military supply schemes continued till the end of March 1946. Subsequently, with the cessation of hostilities, the military supply scheme was dropped.

During 1946-47, another scheme for the increased production of food crops under the *share cultivation system* was tried; the following are the details of the scheme: An area of 551 acres held by the Agricultural Department was thrown open to the ryots for cultivating under the guidance and supervision of the Department under share system, i.e., the ryots were advanced free seed, manure and work cattle and in return half their gross produce was recovered by the Government. Food crops like Ragi, wet and dry Paddy, and Samai were cultivated in these lands by 252 ryots jointly with individual responsibility over their holdings in 19 blocks of about 30 acres each in each village. A sum of Rs. 16,845 was spent towards the supply of manures, seeds and cattle and in return a sum of Rs. 8,752 was recovered by the Department in the shape of half the gross yield. The crop did not give normal yield due to the setback caused by failure of the monsoons and the following were the details of cropping and yields obtained:—

Name of crop.	Area cultivated.	Yield obtained.	Half-share realised.
	ACRES.	LB.	L.B.
Ragi	161.56	101,742	50,871
Wet paddy ..	14.00	19,176	9,588
Dry paddy ..	54.38	54,332	17,166
Samai	222.86	82,700	41,350
Niger	*109.51	5,054	2,527

* Partly double cropped after Samai.

During the year 1945, another scheme for the uplift of hillmen was run, and the details are furnished below:—

Hillmen Uplift Scheme.—A scheme for the uplift of hillmen was sanctioned, its main objects being (1) Free distribution of improved seeds of foodcrops; (2) free distribution of manures and fertilisers; (3) free lending of work cattle and implements.

The scheme was actually put into operation from July 1945, and during this year 800 lb. of improved strains of Ragi seed, and 4,000 lb. of improved strains of Paddy seed were distributed to about 140 hillmen to cover an area of 82 acres. Distribution of manures was also arranged, and during this year a total quantity of 500 bags of groundnut cake (each bag weighing 160 lb.) and 250 maunds of ammonium sulphate were distributed to 226 hillmen in 20 villages and were applied to 500 acres of Paddy and Ragi. It was found that both wet and dry lands responded well to manuring. The following figures will illustrate the fact:—

	Yield per acre (grain in lb.)	
	Unmanured.	Manured.
Dry Paddy	600	1,000
Dry Ragi	800	1,500
Wet Paddy	1,000	1,800

The scheme continued during the subsequent two years also, i.e., 1946-47 and 1947-48. Besides the free distribution of seeds and manures, 30 pairs of work cattle and also implements, e.g., ploughs, hoes, etc. were lent free to hillmen to take up the cultivation of their lands. The following tabular statement shows the quantities of seeds and manures distributed during the three years when the scheme was under operation:—

Year.	Paddy seed.	Ragi seed.	Samai.	Potato.
	L.B.	L.B.		L.B.
1945-46 ..	4,000	800	..	..
1946-47 ..	4,100	1,640	..	2,240
1947-48 ..	4,560	1,640	..	..

The total cost of the scheme during the three years was Rs. 1,01,498.

This free distribution raised the consciousness of hillmen for the use of better types of cattle and implements and to take up regular cultivation instead of shifting cultivation termed "*Podu*" and also helped them to realise the advantages of using better seed and intensive manuring. As a result of free lending of work cattle, an additional area of 192 acres was brought under cultivation. Formerly transplanting and manuring in wet lands were not practised. As a result of departmental propaganda and demonstration, transplanting was adopted and the yields were nearly doubled, as can be judged from the following results:—

	Yield per acre (grain in lb.)	
	Ryots method (broadcasting, no weeding, no manuring).	Improved method (transplanting, weeding and manuring).
Ragi	800	1,650
Paddy	1,000	2,300

Colonisation Scheme.—In the year 1947, a comprehensive colonisation scheme on the lines of the Wynad Colonisation Scheme was drafted. The main features of the scheme are detailed below:—

The total area of Araku Valley is 5,705 acres of which 5,472 acres are under cultivation, leaving about one-third fallow. There are about 500 land-holding ryot families, and about 100 landless families of hillmen employed as farm labourers. Hence, all the 600 hillmen families put together are cultivating an area of 3,472 acres. Still, there is room for an additional population of at least 100 families from the plains to settle as colonists. Thus, it was proposed to develop the entire Araku Valley, and besides accepting all the hillmen in the valley as colonists, i.e., 600 families, provision was made to select from the plains 100 families with agricultural bias. Ex-servicemen were proposed to be selected to make up these 100 families. Thus, 700 families were proposed to be settled on the land, and the proportion of the colonists was fixed as follows:—

	PER CENT.
Existing land-holding hillmen ..	72
Existing landless hillmen ..	14
Plainsmen and ex-servicemen ..	14

4A

It was proposed to allot to each hillman colonist six acres of land (five acres dry land, one acre of wet land) and to each colonist family from plains seven acres (five acres of dry land and two acres of wet land). The total area of the Valley was purchased and an amount of Rs. 2,14,840-14-0 due to hillmen towards compensation was deposited in the Co-operative Central Bank, Vizianagaram. But when parcelling of lands into five acres dry

Groundnut seed.	Ammonium Sulphate.	Groundnut cake.	Ammonium Phosphate.
L.B.	L.B.	L.B.	L.B.
..	6,250	8,000	..
2,116	..	118,400	33,000
Ordinary	336	..	Potassium Nitrate
Super	672	..	326
1,000	782	..	..

land and one acre wet land was taken up by the Survey Department, practical difficulties regarding fractioning arose on account of the uneven nature of the soil and the existing plots with well-marked out contours had to be disturbed. Hence this item of work was given up. The colonisation scheme itself was finally dropped, and no colonist from the plains had been settled here.

Details of work on Departmental Farms.—During the years 1944 to 1947, besides the cultivation of potatoes and exotic vegetables, other crops like Paddy, Ragi, Samai, Groundnut, Plantains, etc., were also tried getting improved strains of these crops from the plains. But regular trial of crops and experiments were started in the year 1947-48 with the following definite programme of work.

(a) Research

- (1) Evolving improved strains in the local crops of Paddy, Ragi, Samai and Niger.
- (2) Examining the possibilities of introduction of improved strains in Ragi, Paddy, Jonna and new crops like Groundnut, Sweet Potato, Cumby, Plantains, Pine-apples, Pyrethrum.
- (3) Maintenance of an Orchard for the trial of about 60 fruit trees of temperate and semi-temperate regions.

Succulent cabbages grow to giant sizes in Araku Valley



(4) Tackling different problems such as varietal, manurial and cultural for the successful cultivation of Potatoes and for preservation of seed material locally.

(5) Continuance of the trial of Cinchona, Pyrethrum, Camphor and Eucalyptus.

(b) Demonstrations

Demonstrating the growing of Potatoes and Exotic Vegetables in ryot holdings, demonstration of manure preservation and compost making, prevention of soil erosion by contour bunding and green manuring of wet lands.

(c) Extension or Propaganda

Tackling twenty villages of the Valley wherein the successful crops will be introduced and the hillmen induced to take up improved methods of cultivation.

(d) Starting subsidiary industries like Dairying, Poultry, Sheep-rearing, Pisciculture and Apiculture.

For achieving the above objects the departmental cultivation was taken up in 1947-48, in an area of 130.00 acres of research farm and also twenty valley villages were tackled for propaganda purposes. During 1948-49, the farm area was 143.24 acres and it was reduced to 114.05 acres during 1949-50. During the current year the area was further reduced, and the following are the details of the area cultivated at present.

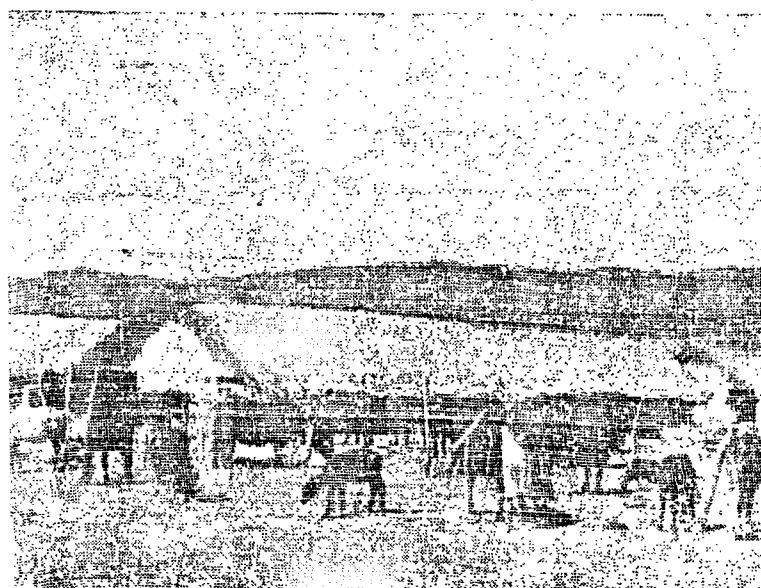
	ACRES.
Wet land	8.50
Garden area	28.85
Dry land	12.00
Paddock	28.00
Orchard	18.00
Total	95.35

The following is a short resume of the work done so far :

(a) Research

Cereals ; Work on Paddy (Wet.)—Thirty-three varieties of Paddy obtained from the Agricultural Research Station, Anakapalle, were tried of which the following six, i.e.,

Dairy buffaloes are part of the profitable subsidiary occupations encouraged



Mtu. 1, S.S. 5, G.E.B. 24, B.G. 1 and Bellamonji, which gave acre yields of above 3,000 lb. were compared in yield trials with local Tellasannam as control. Of these, B.G. 1 and S.S. 5 have fared well and are already under distribution. S.R. 26 B Paddy variety, was tried and found suitable for saline areas and is spreading. Transplanting of paddy, manuring and weeding which were being done on the farm were copied by the ryots, as a result of which their yields have almost doubled. Mass selection in the main local varieties was taken up and the seed was distributed.

The present programme consists of the growing of the promising strains for seed multiplication and continuance of mass selection work in the local varieties.

Dry Paddy.—Thirty varieties of Paddy received from the Agricultural Research Station, Anakapalle, were tried along with ten local varieties. None of the departmental varieties were found to yield better than the local Bhattadhan. Hence mass selection in this local variety Bhattadhan was taken up, and the mass selected seed is under distribution to hillmen.

Rigid mass-selection work every year in Bhattadhan is programmed.

Ragi.—Ragi is a major crop of this Valley. Five strains of Ragi got from the Agricultural Research Station, Anakapalle, were compared with the local Jagaralamandya as control. The local has proved better and mass selection work in this and in another popular local variety, Muddaimuskal, was taken up. Akp. 7 Ragi was however found to fare well and it is under distribution. The application of ten cart-loads of cattle manure and two bags of groundnut cake per acre to Ragi was found to give increased yield, almost double the average yield.

The programme of work consists of mass selection in the local varieties, i.e., Jagaralamandya and Muddaimuskal, and growing the mass selected crops on the farms and distribution.

Canti (Cumbu).—This is not grown in the locality. The crop when tried during the past three years has proved a failure, and hence is discontinued.

Jonna.—Among the three strains of Jonna tried, Akp. 1, and Akp. 2 were found to fare well, and are being grown and multiplied on the farm.

Wheat.—This is not grown in the locality. Three varieties of Pusa wheat, i.e. N.P. 4, N.P. 80.5 and N.P. 125 and glumed wheat from Siruguppa were tried. In the later stage the crops were found susceptible to rust attack. The crops in general were not promising. However, the glumed variety from Siruguppa was slightly better, and it is programmed to continue its trial.

Barley.—This crop is also new to the locality. It was not found suitable to the locality and its trial was discontinued.

Oilseeds.—Niger and castor are grown in the locality, of which Niger occupies a very large area and is the principal money crop of the hillmen. Mass selection work in this crop was taken up and is being continued. Improved castor varieties from Tindivanam were introduced and they are spreading in the Valley ; other oilseed crops like groundnut and gingelly which are new to the Valley were also tried of which Groundnut has been found to come up very successfully, while Gingelly was a failure. The cultivation of Groundnut has been taken up by the hillmen and it is spreading.

Pulses.—Among the pulse crops, greengram, blackgram, redgram, and bengalgram were tried. Of these redgram was found to come up well in this locality, though it was sometimes susceptible to frost attack during December-January.

Root Crops.—The cultivation of Potato has received special attention, and all aspects of its cultivation such as varietal, manurial, seasonal and cultural were tackled and definite conclusions arrived at. About a dozen varieties from Mysore and Ooty were tried, and finally 'Mysore rickets' or 'Maddigedda' was fixed as suitable to this tract. Potato was found to come up well as a rainfed crop (Monsoon crop from June to September) and as an irrigated crop from November to February. The Summer crop, i.e., from March to June, was not very successful due to drought conditions and hot weather during the period. The summer crop is stunted in growth and gave very low yields (just equal to seed material put in). Gradual enriching of the soil with green manure and lime was found to increase the yields. Four manure mixtures suggested by the Agricultural Chemist, of which one is the Nanjanad, are being tried on Potato. The planting of whole tubers was found better than cut pieces. The crop yield at present is about three tons of good sized tubers in both the seasons. But the limiting factors for extension of the Potato area are (1) seed preservation during the summer months from March to May, (2) market, (3) availability of fertilisers and (4) availability of irrigation water for the winter crop. On account of these limitations its cultivation has not spread in the Valley.

The present programme consists of the following items of work :—

- (1) Growing the crop on a bulk scale in the Monsoon and winter months.
- (2) Trial of manure mixtures.
- (3) Storage and preservation trial for seed material from the crop grown here.

Among other root crops tried like Sweet Potato, Ginger, Turmeric, Onions, Garlic, Tapioca, Arrowroot, and Colocasia, Sweet Potato was found to come up well in this locality and has given yields ranging from 10 to 15 thousand pounds per acre. Its cultivation has spread in the Valley, but the limiting factor is again marked. Seven Almora varieties are under trial and some of these have given very big tubers about 8 to 10 lb. each with a high carotene content. Sweet Potato is being grown on a bulk scale and the trial of Almora varieties is being continued.

Fibre Crops.—These are not grown in this locality. Annual cottons were found not successful in this tract and their flowering and boll formation was poor. Seven types of perennial cottons received from the Cotton Specialist are under trial, of which Barbados Type I and II are found promising and are under multiplication. Other fibre crops tried are Gogu, Sunhemp and Jute varieties.

Vegetables Exotic.—In the early years exotic vegetables like Cabbage, Cauliflower and Knochhol were successfully grown and supplied to the Army. The yields ranged from 10 to 15 thousands pounds per acre. The cultivation of these is now being taken up by hillmen.

Indigenous.—Almost all indigenous vegetables were successfully grown on the farm, notable acre yields being Brinjals 21,685 lb., Tomato 9,300 lb., Gourds 11,000 lb., Bendai 46,751 lb. and Clusterbeans 5,150 lb.



A man-high tree tomato

At present both exotic and indigenous vegetables are being grown on the farm periodically on an area of about 2.00 acres, and the produce supplied to the residents of the colony.

Plantains.—Plantain is not cultivated in this Valley on a field scale. Among the dozen varieties tried, Amruthapani and Sirumalai were found well suited for this tract, and they are being grown successfully purely under rainfed conditions. The suckers are being distributed to hillmen.

Sugarcane.—Sugarcane Co. 419 has been introduced for the first time during 1948-49. Ryots have taken to it and it is being used for chewing purposes. Co. 419 and Co. 527 are being grown on the farm for trying jaggery making.

Fodder and Green Manure Crops.—Fodder crops like Fodder Jonna, Maize, Thin Napier Grass and Lucerne, and green manure crops like Sunhemp, Indigo and Wild Indigo were tried which gave respectively 20,000 lb., 21,000 lb., 21,000 lb., 25,000 lb., 4,000 lb. of fodder per acre, and 5,000 lb. and 1,500 lb. of green leaf per acre. At present Thin Napier Grass and Sunhemp are being successfully grown on the farms.

Work on Fruits.—About 60 varieties of fruit trees of both hill and plains varieties and a few spices are being in an area of 18 acres since 1947. Among these, Citrus, Annonas, Guavas, Sapota, Banana, Pomegranate, Pine-apples, Papaya, Plums, Peaches, Pears, Apples, Tree-Tomato, Passion-Fruit, Cape-gooseberry and Strawberry

are coming up well. Among the lemons, Lucknow seedless and Nepali Oblong and Guava (Lucknow No. 49) have started bearing profusely and their layers are being distributed to hillmen. Pineapple suckers are being distributed free every year. Seedlings of Strawberry and Cape-gooseberry, Tree-Tomato and Passion fruit are also under distribution. Sweet Oranges, Plums, Peaches and Apples have just started bearing.

Work in Progress

(a) *Research*.—Research work is in progress in the various farms.

(b) *Demonstration*.—(i) *Growing of Potatoes and Exotic Vegetables*.—Ever since the inception of the Scheme, Potatoes and Exotic Vegetables were grown both on the farm and on ryots' holdings and were demonstrated to hillmen. The hillmen are taking up to the cultivation of exotic vegetables, and if seed material, fertilisers, irrigation and marketing facilities are given, Potato cultivation will also spread in the Valley.

(ii) *Cattle manure preservation and farm wastes compost making*.—The soils of this tract are inherently poor, and the cattle manure that can be got is quite insufficient, hence special attention was paid in demonstrating the better methods of preservation of cattle manure. Compost making is gaining popularity and almost every village is having nearly 20 pits.

(iii) *Prevention of soil erosion*.—Due to the slopy nature of the soil and heavy rainfall there is incessant washing out of the soil. To check this, demonstration of contour bunding by putting up earthen and stone embankments, gully plugging and ploughing along the contour were done which are being taken up by hillmen.

(iv) *Green manuring of fields*.—Demonstrations are being conducted regarding growing of green manure crops like Sunhemp in wet lands and dry lands and application of green leaf to wet lands to increase the fertility of the soils.

(v) *Tractor ploughing of lands* was also demonstrated to hillmen, as a result of which 502.87 acres of land of hillmen was ploughed so far. The lending of tractor to hillmen for hire at half rate is being continued.

The above items of work are being pursued during the current year also.

(c) *Propaganda*.—Twenty villages of the Valley are tackled for propaganda purposes, and the following are the main items of work tackled:—

(1) Introduction of improved strains like B.G.I. Akp. 7 Paddy, T.M.V. 2 and 3 Groundnut, Co. 419 Sugarcane, etc., and doing propaganda regarding the advantages of growing them.

(2) Improved cultural and manurial practices like transplanting, weeding, green manuring paddy and tractor ploughing.

(3) Improving soil fertility by the application of compost, checking soil erosion and growing green manure crops.

(4) Mass selection in important local crops like Ragi, Paddy, Samai and Niger every year.

(5) Cultivation of exotic vegetables like cabbages and growing fruit plants like guavas, lemons, plantains, pineapples, etc.

(6) Control of pests and diseases.

(7) Exchange of White Leghorn cockerels with the desi ones, to grade up the local stocks.

(d) *Subsidiary Industries*.—(i) *Dairy*.—A dairy unit with 19 she-buffaloes and one buffalo breeding bull was maintained and the milk sold to the residents of the Colony. The strength of the dairy herd has now increased to 25 she-buffaloes.

(ii) *Poultry*.—A poultry unit with White Leghorn birds was started and the cockerels both hatched here and got from the Agricultural Research Station, Anakapalle, were exchanged with the local ones to grade up the local stock. As the supply of cockerels from Anakapalle is now stopped, eggs of Leghorn birds are being exchanged with the local ones.

(iii) *Sericulture*.—The rearing of mulberry silkworms was first taken up by this Department in 1947. The worms were successfully reared and 17½ tolas of silk yarn was produced. This work was subsequently handed over to the Industries Department.

(iv) *Pisciculture*.—Fingerlings of mirror carp variety of fish were first introduced in 1946 into one of the Departmental ponds for rearing. The growth and development of the fish are very satisfactory, but breeding was not noticed. One hundred and eighteen fingerlings were again introduced during this year.

(v) *Sheep breeding*.—During 1949, Mandya breed sheep (woolly type) were got from Hosur, the strength being 19 ewes and two rams. They are thriving well here and are multiplying and their present strength is two rams, 15 ewes and 24 lambs. One shearing was taken during 1949, and a total quantity of 20 lb. of wool was received. It is proposed to build up the stock to about 50 to 70 adults, and distribute them to the local hillmen.

(vi) *Cattle improvement*.—A Murrah buffalo breeding bull was maintained on the Farm for free service and grading the local scrub cattle.

Miscellaneous trials.—(a) *Pyrethrum*.—Pyrethrum which was tried here was found not to grow satisfactorily and its flowering was also poor.

(b) *Cinchona*.—Cinchona is being tried at two places (Ananthagiri and Sunkarametta) in two acres at each place. The seedlings were planted in 1946-47 and they have now come to flowering. Their growth however is not encouraging.

(c) *Eucalyptus*.—Camphor and Silver Oak plants are being grown as avenue plants in the Colony.

Future Lines of Development

(a) *Research*.—(i) Multiplication of seed of successful strains of all crops and distribution to hillmen.

(ii) Rigid mass selection work in local varieties and distribution of the seed.

(iii) Manurial trials on potato to find out suitable mixture for the locality.

(iv) Preservation studies of potato seed material and storage problems.

(v) Successful cultivation of exotic and indigenous vegetables.

(vi) Study of different kinds of hill and plains and varieties of fruit plants and multiplication of successful ones for distribution to hillmen.

(b) *Demonstration and propaganda*.—The work in progress as indicated will be intensified.

Report on Vanamahotsava

The Vanamahotsava was successfully conducted in all the districts of this State in the first week of July 1950 and extended up to Independence Week in August. The District Collectors of Guntur, Anantapur, Chittoor, North Arcot, Chingleput, Tiruchirappalli, Ramanathapuram, Tirunelveli, Salem, Coimbatore, South Arcot, Malabar, Nilgiris and South Kanara have submitted their final reports on the number of trees planted during the Vanamahotsava as shown below:—

Districts.	Number of trees planted.		
	Edible fruit-bearing trees.	Other trees.	Total.
Guntur	6,576	136,418	142,994
Anantapur	8,336	125,910	134,246
North Arcot	97,480	447,376	544,856
Chittoor	28,594	193,486	222,080
Chingleput	22,761	115,292	138,053
Tiruchirappalli	9,330	401,262	410,592
Ramanathapuram	25,149	98,567	123,716
Tirunelveli	4,974	119,761	124,735
Salem	68,983	235,296	304,279
Coimbatore	23,551	113,120	136,671
South Kanara	788,006	1,241,028	2,029,034
Malabar	388,411	379,062	767,473
Nilgiris	13,459	232,512	245,971
South Arcot	18,616	173,613	192,229
East Godavari	8,837	3,309	12,146
Cuddapah	10,756	108,183	118,939
Madras	781	3,792	4,573
Tanjore	40,572	549,293	589,865

South Kanara district has planted the greatest number of trees, which is really creditable. Timely verification of both plantings and survivals will enable this State to enter the various competitions instituted by the Government of India.

Restrictions on Supply of Electric Power

Owing to the failure of the North-East monsoon again this year in the Mettur catchment and the heavy demand for water for irrigation, the Mettur reservoir level is going down rapidly. Further, due to the late commencement of irrigation in 1950, irrigation issues from Mettur reservoir may be needed till the middle of this month. The inflow into the reservoir this summer is also likely to be poor.

Owing to these factors, power-generation at Mettur will be much curtailed and relief to the areas served by the Mettur System has to be obtained from the Pykara and Papanasam Systems through the inter-connected grid. In addition, maximum relief possible from Madras will be obtained. Furthermore, the new Madurai Thermal Station with 4,000 KW. capacity has gone into service in the course of last month and it will relieve the power shortage to some extent. All the available power will be distributed equitably throughout the hydro-electric area.

The power position this year is therefore not so bad as last year. Even so, taking the overall situation, there will be a net deficit of power of about 15 per cent in the coming months before the South-West Monsoon sets in.

Restrictive Measures

In the circumstances, the following measures are unavoidable and have to be observed throughout the hydro-electric areas with immediate effect:—

(1) Grouping of rural loads in two batches, each batch working for ten hours a day in alternation, outside the evening peak-load period.

(2) Staggering of holidays and recess hours of all industrial establishments supplied with H.T. power suitably to give maximum relief in power demand.

There will be a small cut in power consumption of 15 per cent with effect from 15th February 1951 on all uses except very essential ones like agricultural-pumping, hospitals drainage-pumping, water-supply, railways, etc. It is expected that the power shortage during the summer months can be tided over with the proposed cut of 15 per cent.

Consumers in the hydro-electric systems are requested fully to co-operate with the Electricity Department in the measures proposed to be taken. The restrictions and cuts will be withdrawn immediately after the water position improves.

Development of Inland Fisheries

By SRI K. N. ANANTARAMAN, I.C.S., Director of Fisheries

There are four sources of natural wealth for a country, Agriculture, Mines, Fisheries and Forests. While we are realising a good percentage of the potential wealth of the country from Agriculture, we are realising only a fraction of the natural wealth of the country from Fisheries.

The value of fish as an article of diet cannot be over-emphasised. Besides proteins and fats, it contains calcium, phosphorus and iron which are of great importance in body building. It is a well-known fact that even though certain articles of diet contain very high percentage of protein and fat, only a portion of the same is usually absorbed in the system. In the case of fish, however, the percentage of digestible proteins and fats is estimated at 94 per cent and 90 per cent, respectively. The vitamin contents of the livers of certain classes of fishes like sharks and dog-fishes is also considerable. The fisheries in our country can be considerably extended. About 80 per cent of the population eat fish. The production of fish in this country is only about 3.4 lb. per capita per year, while it is 111 lb. in Japan, 109 lb. in China, 63 lb. in Denmark, 49 lb. in U.K. and 35 lb. in U.S.A. It can safely be estimated that we are producing only one-tenth of our demand.

Primitive Conditions

The sea, no doubt, if properly exploited, would produce enormous quantities of fish. The primitive methods adopted by the fishermen make it impossible to go far out in the sea and bring the fish in good condition. The absence of metalled roads connecting the fishing villages to the nearby cities, contributes to the spoilage of even this small quantity of fish landed by the fishermen. Efforts are being made to introduce mechanised crafts and to provide transport.

We can, however, utilise fully the vast areas of inland waters like wells, tanks, lakes, reservoirs and rivers for growing fish. Inland pisciculture has definite advantages over marine fisheries. In the first place, fish could be had close to the centres of consumption and this would avoid transporting the fish at a heavy cost and also the risk of spoilage. Inland fisheries could also be exploited gradually to meet the local demand without producing a glut in the market.

Available Area

There are about 895,000 acres of inland waters of which six lakhs of acres have fresh water. There are also huge reservoirs like the Mettur Reservoir, Hope Lake and Collair Lake with an acreage of nearly two lakhs. There are brackish water lakes like the Pulicat Lake and Muthupet swamp and estuaries which can also be grown with good fish. At present, we are utilising properly only about 2-3 per cent of the available area for pisciculture. Growing fish in ponds is not a new art. Ancient Romans, the Egyptians, the Chinese and the Japanese have practised pisciculture from many centuries with success. The Egyptians were the first to have elaborated suitable methods two thousand years ago. Estuarine fish farming was practised by the Romans from the days of the great

Archimedes. The Romans lavished enormous sums of money in estuarine farms.

In the Far East, Japan has been practising estuarine pisciculture from many years. Three ponds near Tokyo with an area of six acres visited by Mr. F. A. Nicholson were reported to have produced 20,000 lb. of eels and 23,000 lb. of carps and large number of mullets, i.e., more than 8,000 lb. of fish per acre. In the East, the Chanos farms of the Philippines and from Java are well known. In Bengal, pisciculture has been practised from centuries. The fry of quick growing species are collected in large quantities by hundreds of fishermen and sold to thousands of pisciculturists. Practically, every house in Bengal has a fish pond in the backyard.

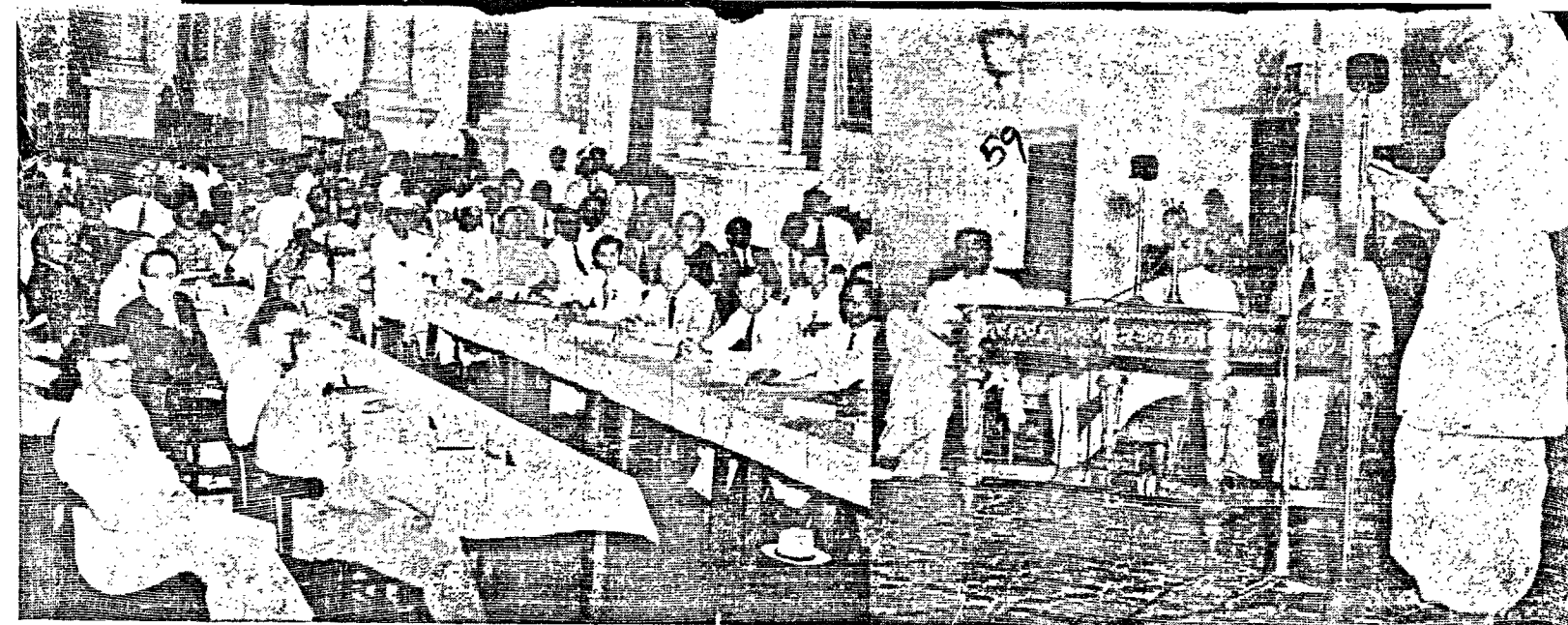
Survey by Rural Units

The Madras Fisheries Department has surveyed carefully about three lakhs of acres of inland waters to determine their suitability for pisciculture. There is an elaborate form containing more than 20 points for investigation including the availability of food for the fish, the existing fauna in the water and the types of fishes suitable for the tank. This work is being done by rural fishery demonstration units. A number of demonstration tanks are also maintained in each centre. They have found that more than 90 per cent could be utilised. It is not necessary that a pond should retain water throughout the year. Some eminent pisciculturists consider that seasonal waters that retain water for about ten months and dry up annually, are as good, if not better, than perennial waters. Many of our tanks are seasonal but they are suitable for growing fish. As a matter of fact, it is possible to use tanks which retain water for about two months as nurseries, for four months as stocking ponds and for eight months as rearing ponds.

Thousands of species of fish have been identified. Hundreds of fish are eaten but for stocking inland waters usually quick growing fishes which are not predaceous, i.e., fish that do not eat other fish, are selected. In Bengal three varieties are commonly grown, viz., Rohu, Catla and Mrigal. Each of these varieties feeds on one particular strata of water. Rohu and Catla are probably the most rapidly growing fish in India. Rohu is esteemed as a great delicacy. Mrigal is a bottom feeder and keeps the tank clean. There are also other varieties, Cirrhina Cirrhosa known as White Carps, Cirrhina Reba known as Short Carp, which are found in abundance in Madras State. The carps usually breed during floods in the rivers. The newly hatched fish or the fry, as it is commonly called, is very minute and is practically helpless.

Distributing Fingerlings

In many countries, fish fry is collected, varieties separated by experienced people and sold in millions to the pisciculturists. In Bengal, as already mentioned, there are hundreds of people engaged in fry trade. In Madras, however, in the absence of private parties, the Department has undertaken to collect large number of fingerlings and distribute them to the pisciculturists, and

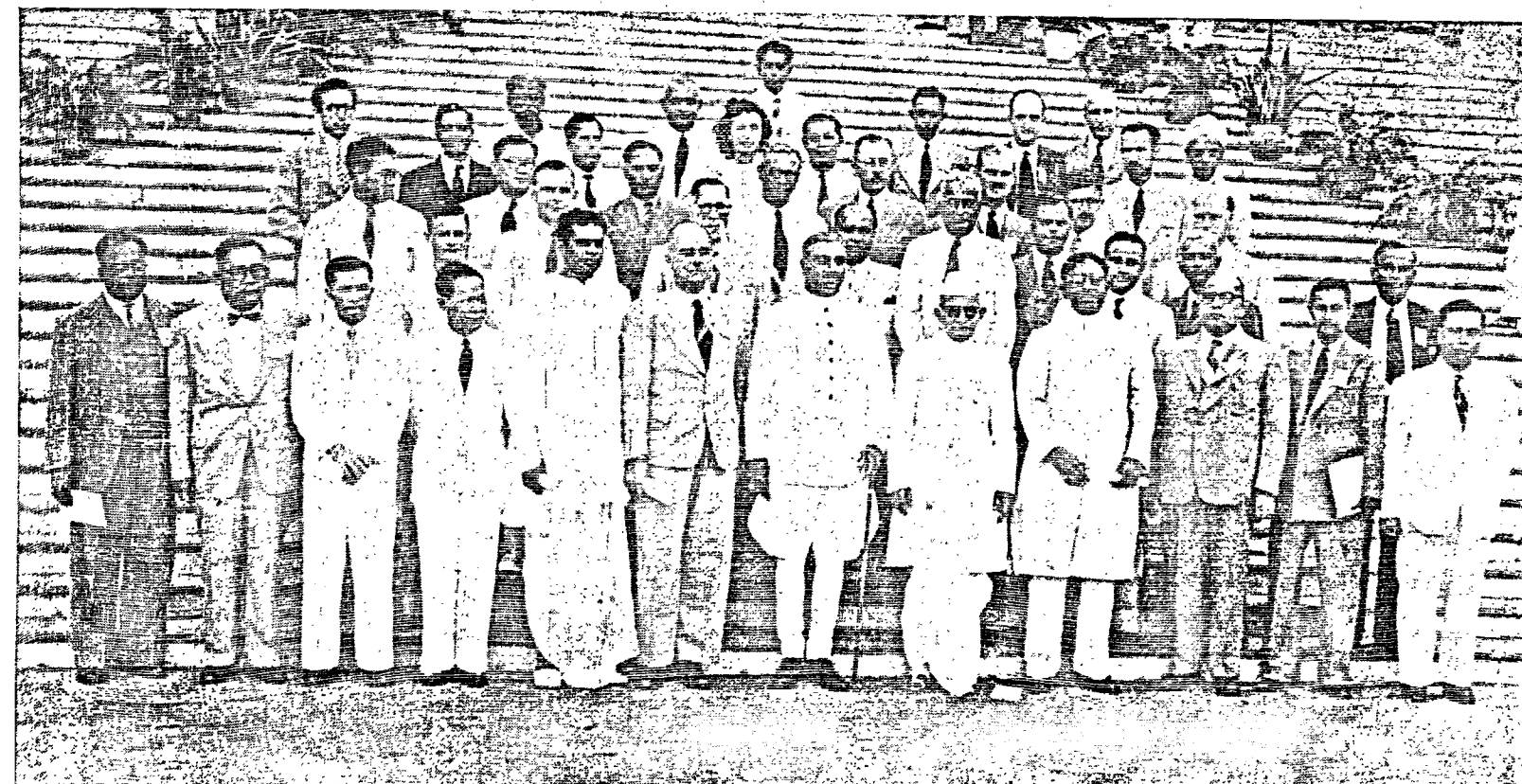


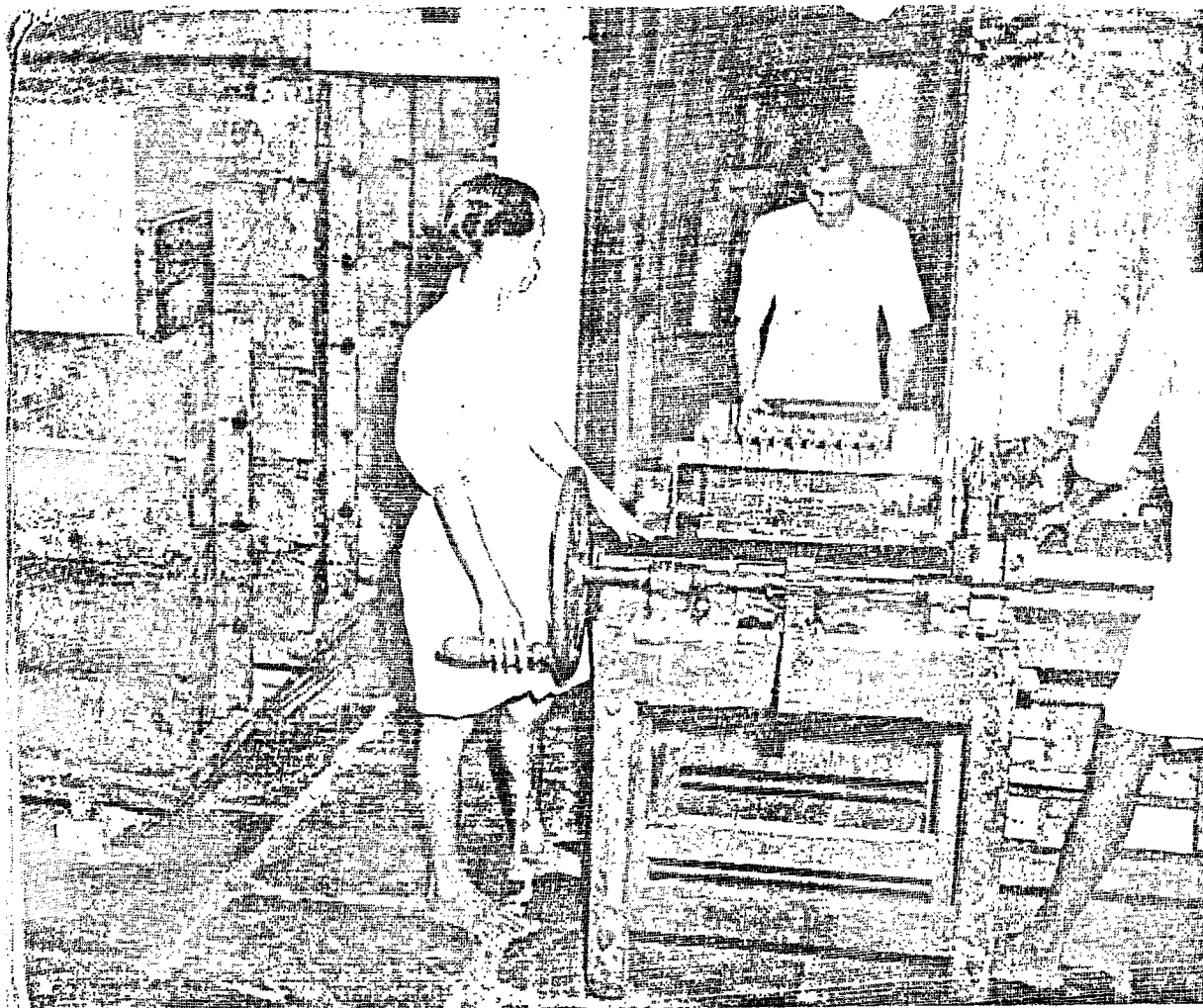
Sri K. M. MUNSHI, Minister for Food and Agriculture, Government of India, inaugurating the Conference

INDO-PACIFIC FISHERIES COUNCIL

THE THIRD MEETING of the Indo-Pacific Fisheries Council took place recently in Madras and was attended by delegates from Australia, Cambodia, France, Indonesia, the Netherlands, the Philippines, Thailand, Malaya, the United States of America and Vietnam. The I.P.F.C. is an international organization, constituted under the aegis of the Food and Agriculture Organization of the United Nations

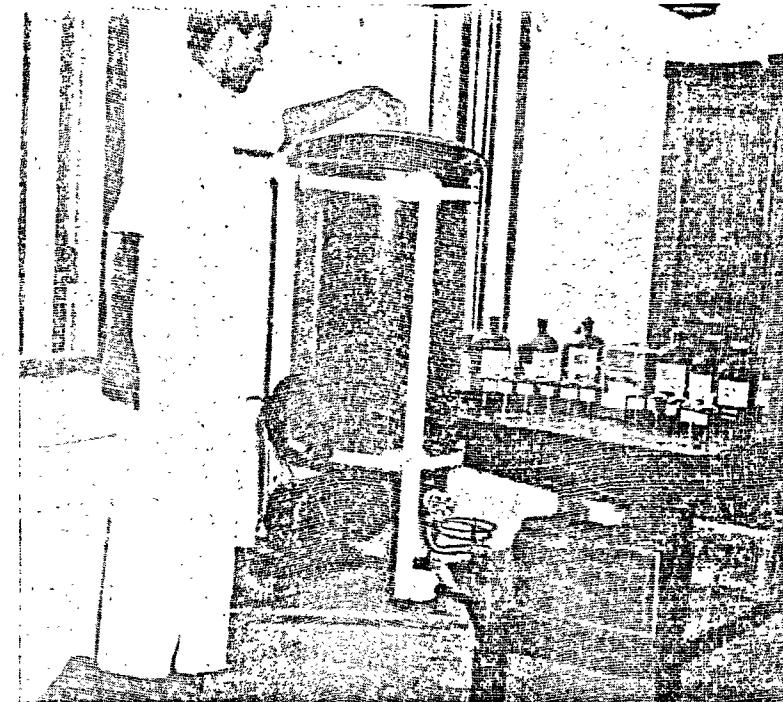
H.E. the Governor of Madras, Sri K. M. Munshi, Central Food Minister, and the Food and the Finance Ministers of Madras State, with the delegates to the Conference





THE KERALA SOAP INSTITUTE is ideally located at Kozhikode, the headquarters of Malabar, famous the world over for its coconut oil, the oil best suited for soap. This pioneer institution was started by the Government of Madras in 1916. Apart from producing quality soaps, the Institute affords training in soap manufacture, theoretical knowledge combined with practical experience being imparted in a factory run on a commercial basis

MADRAS MAKES QUALITY SOAPS

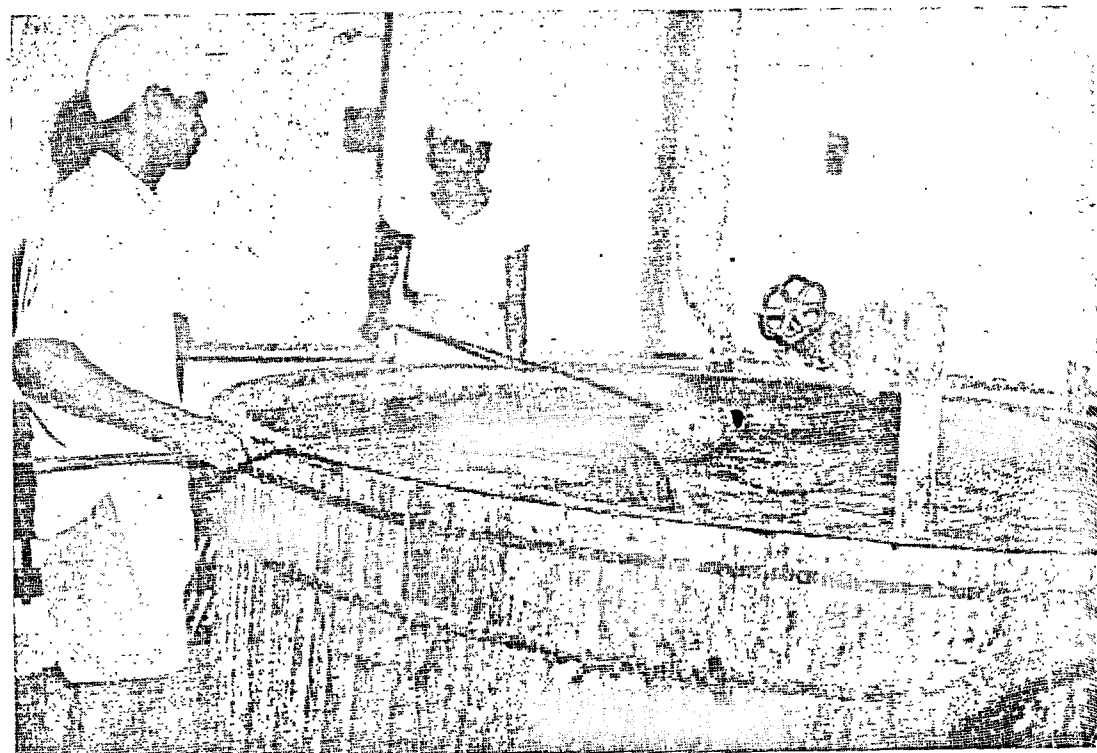


Top.—Perfumes are scientifically blended to impart fragrance to toilet soaps

Right.—Chipped soap pieces are dried by hot air in a drying chamber

Bottom Left.—The dried soap chips mixed with perfume, colour and chemicals are further milled in the granite three-roll milling machine

Bottom Right.—Milled ribbons are put through a plodder (screwpress) to exude as bars of required shape and thickness

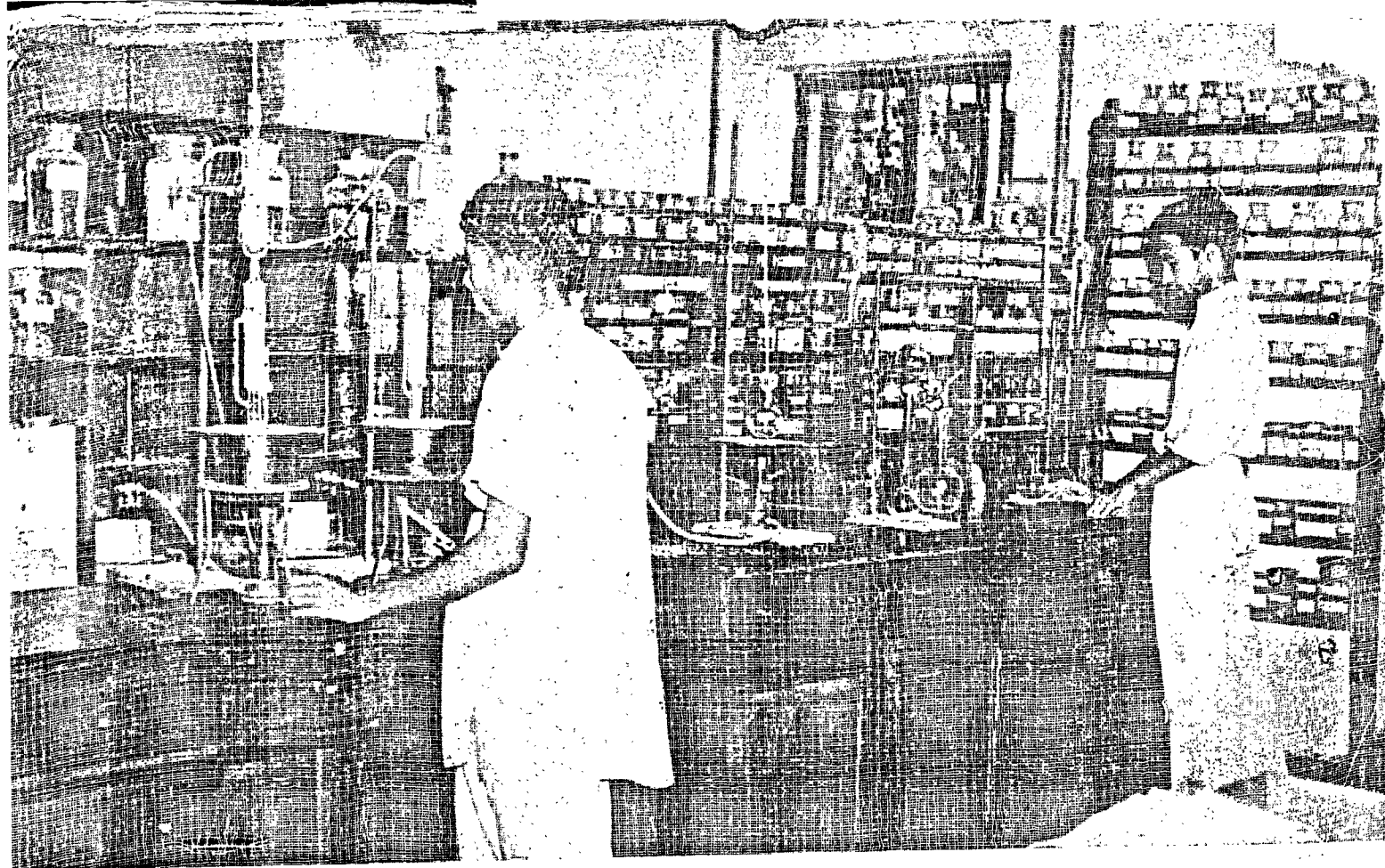


There are two methods of manufacturing soap—the Cold Process and the Hot Process. The former is a cottage industry, the latter a factory technique.

Picture at right shows oils and alkali being mixed and boiled in huge cauldrons

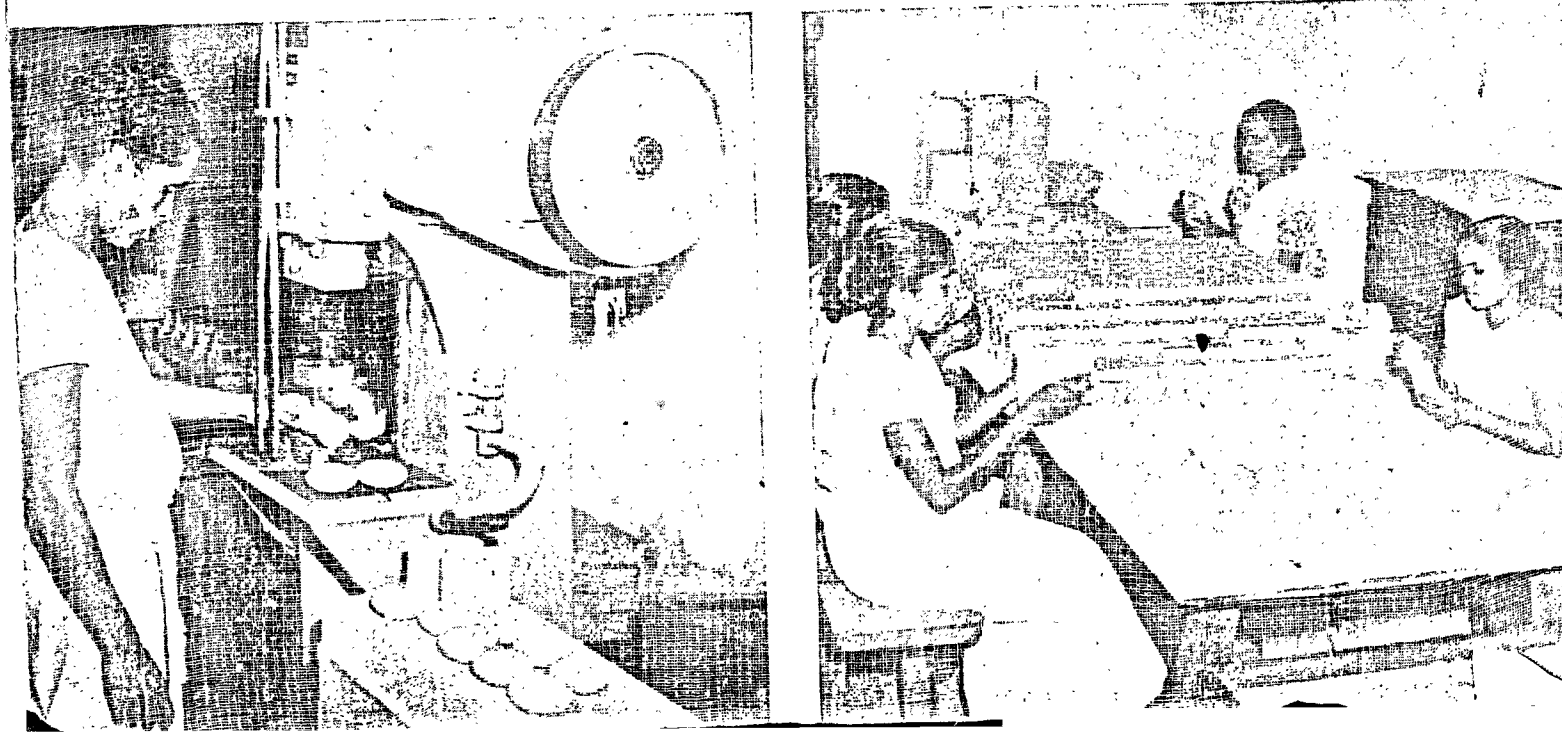
In the picture above, the cooled soap slabs in frames are being trimmed to required sizes





Apart from its regular works on oils and allied products, the Institute has conducted research and experiments on a number of lines such as distillation of essential oils from indigenous raw materials and the preparation of cosmetic articles. Investigations have been conducted in the laboratory (seen above) on the lesser known oils for their suitability in soap, paint and varnish and other industries

Pictures below show the final stages of toilet soap making. The bars are cut into standard sizes, moulded into cakes and stamped with trade-mark. The cakes are then packed and sealed in cartons, ready for despatch, sale and use. During 1949-50, the Kerala Soap Institute sold nearly 300 tons of soap valued at about Rs. 7 lakhs



FISHERIES

21

MADRAS INFORMATION

Inland and Marine Fisheries

Of the total production of fish in India, only about one-third comes from inland sources. This quantity, though comparatively small, has a special significance. During the last few years, we have made special efforts to stock large areas of hitherto unproductive waters with encouraging results, but a great deal however still remains to be done. The development of inland fisheries does not require any large capital outlay or the import of fishing vessels and gear from abroad. One great handicap in the way of extending piscicultural operations so far has been the lack of fish seed of suitable varieties in certain parts of the country.

To overcome this difficulty, the Government of India have made arrangements to produce and transport large quantities of fish seed from surplus to deficit areas. As a result of these efforts, more than 70,000 acres of fallow waters have been stocked and converted into productive fisheries during the last four or five years and additional production from this source in the current year is estimated at nearly five lakh maunds.

Our vast reserves of fish-food undoubtedly lie in the sea and their proper utilisation is indeed one of our great problems. We are already producing twice as much marine fish as the marketable surplus of fresh water fish, but the difficulty is that not even half of the marine fish production is used as food in the country—about 50 per cent being sun-dried or converted into manures chiefly for export.

In the development of marine fisheries, therefore, it seems desirable to provide refrigeration and quick transport for the catches and to convert the surplus into suitable processed food acceptable to the taste of the Indian public. In such matters, while consumer preferences must be clearly borne in mind, it should be realised that through proper marketing methods, consumer preferences can also be influenced. The Dory System of fishing with long lines, as recently introduced in Madras and Travancore, seems to have a great scope for expansion of production from the sea at a cost within the economy of the trade.

Attention is invited to the great possibilities of this method of fishing which permits the use of the existing craft and gear. Deep-sea fishing will naturally follow when off-shore harvests prove successful and attractively remunerative. Such a step by step development will take deeper root in the economy of the fishermen and will prove more helpful in the fulfilment of our objectives.

K. M. MUNSHI,
Minister for Food, Government of India.

also to stock tanks owned by Government. These are usually collected in big rivers near the sluice gates of the regulators. These fingerlings have a tendency to swim against the current and to accumulate in millions wherever sluice gates are practically closed.

The Madras State has recently sanctioned a scheme for collecting five crores of fingerlings and transporting them for stocking about 50 thousand acres of waterspread. Each acre of water is expected to yield 500 to 1,000 lb. of good fish. Many of the demonstration farms maintained by the Department are yielding between 1,000 to 1,500 lb. Taking the price of fish at eight annas it is expected that the scheme would yield more than a crore of rupees worth of fish.

Care in Transit

The fingerlings after collection are kept in small nurseries and transported in tin carriers to the various places for stocking. During transit, considerable attention has got to be bestowed on the fingerlings. As they are very delicate, water has to be changed at frequent intervals to prevent large-scale mortality of these fingerlings. Accumulation of impurities leads to mortality and this is prevented by changing water. Usually trained attendants accompany consignments of fingerlings on trains and vans and take care of them.

Besides carps collected at the rivers, the Department is also collecting millions of Chanos Chanos or the "Palmeen" from estuaries for stocking after acclimatising them. This fish though a sea fish, grows very well even in fresh water. It has however got to be acclimatised gradually in varying proportions by transferring at stages from brackish-water to fresh water. Ehophes, another brackish-water fish, also breeds in fresh water and is usually stocked in many of the irrigation wells.

As already mentioned, we have got more than six lakhs of irrigation wells in the State, over six lakhs of acres of fresh water tanks. By intensively cultivating every acre of water, it ought to be possible to produce about 20 crores of rupees worth of fish every year.

(By courtesy, A.I.R., Madras.)

Concessions to Soldier's Children

The Government ordered in G.O. No. 1915, Education, dated 3rd August 1948, that the nominee of a soldier belonging to a Marumakkathayam family will cease to be eligible for the grant of the concessions sanctioned in G.O. No. 610, Education, dated 20th April 1945, as soon as a child is born to the soldier. The Government now direct that the concessions granted to a nominee before the birth of a child to a soldier may be revived if the child dies subsequently.

The Indo-Pacific Fisheries Council

The third meeting of the Indo-Pacific Fisheries Council took place in Madras, from February 2 to February 16. Delegates and observers from Australia, Cambodia, France, Indonesia, the Netherlands, the Philippines, Thailand, Malaya, the United States of America and Vietnam attended the meetings. This is the third meeting of the Council, the first two having been held in Singapore (March 1949) and Cronulla, Australia (April 1950).

The meeting was inaugurated by Sri K. M. Munshi, Minister for Food and Agriculture, Government of India. The subsequent sessions from 2nd February to 16th February were occupied with full Council Sessions and with meetings of the Technical Committees and sub-committees.

The Council also held symposium sessions to discuss in essentially scientific way, the subject, "Transplantation of fish in the Indo-Pacific region and the introduction of fish to the region from outside." Of particular interest was the discussion on technical instruction for the industry as the basis to economic development, the problems of the salt fish industry of the region, and the problems of statistical work. This agenda was supported by considerable documentation involving probably as many as 70 technical papers presented by delegations and about 25 working papers prepared by the Technical Committees and the Secretariat.

International Organization

The Indo-Pacific Fisheries Council is an international organisation consisting of members countries in the Indo-Pacific regions and is constituted under the aegis of the Food and Agriculture Organization of the United Nations. The Council is constituted by an agreement which was drafted at Baguio in the Philippines in February 1948 and came into effect when, in November 1948, the fifth acceptance of the agreement was received by the Director-General of Food and Agriculture Organization. The Council functions principally through its annual meetings, which is attended by representatives of the member Governments.

The Council has an Executive Committee consisting of a Chairman and a Vice-Chairman, who are elected at each Council meeting, and the Secretary who is provided by the Food and Agriculture Organization. The Council also has two Technical Committees which are appointed at each meeting. These Committees may establish sub-committees. The first of the Committees is concerned with Biology and Hydrology. The second Committee is concerned with Technology. These Committees have appointed sub-committee concerned with Tuna, Neritic pelagic fishes, Fish culture, Planktology, Hydrology, Taxonomy, Seaweeds, Gear Technology, Food Technology and Socio-Economics.

Functions of the Council

The functions of the Council are as follows:

- (a) To formulate the oceanographical, biological and other technical aspects of the problems of development and proper utilisation of living aquatic resources;
- (b) to encourage and co-ordinate research and the application of improved methods in everyday practice;

(c) to assemble, publish or otherwise disseminate oceanographical, biological and other technical information relating to living aquatic resources.

(d) to recommend to member Governments such national or co-operative research and development projects as may appear necessary or desirable to fill gaps in such knowledge;

(e) to undertake, where appropriate, co-operative research and development projects directed to this end;

(f) to propose, and where necessary to adopt, measures to bring about the standardisation of scientific equipment, techniques and nomenclature;

(g) to extend its good offices in assisting member Governments to secure essential material and equipment;

(h) to report upon such questions relating to oceanographical, biological and other technical problems as may be recommended to it by member Governments or by the Food and Agriculture Organization of the United Nations and other international, national or private organizations, with related interests; and

(i) to report annually to the Conference of the Food and the Agriculture Organization of the United Nations upon its activities, for the information of the Conference; and to make such other reports to the Food and Agriculture Organization of the United Nations on matters falling within the competence of the Council as may seem to it necessary and desirable.

Cultivation of Railway Lands : Period of Grant to be Extended

The Government have decided that all railway lands which have been under cultivation for five years or more should be granted on lease in open auction for a period of three years and in special cases the lease be renewed in favour of the previous lessee without auction.

According to the existing regulations railway lands which have been under cultivation for five years or more are granted on lease in open auction on an yearly basis. It has been felt that the grant of an annual lease after the initial lease of five years is not a sufficient inducement for the lessee to manure the lands and make the best use of it. It was therefore considered that leasing of such lands for longer periods would make the lessee look after the land better and get the best yield out of it.

Rural Reconstruction Work

The Government have selected Santhanthalapadu and Velampalle, Guntur District, 44 villages in Puthur Taluk, Chittoor District, and 33 villages in Tiruttani Taluk, Chittoor District, for intensive rural reconstruction work.

Control of Rinderpest

Rinderpest is the most fatal disease which affects Indian cattle and is responsible for the death of 1.09 lakhs cattle annually, worth more than one crore of rupees. The animals which survive are left in a very debilitated condition and lag behind both in work and milk production. The loss due to decrease in milk production from this disease is estimated to be about 17 lakhs maunds worth more than Rs. 3.4 crores. There is an additional loss to the country because of the diminished working hours of bullocks as a result of their weak condition. Rinderpest (Cattle Plague) is known by different local names, such as Sitla or Mata (Hindi), Moke (Punjabi) and Gomari (Tamil).

Not only India but China, Tibet, Southern Russia, Egypt, Sudan and the Philippine Islands are also affected by this plague. In Britain a serious outbreak of this disease was recorded in 1877 which was controlled by the destruction of thousands of affected and incontact animals; since then that country is free from this scourge. America and Australia have never been affected by this disease.

The main symptoms are a rise of body temperature, dullness, discharge from the eyes followed by loose watery motions which are sometimes tinged with blood. The animal becomes weak, debilitated, unable to move and in most cases, death is certain. The disease is caused by a virus, which is present in the blood and all discharges and the evacuation of the sick animal such as saliva, tears, urine, dung, etc., hence all these discharges are responsible for the spread of the disease. If a healthy animal ingests any of these the virus enters the body and produces symptoms of the disease. The virus is however readily destroyed by disinfectants, both natural (e.g. direct sunlight) and chemical (lime and copper sulphate).

Control of the Disease

No drug is of any specific curative value for this disease. Careful nursing and attention to the animal's comfort may improve the condition of the sick, but severe cases seldom survive. Thus all efforts are to be directed in adopting control and preventive measures.

After trial with various methods of controlling this disease, only vaccination has been found to be of any avail. "Serum simultaneous method" and "Goat Tissue Virus (Goatis)" are the two types of vaccination popular in our country at this time. In the first method about 15-30 c.c. of serum (fluid portion of blood obtained from a hyper-immunised animal) and one c.c. of blood virus are injected into a healthy animal. In 'Goatis' method which is generally adopted these days, one c.c. of emulsion prepared from the spleen of an artificially infected goat is injected and the animal acquires powers to resist attack of the disease. Research workers are busy in improving the vaccines, and 'Lapinised,' 'Avianised' and pill forms of vaccine which are at present under laboratory tests, might well enable a control of this scourge and even its eradication.

In most western countries, legislation provides for the notification of the disease, the destruction of the sick, the proper disposal of carcasses and the enforcement of the quarantine measures. But in so vast a country as

India where the movements of the animals are uncontrolled and religious sentiments do not allow the destruction of the sick, these measures are not likely to yield the desired results.

Veterinary Aid

The alternative, i.e., vaccination, must therefore be the weapon used against this enemy of livestock. For this purpose prompt reporting of the disease to the nearest veterinary hospital is most essential. The veterinary hospitals on their part should be fully equipped to meet all emergencies. Sera and vaccine are liable to be quickly destroyed if exposed to sunlight or high temperature. Hence refrigerators should be provided, at least in all tahsil hospitals. To enable the veterinary surgeon to reach the spot of outbreak without much delay, facilities for mobile transport are also necessary.

In the case of an outbreak of rinderpest, the following steps if taken quickly should keep down the loss involved:

1. All the animals showing rise of temperature, loss of appetite and watery discharge should be immediately isolated.
2. Sick animals should be kept under shade at a distant place and fed on rice gruel containing a little salt.
3. The nearest veterinary hospital should be informed and healthy animals should be inoculated.
4. The carcasses of the animals should be either buried six feet deep or burnt.

This however requires a high degree of co-operation between cattle owners and the veterinary staff.

Extracting anti-rinderpest serum at Ranipet



Poultry Farming as Side Industry

By SRI A. B. SHETTY, Minister for Agriculture

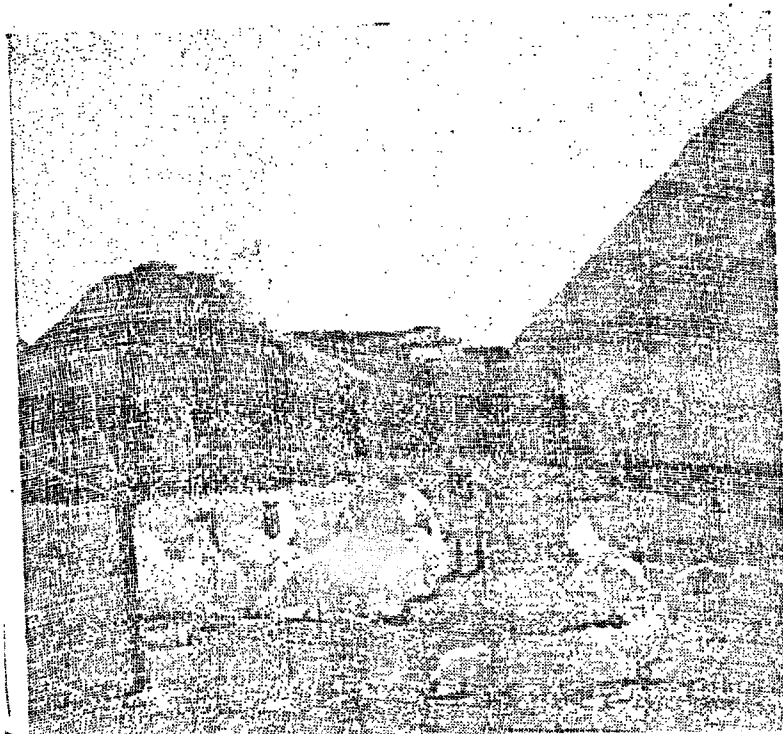
The present food shortage in the country makes it necessary for us to take stock of our food resources and find out ways and means of augmenting our food supply, and raising the nutrition standard of our people. We are all preoccupied with increasing cereal production. The need for supplementing cereals with proteins of suitable quality is not kept in view. Animal proteins are considered to be better than plant proteins. We should give priority to producing such animal proteins as will not come in the way of increasing the supply of cereals. From the nutritional aspect it is very important that the production and consumption of eggs should be increased manifold in this country, for eggs are exceptionally rich in proteins, minerals and vitamins, all of which are deficient in the normal diet of the people. It is for this reason that the Nutrition Advisory Committee of the Indian Research Fund Association has laid stress on the importance of expanding our egg production.

Village Occupation

Poultry keeping is mostly a village occupation in this country. The poor villager keeps a few birds and allows them to pick up whatever foods are available. They are housed and managed in the same old way. No attention is paid to the improvement of their quality by selective breeding or in other ways. The average egg production of indigenous hens is about 50 per annum and the weight of

(From the address by Sri A. B. Shetty, Minister for Agriculture, at the opening function of the American Arcot Mission Rural Service Exhibition at Katpadi).

Pedigree White Leghorn birds are raised on the Poultry farms at the Araku Valley Colony



the egg is one and a half ounces. The last World War created a big demand for poultry meat and eggs to meet the requirements of the Defence Services. War time prices brought a more lucrative return to the poultry keeper. Poultry farms were established on the Western model by the various Army units. Small producers were encouraged to take up poultry keeping. Poultry industry thus received a fillip after the outbreak of the second World War. It is unfortunate that poultry farming has not been incorporated with the present Grow More Food Campaign.

There is good scope for the development of the poultry industry on account of the increasing demand for eggs and poultry meat, particularly from urban areas. The improvement of poultry can be achieved in two ways: (1) By selecting the best indigenous fowls and breeding only from them. This method of breeding from the best layers and culling out the inferior stock does no doubt develop a better class of *desi* hens which give higher egg production. But it is a slow method which takes a long time for achieving results; and (2) crossing the indigenous hens with pure bred cocks in successive generations grades them up and gives pure breeds. This is a quicker and more effective method for producing improved breeds. Improved breeds have a higher egg-laying capacity and the average size and weight of the egg is also larger.

Better Feeding and Care

In addition to proper management and selection of suitable breeds, better feeding is necessary to improve the output per bird. Poultry feeding is the largest single expense in poultry work. Experiments are being made in the economic feeding of poultry at the Veterinary Research Institute at Izatnagar in Uttar Pradesh. Feeding poultry with meat offals, for instance, has resulted in a considerable reduction of the feeding cost. Prevalence of poultry disease is one of the main causes for the backward state of the poultry industry. Epidemic diseases frequently cause heavy losses. This is a problem even on specialised farms.

Ranikhet disease, which periodically sweeps away practically all the fowls in large areas, is a major killing disease. A reliable vaccine to immunise birds against Ranikhet has been produced at the Indian Veterinary Research Institute at Izatnagar. This vaccine is now being manufactured at our Veterinary College. The perishable nature of the Ranikhet vaccine is a limiting factor in its use on a mass scale in normal field conditions. The success of the poultry industry will depend upon the adoption of proper measures to keep under control parasitic and contagious diseases. Control measures are difficult to apply in a vast country like India. Lack of knowledge of the producers is a great obstacle. More trained personnel are necessary to diagnose and control poultry disease. Better housing, management and feeding will help to reduce poultry mortality. Transport and marketing arrangements will also have to be improved since eggs lose their quality quickly in hot weather.

Fisheries Work in Madras

The Department of Fisheries of Madras State is the oldest and largest Department of Fisheries in India. Ever since its inception in 1907 by its philanthropic founder, the late Sir Frederick A. Nicholson, I.C.S., it has been striving not only to improve the fishing but has also devoted considerable attention to the amelioration and uplift of fishermen.

From the inception of the Department, great attention has been paid to the education of children in fishing villages. Over 60 schools providing educational facilities for 15,000 children are run by the Department. A sum of Rs. 3½ lakhs is spent annually on these schools. The aim of the Department is not merely to make the children literate but to make them better fishermen.

The Department with the help of the Co-operative Department, has also fostered the co-operative movement which has progressed remarkably. There are over 150 societies with 20,000 members.

Madras has a coastline of 1,700 miles. Ninth-tenth of the population take fish. The importance of supplementing rice diet with fish, especially in these days of food scarcity, is obvious. We are now getting about 170,000 tons of fish valued between eight to ten crores of rupees. There is possibility for extending this zone of operation by 30-40 miles.

From the beginning, special arrangements to preserve fish scientifically by curing it with salt under hygienic conditions have been made. There are about 100 such fish-curing yards where good salt is supplied at concessional rates to fishermen. About five lakhs of rupees is spent for providing this concession.

A scheme has been sanctioned for procuring and supplying all essential articles to genuine fishermen through co-operative societies and depot-keepers appointed by the Government, at 75 per cent of the cost price. According to the scheme, essential material worth about ten lakhs of rupees is distributed at concessional rates.

There are 850,000 acres of inland waters including estuaries and backwaters in the State. Of these, more than six lakhs of acres are freshwater tanks and lakes. A scheme has been sanctioned to develop the fisheries in the inland waters by stocking them with fingerlings of quick-growing carp. The fingerlings are collected in millions from the rivers and conveyed in motor vans to various centres.

—J. L. P. ROCHE-VICTORIA,
Minister for Food and Fisheries.



Mirror carp fish grown in Padmapur pond at Araku Valley

Research and Development

The Madras Government have a Central Poultry Research Station in Madras City. Poultry farms are being run at the Hosur Cattle Farm and at the Agricultural Colleges in Coimbatore and Bapatla. Besides these, there are three district poultry farms at Chittoor, Cuddapah and Cannanore and 30 small scale poultry units are being maintained at some of our agricultural stations and veterinary institutions. Improved breeds are being distributed from these Government farms and eggs are sold for hatching purposes. These farms serve also as demonstration centres for showing people how management, housing and feeding of poultry should be done and in what way diseases can be prevented and controlled.

The Animal Husbandry Wing of the Board of Agriculture has recommended that the poultry industry in India should be developed on the following lines:—

- (a) In the vicinity of important centres large commercial units should be encouraged, and
- (b) in other areas a poultry cottage industry should be developed.

In countries where the trade in eggs is commercialised, cold storage is done to preserve eggs for a long time. Eggs are graded and sorted. Egg products are frozen or dried. A large export trade is carried on. Plenty of facilities for practical training in poultry farming are available.

Tungabhadra Dam Impresses Foreign Engineers

Two hundred and eighty-six foreign engineers, delegates to the International Engineering Conference held at New Delhi in January, recently visited the Tungabhadra Dam site. The delegates were taken round the dam site by the Chief Engineer, Tungabhadra Project, Sri M. S. Tirumale Iyengar and his staff.

The general impression among the delegates was that the Tungabhadra Project was the only dam in which the construction had advanced well and was very instructive and unique in every respect. What surprised the foreign delegates was the stupendous labour force of 20,000 working on the construction of the dam. Probably these foreign engineers were not accustomed to employing such huge labour since manual labour is scarce and costly in their countries. The foreign engineers were all favourably impressed with the quality of the work and the efficiency with which every operation was being carried out.

The Tungabhadra main dam is a stone masonry dam 5,942 feet long and 160 feet high above the lowest foundation level, and is intended to store ultimately 3.06 million acre feet of water to command about two million acres of land in both Madras and Hyderabad States. There is an overflow section 2,300 feet long intended to surplus 650,000 cubic feet per second flood discharge.

"Amazing Work"

Mr. William Meyers, Chief Engineer, M.A.N. Germany, said that it was his privilege to see the site of Tungabhadra Dam at a stage when the outlay of the scheme could be seen very clearly. "It is an amazing work with a clear organisation. I congratulate the Engineers in charge and the staff on this fine work."

The Austrian delegate Mr. Wiessel Walter also spoke in appreciative terms about the works. The Netherlands representative Mr. Blumestien also had a kind word to say about the progress of the project.

The Chairman of the Central Electricity Commission, Government of India, Sri. N. N. Iyengar, who spoke on

behalf of the Indian delegates, declared that Madras has done the best in the construction of dams and that the progress on the Tungabhadra Dam was the best he had seen so far.

Project Filmed for U.S.A.

The U.S.A. representative Mr. Michel W. Straus, Commissioner, Bureau of Reclamation, who took a film of the project for a television talk to be delivered in U.S.A., was of the opinion that our engineers here were doing very satisfactory work and that the progress made in the dam work and the organisation showed efficiency throughout. It went to prove, he said, the progress India was making after the attainment of independence.

Mr. Straus and the Chief Engineer of the Bureau of Reclamation Mr. Maclellan found several things new in the way in which work was being carried on at the project site. Since all the dams recently constructed and in progress in America are of concrete, the use of stone-masonry for a large dam like this was a bit of a surprise to them. The members of the French delegation were deeply gratified at having been afforded the opportunity to visit the construction of this dam.

The head of the Soviet delegation said that of all the dams he had seen so far the progress in this dam was the most encouraging and the work was being done as it ought to be for the good of the large number of labourers and using local materials.

"An Educative Visit"

Mr. M. C. M. Da Rocha of Portugal, Dr. Salim of Egypt, and Mr. Onishi of Japan, President, Electric Association, Tokyo, were very favourably impressed by the construction works. The Thailand delegates stated that the visit was very educative.

Many of the Indian delegates from Northern States including several engineers of the Damodar Valley Corporation were likewise very much impressed with the progress of the work.

Boarding Grants for Harijan Hostels

The Government have been making lump-sum boarding grants to hostels run by the Harijan Sevak Sangh and by private bodies or individuals for the benefit of boys and girls belonging to the eligible communities, and to the backward classes who take up approved courses of study in recognised educational institutions. They have in their previous Press Note made it clear that no such hostel will be admitted to the Government grants, unless it is recognised by the Director of Harijan Welfare and that for the purpose of recognition the management of the hostel should submit an application in the prescribed form to the Director of Harijan Welfare by the 31st August through the Collector of the district concerned with full and necessary particulars required by the Harijan Welfare Department.

Even in regard to a hostel which has been so recognised, the Government are not in a position to make grants to every pupil in that hostel, since the number of boarding grants sanctioned to the hostel will depend on the availability of funds provided for in the State Budget. As regards hostels which were already admitted to these grants, the Government make additional grants to new boarders. This increase is also dependent on the provision made in the Budget.

Hostels thus subsidised by the Government have in recent years grown very rapidly both in number and strength. The Government cannot be expected to pay lump-sum boarding grants for every pupil of every hostel and in respect of new hostels to be recognised, they can make grants during 1951-52 only to those which were started before December 1950. They are also anxious to limit these grants to hostels run on proper and sound lines. For this purpose, it is necessary to inspect and enquire into the conditions of the hostels. They, therefore, wish to make it known in advance that applications for additional lump-sum boarding grants in respect of hostels already recognised and for recognition of new hostels which have been in existence prior to December 1950, should be made in the prescribed form to the Collector (except Madras) a copy thereof being sent to the Director of Harijan Welfare before the 15th March 1951.

Definite orders on such applications will be passed after due inspection and enquiry and in any event before the

15th of July. Only such hostels as are approved on such applications may be run for the next year in anticipation of getting Government subsidy. If others open and run hostels, they will be doing so entirely on their own responsibility and liability.

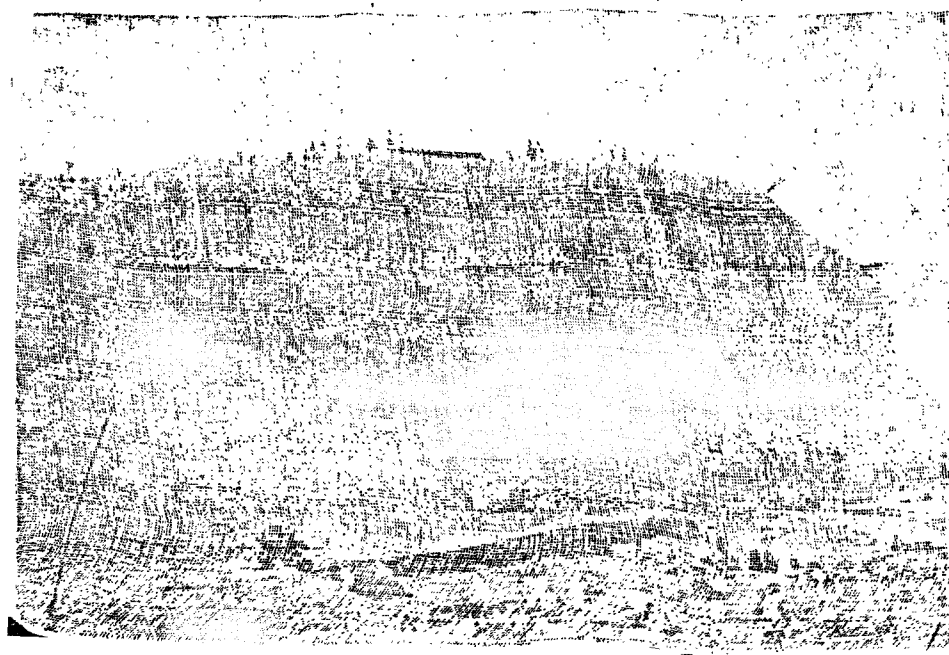
Sense of Duty in Service

The conservancy menials of Periyakulam Town (Madurai District) were supplied with dress similar to that of officers and all female menials were supplied with sarees and jackets recently at the cost of the Municipal Council. Sri P. A. Ramaswami Chettiar, Municipal Chairman, after distributing dress to the menials, observed that everyone serves the public in one way or other and that there is no disparity in service.

Janab K. Peer Mohammad Sahib, Commissioner, then exhorted the conservancy staff to do their duties with a sense of responsibility and care. The public service entrusted to them should be deemed the highest and the street or latrine left to their charge should be cleaned with devotion. If they do like this with all sincerity they need not fear or bow before anyone. The Commissioner added that a menial with a high sense of responsibility could easily become a maistri himself provided he had some education. If they realised all this and kept their body and dress clean they would never be untouchables.

Minimum Wages for Mica Workers

The Government have issued a draft notification fixing the minimum rates of wages for workers employed in any mica works in the Madras State. The notification has been published in the Fort St. George Gazette for the information of all persons likely to be affected. The draft will be taken into consideration on or after April 2, 1951 and any representation with respect to the minimum wages fixed may be made before that date to the Secretary to the Government of Madras in the Development Department through the Commissioner of Labour, Madras, for the consideration of the Government.



Rear face of the Tungabhadra Dam. Delegates to the International Engineering Conference recently visited the dam site.

The Chief Engineer of the Tungabhadra Project welcomes the distinguished visitors to the dam site.



Mathematical Research by Schoolboys

The South Indian Mathematical genius was the subject of admiration in the 16th Biennial Indian Mathematical Conference held in Madras. At the Mathematical Exhibition attached to the Conference, the Usilampatti High School (Madurai District, Madras State)—the only high school in all India to participate in the Exhibition—distinguished itself by its display of some remarkably accurate charts presenting complicated propositions of geometrical interest. Small schoolboys under the able direction of Sri M. Parameswara Ayyar, the Mathematics Assistant of the Usilampatti School, explained the charts in a manner which won the uniform appreciation of all the learned visitors.

One of the exhibits, a clear illustration by accurate drawing of the unique property of the Nine-points-circle (otherwise known as Feuerbach's Theorem) deserves special mention. Several hundred charts on circular patterns and illusion of the circle by means of straight lines, attracted as much attention as the photostat copies of the late Ramanujam's note-books.

Full credit for this unique work goes to two pupils of the Usilampatti High School (in 1945-47), Sri A. Ponniah (a Harijan) and Sri P. Muthuramalingam. Sri Ponniah was the first to stumble, by accurate drawing, into the unique property of the Nine-points circle (first discovered by the German geometrician Feuerbach, 1800-34, in his twenty-second year); thus the way was paved for the teacher and other pupils to work upon it. Sri P. Muthuramalingam prepared a scientifically graded series of ten charts. These charts have been hailed by eminent mathematicians and scholars like Dr. C. V. Raman, Dr. K. S. Krishnan, Sri D. P. Ramaswami Ayyar, Sri Vepa Ramesam, Dr. R. Vaidyanathaswami, Dr. Narasinga Rao, Professor Ananda Rao and others.

It has been suggested that the diagram be elliptically projected for study of possible application in the glass industry. Blueprints of the charts are being sent to research departments of universities in India and abroad and for publication in leading journals like the *Scripta Mathematica* (New York) and the *New York Herald-Tribune*.



Enhancement of Teaching Grant

The Government have sanctioned an increase of Rs. 2 (Rupees two only) per mensem to the minimum of the scale of teaching grant now in force for Lower Elementary Grade, Secondary Grade and Collegiate Grade trained teachers.

It may be recalled in September 1950, the Government enhanced the teaching grant for Higher Elementary Grade teachers by Rs. 2 per mensem. Subsequent to this order representations have been received for a similar increase in respect of Lower Grade, Secondary Grade and Collegiate Grade trained teachers. The Government have considered the representation and sanctioned the enhancement of grant as above.

The Government have directed the managements to contribute Rs. 3 per mensem from their funds to supplement the salary of these categories of teachers.

The enhanced rate of teaching grant which has already come into effect from January 1, 1951, will be :—

Lower Elementary Grade Trained Teachers—Rs. 20 per mensem.

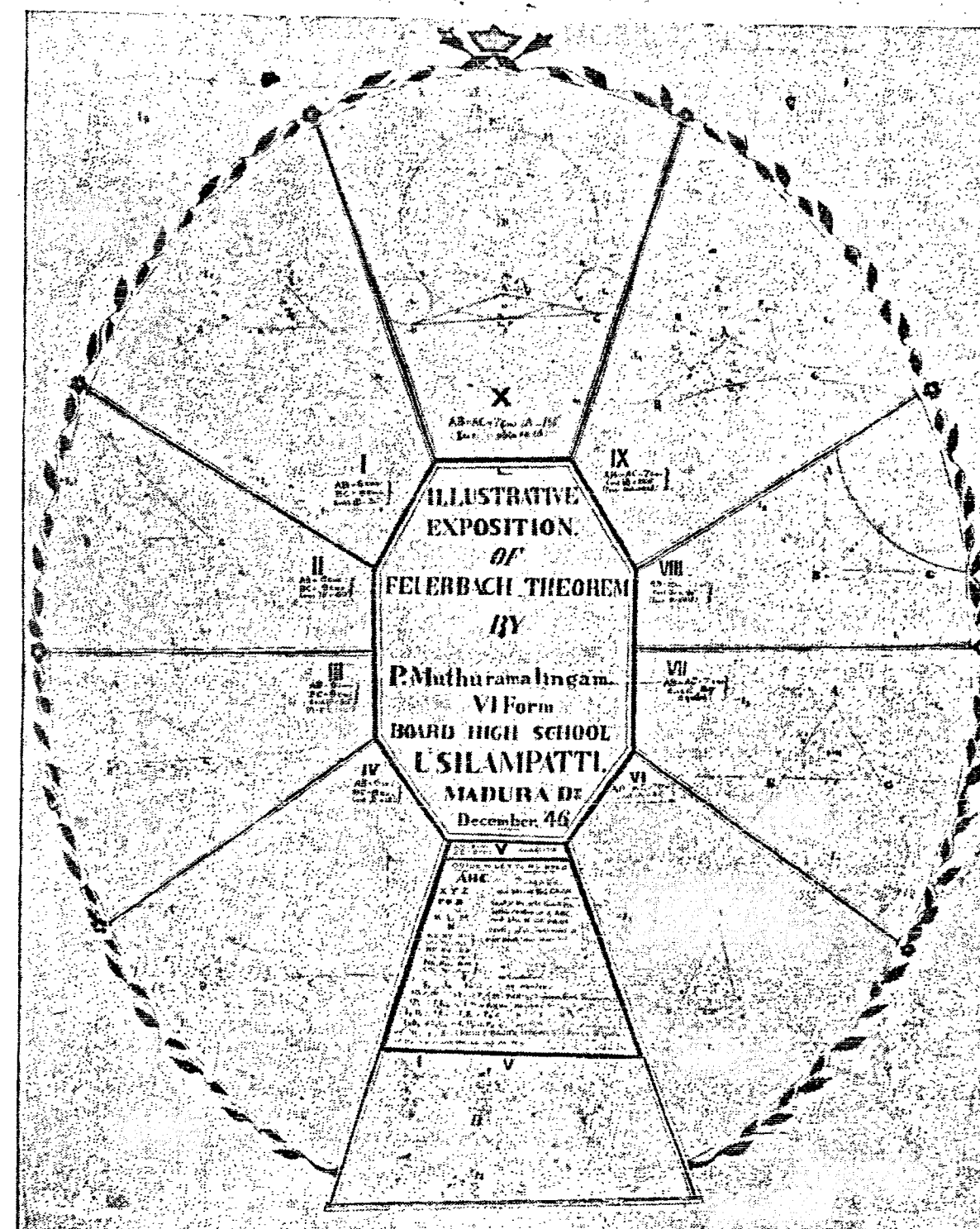
Secondary Grade Trained Teachers—Rs. 37-1-45.

Collegiate Grade Trained Teachers—Rupees 37-1-45.

Concession Extended

Under the present orders of the Government, a candidate belonging to a Scheduled Caste, or a Backward Class, who has passed the Intermediate Examination in Arts of any of the Universities in the State or who has taken a degree of any of the Universities in the State or who has acquired from any other University any qualification corresponding to the said qualifications, is exempt from payment of the fee prescribed for application for selection for appointment to any post within or outside the purview of the Madras Public Service Commission. This concession expired on the 31st December 1950. It has now been decided to extend the concession to candidates belonging to the Scheduled Castes, Backward Classes and Scheduled Tribes for a further period of three years from the 1st January 1951.

Sri A. Ponniah, the Harijan student (left) who rediscovered the Feuerbach Theorem, and Sri P. Muthuramalingam (right) who drew the original chart as an illustrative exposition (printed on opposite page)



THE NINE-POINTS CIRCLE

The unique property of the nine-points circle is that it is the only circle that touches the four circles (the in-circle and three ex-circles) of any triangle. This property was discovered by Feuerbach, the German mathematician, after whom the theorem is named. It is illustrated in the chart given above in ten graded cases. Two sides AB, AC are unequal while the included angle A measures 30°, 60°, 90°, 120° and 150° giving five cases; again the two sides AB, AC are equal, giving five more cases. The relation between the points where the nine-points circle touches the in-circle and the ex-circles (called Feuerbach's Points) and the vertices of the triangle is a projected subject of study in pure geometry.

Health Through Co-operation

Poddaturpet is a village in Puttur Taluk situated at a distance of ten miles from Nagari. It is a big village with a population of 6,618 consisting mostly of weavers. A Grama Sangham was formed in the village in the early days when Prohibition was introduced in the district. The Grama Sangham under the Presidentship of Sri E. S. Thiagarajan, took much interest in the ameliorative activities and showed considerable zeal for team spirit and co-operative enterprise. At the instance of the Grama Sangham the proposal for the formation of a Health Co-operative Society was taken up for investigation. Within a radius of three miles from the village, there are ten villages with 3,755 families with a population of about 22,696 most of whom belong to the weaver community. The need for medical aid and maternity assistance was keenly felt by the inhabitants of these villages. The villagers of this area had to go all the way to Athimajeripet and Palupat Rural Dispensaries which are at a distance of about seven miles, to get medical aid in time.

Besides the need for improving the Public Health in these parts was keenly felt. Sanitary conditions in the villages are not satisfactory. Filth and rubbish are allowed to be heaped in residential surroundings and the streets are kept unclean. It was therefore found necessary to arouse the civic consciousness of the villagers. The Grama Sangham showed considerable interest and enthusiasm in the formation of a Health Co-operative Society for the benefit of the villagers and volunteered to place a building with a compound worth Rs. 11,520 at the disposal of the society when formed for locating the medical centre. Sri E. S. Subramanya Mudaliar and Sri E. S. Thiagaraja Mudaliar who are the moving spirits in the village, donated to the extent of Rs. 5,000 towards the construction of the building. The Grama Sangham also promised to raise liberal donations from the weaver societies in and around Poddaturpet to meet the expenditure connected with the initial starting of the society.

Working of the Society

A Health Co-operative Society was therefore organized at Poddaturpet in the month of September 1950 with the following objects:

- (1) To organise a medical centre with a qualified medical officer, compounder and a dispensary for the benefit of the members;
- (2) To organise one or more Child Welfare Centres or Maternity Houses for the benefit of its members;
- (3) To carry on propaganda among the members for rousing a sense of responsibility and consciousness about maternity welfare; and
- (4) To carry on sanitary and preventive activities to keep the villages clean and free from epidemics.

The Registrar of Co-operative Societies, Madras, was pleased to permit the registration of the Poddaturpet Health Co-operative Society in his letter Rc. No. 126979/49-X-4, dated 24th June 1950. The society was registered on 19th August 1950 and started on work on 22nd September 1950 with 25 members who paid an admission fee of Rs. 25 and annual subscription of Rs. 150 on the date of starting.

The area of operations of the society extends to ten villages situated within a radius of three miles. The

population served by the society is about 22,696. There are at present 50 members in the society who have paid an admission fee of Rs. 50 and an annual subscription of Rs. 300. The society is now housed in the building transferred by the local Grama Sangham. In addition to this the local Grama Sangham has been kind enough to transfer to the society the following funds and equipment purchased by it from out of the donations raised from the Co-operative Weavers' Societies and philanthropic gentlemen:—

	RS.
(1) Medicines	1,352
(2) Patent medicines	95
(3) Surgical instrument and equipment ..	1,467
(4) Furniture, bed set, etc.	764
(5) Amount invested in postal S.B. account.	1,000
Total ..	4,678

The Chittoor Branch of the Provincial Welfare Fund has sanctioned a grant of Rs. 1,000 for opening a Child Welfare and Maternity Centre attached to the dispensary. Steps are being taken by the society to draw the amount and open a Child Welfare and Maternity Centre soon. The Chittoor District Board was pleased to sanction a sum of Rs. 1,000 as a grant for running the society and the amount has since been received by the society.

The Government were pleased to sanction a sum of Rs. 2,500 as grant towards the cost of equipping the hospital. The grant has not yet been drawn by the society.

Hospital Staff

The society has employed for the present a qualified compounder on a salary of Rs. 75, a midwife on Rs. 54 and a wardboy on Rs. 30 per mensem and the Hospital is run with the help of the above staff. The compounder and midwife are provided with free quarters and the rent of Rs. 15 per month is met by the society. Arrangements are being made by the society to appoint a qualified doctor at an early date on a decent salary with facilities of free quarters. A clerk is maintained by the society on a salary of Rs. 50 per month to write the accounts of the society.

The Hospital works from 8 a.m. to 12 noon and 3 p.m. to 6 p.m. on all days except on Sundays when it is kept open only in the forenoon. At present the compounder is attending to all male patients and the midwife to the women patients and maternity cases in the area of operations of the society.

Income

In addition to the medicines transferred by the local Grama Sangham the society has since purchased medicines worth Rs. 234-1-0 for the use of the Hospital. Medicines are administered free of cost to the members, but the members are at liberty to help the institution by way of charity donations through a hundi box kept in the Hospital for the purpose. Non-members have to pay for the treatment and issue of medicines. Six hundred and ninety-two persons were so far treated in the Hospital of whom 339 were men, 156 women and 197 children. Value of

medicines dispensed with to the non-members alone amounted to Rs. 437 so far. Charity donations voluntarily offered so far by the patients amounted to Rs. 29.

The society was started only recently and is making arrangements to appoint a Doctor. However, it has been able to do considerable service to the suffering humanity and has been able to treat 692 persons successfully within a short period of two months, in rural surroundings. The office-bearers of the society are enlightened and

enthusiastic gentlemen known for their selfless service and co-operative endeavours. They hope to admit large number of members and enlist the co-operation of public spirited and philanthropic gentlemen. They desire to run the society successfully with a well-equipped Hospital and Child Welfare and Maternity Centres in the area of operations of the society to serve the humanity as centres of social service. The society has therefore a bright future.

The Kavutaram Co-operative Society

The following report indicates the progress in the Kavutaram Co-operative Society during one month:—

	Credit Activities					
	At the beginning of the month.			At the end of the month.		
1 Number of members ..	744			751		
	RS.	A.	P.	RS.	A.	P.
2 Paid-up share capital ..	13,498	0	0	13,711	0	0
3 Fixed deposits (Borrowings).	66,253	0	0	65,413	0	0
4 Thrift deposits ..	404	10	0	404	10	0
5 Recurring deposits ..	270	0	0	270	0	0
6 Homesale deposits ..	1,156	3	0	1,311	14	0
7 Loans from Central Bank.	49,541	0	0	52,541	0	0
8 Loans outstanding against members.	1,12,858	0	0	1,18,164	0	0

The society had applied for a loan of Rs. 25,000 from the Krishna Co-operative Central Bank of which only Rs. 3,000 was disbursed during the month. The balance

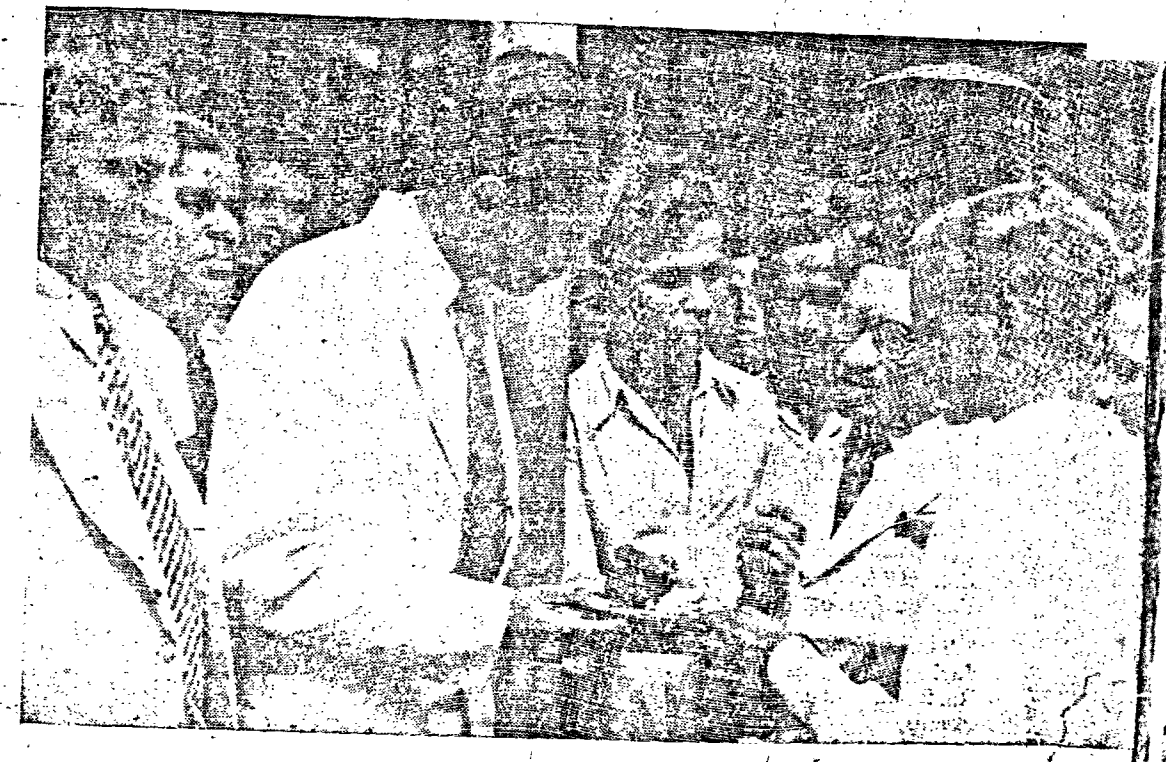
Non-Credit Activities

The society purchased during the month Rs. 275-7-3 worth of sugar and sold it for Rs. 313-14-9, there by making a gross profit of Rs. 38-7-6. For distribution to the members, sunhemp seeds valued at Rs. 3,864-6-0, redgram for Rs. 45 were purchased during the month besides 'mummitties' valued at Rs. 94-11-3.

Construction of Godowns

For the construction of the godowns by the society, permits for the purchase of iron and cement requirements are awaited. The other requisite materials for completing the construction have already been procured and kept ready. It is hoped that the godowns will be ready by the end of March 1951.

Bochana Senkariksha, Chief of the Consumers' Co-operative Provision, Bangkok, Thailand, recently visited co-operatives in Madras City. He is seen above at the Saidapet Weavers' Co-operative Society



Good Work By Multi-purpose Co-ops

The Kuthanur Rural Credit Society

The Kuthanur Multi-purpose Co-operative Rural Credit Society in Nannilam Taluk, Tanjore District was registered on 16th December 1924 and started on 29th January 1925. The society has passed 25 years of its successful working, and it is to celebrate its Silver Jubilee shortly. The area of operations of the society comprise three revenue *vattams*, viz., Seruvalur, Kuthanur and Maruthavanjeri. Proposal has recently been sent extending the same to two or more *vattams*, viz., Mudikondan and Nemmeli. The society is situated among the fertile villages.

There are 160 members on rolls with a paid-up share capital of Rs. 2,544. The maximum borrowing power of the society is Rs. 21,000. Proposals have been sent for increasing the same to Rs. 40,000. The total deposits outstanding as on date is Rs. 9,100 apart from the loan of Rs. 5,150 due to the Co-operative Central Bank, Ltd., Kumbakonam. The society enjoys cash credit accommodation of Rs. 5,000 for doing business in cloth; Rs. 1,000 for *maligai*; Rs. 3,000 for issue of short-term loans; Rs. 2,000 for transmission of collections from societies to the Central Bank.

The society has invested in other institutions as share capital; Rs. 240 in Co-operative Central Bank, Ltd., Kumbakonam; Rs. 50 in Tanjore Central Co-operative Stores, Ltd., Tiruvarur; Rs. 10 in Tanjore Co-operative Marketing Federation, Ltd., Tiruvarur; Rs. 150 in Kuthanur Co-operative Marketing Society, Ltd., Kuthanur. There are 100 loans outstanding against members to the tune of Rs. 16,624. The society has Rs. 3,779-4-0 to the credit of its Reserve Fund of which Rs. 1,661-13-0 is invested in Co-operative Central Bank, Ltd., Kumbakonam, Rs. 500 in War Bonds; Rs. 100 in National Savings Certificate.

This is the first society in the area to adopt amendment to its bylaws for undertaking Multipurpose activities. The society has a *maligai* and a cloth branch besides its credit work. The *maligai* branch deals in all articles, including kerosene, coffee, sugar. The total sales of the *maligai* branch for 1949-50 was Rs. 24,852-5-11. During the time, when informal rationing was in force, the society was dealing in rice rationing also. The society is now having a ration shop from 26th May 1950. The total sales in this respect for 1949-50 was Rs. 716-15-10. The society is incurring Rs. 127 per month towards establishment charges in the *maligai* branch alone. Recently, on 12th July 1950 the society opened a branch of its *maligai* section at Punthottam, half a mile off, and the average sales of its new branch is Rs. 100 per day.

The cloth branch deals in both mill and handloom cloth. This is the first rural credit society in this taluk that was given mill cloth licence during the last control period, viz., 1946. The society has earned a name for its fair distribution of mill cloth.

The society has earned a net profit of Rs. 2,048-8-0 during the year 1949-50. It has a business reserve Rs. 2,962-4-0 created under Bylaw No. 54, to meet business losses.

The Rajakoil Credit Society

The Rajakoil Multi-purpose Co-operative Credit Society in Gudiyatham Taluk in North Arcot District was registered on 13th April 1947 and started on its work on 27th April 1947. Rajakoil is about 1½ miles from Gudiyatham Town. The village is situated between the two trunk roads leading to Katpadi on the one side and Vellore on the other side. The society serves about 360 families in the four villages of Govindapuram, Kalleri, Thathiyampatu and Rajakoil. There are 166 members with a paid-up share capital of Rs. 4,054.

The society, in addition to affording credit facilities to the members in the villages, has also undertaken the various kind of Multi-purpose activities such as purchase and distribution of controlled commodities like rice, millets and other foodgrains. It is also dealing in textiles, sugar, kerosene oil, etc. It is running a ration shop for the benefit of the villagers and every month it is selling rationed articles to the extent of Rs. 1,500. Besides this, it has also purchased Ammonium Sulphate for distribution to the members and others. It has also applied for licence to deal in manure and agricultural implements.

Even though the society has been started very recently, it has considerably developed its business. A community centre at a cost of Rs. 4,000 for the benefit of the villagers which was proposed to be constructed by the gramasangham has been taken over by this society and it has completed its construction, which will serve both as a community centre-cum-godown. Out of this cost of Rs. 4,000 the society got Rs. 1,000 as grant from the District Amelioration Fund and another Rs. 1,000 has been sanctioned as a Government grant. This grant will be disbursed to the society shortly.

Separation of Judiciary in Kurnool

The Government have accepted the recommendation of the High Court for the redistribution of jurisdiction of courts of District Munsifs-cum-Subdivisional Magistrates in Kurnool District. As regards Banganapalle and Owk Sub-taluks, Government have decided to appoint the Sub-Magistrate at Banganapalle as a District Munsif *ex-officio*. The civil and criminal jurisdiction of the various district Munsif-cum-Subdivisional Magistrates courts in the district will be redistributed as follows:—

Magisterial.—Dhone Headquarters: Dhone, Pattikonda Taluks; Kurnool Headquarters: Kurnool, Nandikotkur Taluks; Nandyal Headquarters: Nandyal (including Banganapalle and Owk Sub-taluks and Sirvel Taluks).

Civil.—Dhone Headquarters: Dhone, Pattikonda Taluks; Kurnool Headquarters: Kurnool, Nandikotkur Taluks; Nandyal Headquarters: Nandyal, Koilkuntla (excluding Owk Sub-taluk) and Sirvel Taluks.

The American Scene

By SRI J. M. LOBO PRABHU, I.C.S., Secretary, Development Department.

In a well-known sonnet Keats describes "Stout Cortez, silent on a peak in Darein staring at the Pacific, while his men looked at each other in wild surmise." I had to reverse this process of discovery, and though not so stout to stare at America from the Pacific, with no less wonder. Through the Golden Gate Bridge which spans the sea for nearly two miles with a single suspended arch nearly one mile long, I saw San Francisco rising in pinnacles from the sea to the top of Powell.

Death Valley and Grand canyon

Some consider San Francisco, the most beautiful city in the world. Its landscape of hill ranges, which hold both cottages and skyscrapers, its Chinatown, its beaches, its redwood forests, its hotels, Marks, which has a bar with a glass roof on the 17th storey, and Fairmont, which reproduces to the last detail the dining and dancing rooms of five different nations, are a few of the features one can mention. From San Francisco I went to Santa Barbara, with its Artists Colony, then to Hollywood and Los Angeles, where I stayed for some time.

Life in Hollywood

Every one expects Hollywood to be beautiful, but I found it to be kind and human also—film stars, at whom people are apt to hold a finger of warning, are the most hard worked people, tied to their sets till late hours, often put through a small scene ten times over. I saw a noted producer talk to a glamorous film star, as if she had no brains at all, which may be true. The houses on Beverley Hills, most of which have swimming pools of their own, each seem to be creations of artists, every detail related to express the beauty, often simple, of the place.

Los Angeles, third largest city in U.S.A., covers 84 squares and is sometimes described as 'six suburbs in search of a town.'

From Las Angeles, I drove to Death Valley, 300 feet below sea level, with a temperature at 126°, then to Las Vegas, another town in the desert, with air conditioning nearly in every place except the streets, and gambling in every place, except possibly churches which I did not see. Like my next stop, Boulder City, Las Vegas is a monument to human ingenuity, green and cool in the midst of the fierce heat of the desert.

Boulder City accommodates the 5,000 workers of the Boulder Dam, the greatest in the world, the mighty Colorado River being held up to a height of 700 feet before it is dropped to create the electric power on which a great part of Los Angeles depends. From here I went to the source of the Colorado, the Grand Canyon, a gorge 5,000 feet deep, in a circumference of 80 miles which the sun throughout the day and the moon throughout the night fill with changing colour effects. Then on I trailed to Sante Fe, Albuquerque and Colorado Springs, which contain relics of Indian, Spanish, and of Nature's greatness. In the Garden of the Gods at Colorado Springs, red sandstone spires rise as in a cathedral. At Pikes Peak nearby, I climbed skywards to a snow top at 14,500 feet in a cog railway that is almost vertical.

Then I visited the Midwest City of Denver, the cities of the corn country, Omaha, with its famous Boys' Town, where I also met Joe Louis playing Golf, Iowa, where I saw various agricultural experiments, Davenport and last of the plains, the sprawling city of Chicago. Though Chicago has a planetarium which almost brings the sky and stars within hand's reach, an aquarium with nearly all the fishes of the world, including monsters, several feet long, the Museum of Science and Art, at which Pandit Nehru spent hours seeing the mechanical wonders of the world, Chicago is not a beautiful city.

Niagara and New York

If there are no gangsters now, there is in the streets darkened by overhead railways, plenty of atmosphere for crime. Only Michigan Avenue with its line of skyscrapers, by the lake, holds an unforgettable patch of beauty. By the lake shore, I went to Detroit, the centre of the motor industry, where I had a fleeting interview with Henry Ford, and where I saw his factory in which new cars roll off the assembly lines every 58 seconds. Only a short length of underwater tunnel took me to Canada, the face of which is more like that of England than America. I saw Toronto and Montreal and returned via the Niagara Falls, the beauty of which in water staggering down hundreds of feet, in width exceeding most of our rivers, is impossible to forget.

New York, my next halt, was in a sense the Niagara in reverse, the lines of skyscrapers, carrying man's might upward. New York is a world in itself, with a hustling but ordered life to be found nowhere else, with science, art, beauty, collected with the purposiveness of a museum. Everything runs to hyperbole, the Empire State building is of 107 storeys, the Statue of Liberty is so large that crowds can walk on its arm, the streets all drawn to a symmetrical plan are lined with the best shops, the hotels hold "inexplicable splendour of Ionian white and gold," the women are the best dressed in the world, Broadway is the last word on theatres and cinemas, while Times Square is better lit by night than by day. New York is an orgy of wealth, work and science, which made other places, Baltimore, Philadelphia and Washington, I saw later, much smaller by comparison.

Paradox of Practical Communism

I saw 17 States of America, excluding Japan, Philippines and Hawaii which are also dominated by the American Civilization. My experiences and impressions could fill a book. Here and now I shall advert only to certain paradoxes, which make Americans the most misunderstood people in the world: their wealth, their materialism, their self-righteousness, their aggressive success, their overwhelming hospitality. There is a tendency to typify America with capitalism but in reality while Russia may have been preaching Communism, America seems to have been practising it. The whole of the American economy is built on levelling up of the common man, multiplying his wants so that everyone has the best of everything. The motive may be quest of profits, the methods may be extravagant advertisement and systematized over-credit.

but the result is that the aggregate demand created maintains industry on a mass scale with all advantages of cheapness, quality and profusion. The lesson for India is that by increasing the incomes of those now economically depressed, a market will be created which will add to the value of capital whether in land, money or organization.

American materialism is ascribed to the absence in a new society of other values than money. It is true that money is a measure of success, but generally success is the end and money is only the means. This would explain American enterprise which is not bound by money, and which by standards of older countries is regarded as fantastic. Against materialism may be stated the almost atavistic longings of Americans for things of the past, the saying being that "Good Americans go to Paris when they die." It may be mentioned that churches are the most prominent features of American cities, that they are probably the wealthiest in the world. There is generally a spiritual hunger in America which made even me feel like a kind of minor prophet.

American self righteousness derives from the current urgency of the idea of the American way of life. This idea has been reinforced by the success in the world of the Communist way of life. The average American therefore is driven to cling to his way of life which has given him so much, without the sacrifices which the other way of life implies. One is warned on setting foot in America, not to have 'a chip on one's shoulders', meaning ideas other than American—perhaps the warning is unnecessary because one is quickly satisfied with the value of American ideas.

The aggressive success of the Americans derives from a certain target consciousness. The American people have constantly advanced against frontiers, which has induced in them a spirit of competitiveness. Every person, institution, town, not only wants but plans to get one better than the best-known type of its kind. Whether in industry, housing, dressing, entertaining—the same ruthlessness is apparent. It is calculated that the average age of American houses is 25 years, of women's clothes, only one season. It may be that this involves borrowing, but far from instalment-payments demoralising the people, they seem to secure a mortgage on their continued work. India would do well to encourage people to spend their future incomes at least on things which they so lamentably lack now.

American hospitality is just overwhelming. If one is accepted as a friend, he is very soon embarrassed by time and money spent on him. It is enough only to make a start, then one friend passes you on to another, and the process is like snowballing. It is no use impressing your hosts that you cannot repay their hospitality; they tell you that your company is the best thing they have known. And they will take you from one club to another, from one wonder to the next, as if they are bent to create a record.

America is really a new world, the discovery of which is a continual surprise and delight. The Americans are a new race, vital, and at the same time human, great and at the same time childlike, successful and at the same time unspoilt. As and when they can overcome their present preoccupations, America may be able to know the world better, and to adopt its frontiers, as its own, in the vital task of levelling and enriching human civilisation.

(By Courtesy, A.I.R., Madras)

Milk from Soya Beans

To augment the supply of milk for the defence forces personnel, the Ministry of Defence have recently started large-scale experiments for the use of soya bean milk. A group of 219 recruits are being given soya milk prepared in the Food Technological Laboratory of the Indian Institute of Science, Bangalore, in the form of milk as such, for tea and as curd along with their food. The milk supplied to them is flavoured and the troops are reported to like the flavour and taste of soya milk. So far the group taking soya milk has been comparing very favourably with another group receiving ordinary milk. Detailed investigations conducted at the Food Technological Laboratory during the last few years are said to have proved conclusively the value of soya bean milk as a substitute for milk.

At the Indian Veterinary Research Institute, Izatnagar, experiments are being conducted to utilize as cattle food coffee husk which forms the outer cover of the coffee seed and remains as a by-product after the disposal of the seed.

In South India large quantities of the husk remain unused. Chemical analysis and feeding experiments of this material show that it contains a fairly good proportion of nutritive elements like protein in an assimilable form and that the cattle fed on it do not show any adverse symptoms. The main difficulty however in the utilization of this food on a large scale is that the animals are disinclined to consume it in suitable quantities, probably because of its unpleasant taste and aroma. The problem for the scientist which is being tackled at the Institute is to eliminate this unpleasant taste.

Kernel as Food for Poultry

The object of another experiment being conducted at the Veterinary Research Institute is to replace maize by mango and jaman seed kernel as food for poultry. Experiments show that mango kernel can replace 20 per cent of maize with a beneficial effect on egg laying. Jaman seed, however, has been found to have a depressing effect on the reproductive system of fowls.

The Institute has also devised a new method called the Stick or prick method for administering vaccine to fowls suffering with the Ranikhet disease. The method simplifies the procedure and dispenses with the use of syringes and needles. The duration of immunity by this method is being tested.

The Department of Electrical Communications Engineering of the Indian Institute of Science, Bangalore, is developing an apparatus for ionospheric measurements. Radio communication and broadcasting on medium and short waves except for short distances, would be impossible but for the existence of the ionosphere high up in the atmosphere of the earth. The electron densities and heights of those layers vary according to the time of the day, the season and the sunset cycle. To ensure reliable radio communication at different frequencies and over different distances, a knowledge of these is essential.

A manually operated pulse apparatus, operating directly off the alternating current supply mains is being developed to measure the penetration frequencies and virtual heights of the different layers of the ionosphere. The construction of the apparatus is being completed and it will have a range of 2.5 to 16 megacycles per second.

Rounding up of Delinquent Juveniles in Vijayawada Town

During July and August 1950, there were a series of house breaking cases in Vijayawada Town during the daytime between 11 a.m. and 7 p.m. Locked houses and shops were broken open and article like stoves, timepieces, cigarettes, soaps and towels were stolen.

An Accountant in the Electricity Department locked his house and went to his office at 11 a.m. On his return home at 2-30 p.m., he found the doors ajar and his trunk ransacked and the contents, a silver *chembu*, woollen and silk clothes and timepiece removed.

The proprietor of a dhobi shop locked his shop and left for the river early in the morning. On his return at 3 p.m. he found the door of his shop open and a bundle of 36 clothes stolen.

The Office Superintendent of the Warden Insurance Company living alone without his family, left his house at 11 a.m. having locked the door, and at 11-45 a.m., he learnt that his house was broken open and a new stove which was inside stolen.

At 7 p.m., a sundry shopkeeper at Vijayawada closed his shop and went away. On his return to the shop at 9 p.m. he found the lock removed and cigarettes worth Rs. 20, soaps worth Rs. 40 and a towel with *sikakhai* packets have been stolen.

A clerk in the Co-operative Stores at Vijayawada had left for Narasaraopeta locking his house. On his return later, he found the lock missing and the door bolted from within. A timepiece and three umbrellas were stolen.

The Sub-Inspector of Police, Central Crime Station, Vijayawada, on receipt of reports about the cases mentioned above, made diligent enquiries and finally discovered that these offences were committed by a set of local juveniles, Bandaru Venkateswaralu and four others. The stolen articles had been disposed of at random at very low prices. The Police lost no time in tracing the receivers of stolen properties, and soon recovered some of the articles from them. In two of the cases, a relative of one of the accused who had purchased a stove and two timepieces, threw them into the Bandar Canal when she learnt that the accused was caught. The articles were fished out of the canal by the Police.

The *modus operandi* adopted by the gang was "lock breaking." The members of the gang used to operate between 11 a.m. and 4 p.m. when the male members were absent from the houses either to office or on business work and when ladies were taking a nap, and traffic in the streets was negligible. Venkateswaralu, an adept at

Corruption Among Government Servants

During the month of September 1950, corruption among Government servants was brought to notice against 327 persons including those against whom proceedings were pending at the end of the previous month. Of these, 17 persons were let off as charges against them were not proved and proceedings against 302 were pending at the end of the month. Corruption was successfully detected in the case of the remaining eight persons and they were suitably punished. Of these, one was awarded a minor punishment. The names and designations of the seven persons who were awarded severe punishments are as follows:—

Cases dealt with by the Tribunal—

A.—Gazetted Officers—

1. T. Ramaswami Mudaliar, Officiating Assistant Engineer—Compulsorily retired.

B. Non-Gazetted Officers—

2. A. Kothandaram Naidu, Port Conservator—Removed from service.
3. C. Subramaniam Pillai, Port Conservator—Dismissed.

C. Inferior servants—Nil.

Cases dealt with by Departmental Authorities—

A. Non-Gazetted Officers—

4. R. Srinivasan, Upper Division Checking Inspector, City Rationing Office—Discharged from service.
5. J. G. Eagen, Foreman-cum-Sergeant, Madras Electricity System—Discharged from service.
6. T. Muthukrishnan, formerly Revenue Inspector, Perianaickenpalayam Firka, Coimbatore Taluk—Dismissed.
7. M. V. Zackariah, Forest Guard—Dismissed.

B. Inferior servants—Nil.

breaking locks, used to post two of his associates at the two ends of the street to keep a watch with instructions to whistle at the approach of any person. He and one of his associates would enter the marked house and commit theft. Another associate would sleep outside the front threshold of the house to ward off any suspicion of the passers-by, who may move on under the impression that he was keeping watch over the house.

All the five persons were charged before the Additional First-Class Magistrate, Vijayawada, and convicted. Three of them were sent to the Certified School, Tanjore, for being detained for a period of three years while the two others were let off on probation on their parents' giving a bond for their good behaviour.

After the rounding up of this organization, there has been a marked fall in the number of house-breaking cases in Vijayawada Town.

Examination Proposed to Regularise Services of Temporary Government Staff

The Government of Madras have decided to hold special competitive examinations for the regularisation of the services of all temporary staff in government service who have put in on October 1, 1950, at least one year's service—which need not necessarily be continuous—and who were on duty on October 1, 1950.

The Government during the period of the last war and even after, owing to an unprecedented expansion of the departments and due to non-availability of candidates selected for regular appointment, had to appoint a large number of persons, estimated at 5,000 in all, under the emergency provisions, as clerks and typists in the Madras Secretariat Service, the Madras Ministerial Service and the Madras Judicial Ministerial Service. These temporarily employed persons have been in service for periods ranging from a few days to four years and above. The Government consider that it will be somewhat hard to throw such a large number of persons out of employment though under the rules they have to be replaced by regular selected candidates. After examining the question of regularisation of these temporary candidates, in all its aspects, the Government have decided to hold special competitive examinations and regularise those who are successful in the special examinations.

The examinations will comprise two papers of three hours' duration. One paper will contain questions in composition, essay and precis writing and the other will contain questions in general knowledge comprising matters of political, social, economic and scientific interest. The papers will be in English.

The examination for persons employed in posts in the Ministerial Service, etc., for which the qualification prescribed is S.S.L.C. will be of the S.S.L.C. standard, and that for those employed in posts in the Secretariat, etc., for which the qualification is a University degree, will be of the B.A. standard.

Control Orders in Force

In continuation of the list of Control Orders in force on October 1, 1950, published in the January 1951 issue of *Madras Information*, the following orders are appended as a supplementary list:

FOOD AND AGRICULTURE DEPARTMENT Madras Kerosene Control Order (1947)

The Madras Kerosene Control Order (1947) has been rescinded.

Madras Manure Dealers' Licensing Order (1949)

An amendment issued on November 25, 1950, lists the names under which manure materials are sold and the definitions implied in the sale of manure articles against those particular names, and notifies that the sale of an article under any of the defined names shall constitute a warrant that it accords with the implied definition. Further, the particulars of the implied definition should be marked on the manure bags, in addition to the name under which the manure is sold, the gross weight and the name of the manufacturers.

An amendment issued on December 29, 1950, gives the enhanced rates per annum of licence fees for the different classes of licensees.

Another amendment dated December 29, 1950, explains that: (1) In cases where a mixing or millers' licence has been obtained, no other licence under the Order is necessary; (2) Mixing or millers' licence will have to be taken by the licensee in respect of each centre where mixing or crushing is carried on; and (3) In the case of manure mixtures, a non-recurring fee of Rs. 50 for each mixture shall be payable. If the analysis of any mixture is changed, it will be regarded as a new mixture for the purpose of this Order and a fresh registration fee shall be payable.

Madras Foodgrains (Intensive Procurement) Order (1950)

An amendment issued to the Madras Foodgrains (Intensive Procurement) Order (1950) on December 2, 1950, omits the words, 'or repayment of loan in kind' in sub-clause (1) and 'or for the repayment of loans in kind' in sub-clause (3) (1) (6) of clause 3 of the Order.

Provision was made in the Intensive Procurement Order to the effect that producers who among other methods received foodgrains as repayment of loans in kind should sell the surplus of such grains to the agent appointed by the Collector, and that in determining the surplus with producers, the quantity required by them to repay loans in kind should be deducted. These Provisions were intended only to meet such liabilities that existed at the time the Intensive Procurement Order came into force and not to allow such liabilities being contracted after that Order came into force, and the amendments were therefore issued.

By an amendment issued on December 11, 1950, the Madras Foodgrains (Intensive Procurement) Order (1950) will also apply to Coimbatore District.

Madras Foodgrains (Levy Procurement) Order (1950)

The Madras Foodgrains (Levy Procurement) Order (1950) for Coimbatore District, in so far as it applies to paddy, rice and millets, has been rescinded with effect from December 11, 1950.

Brown Coal in South Arcot

By Sri H. K. GHOSE, M. I. M. E., M. M. G. I., Officer-in-charge, Lignite Investigation

King Coal still reigns supreme over the destiny of nations. Though various means of power development have been discovered, yet coal remains the main source for generation of motive power. Coal, iron and liquid fuels are essential for the industrial and consequently the economic development of any country. Therefore, they also play a very important part in its potential political strength. India is very favourably placed with regard to its iron ore deposits; but though it has extensive coal deposits, it is not so favourably placed with regard to its metallurgical coal resources. The iron ore resources of the Indian Union may last for over 2,000 years but its known metallurgical coal reserves may not last over 50 years. India is rather poor in its oil resources. The only oil resource of India lies in Assam near Digboi.

The State of Madras has two large deposits of iron ore, one at Sandur (formerly Sandur State, now merged in the State of Madras) and the other at Salem. The Sandur ore is of good quality but the Salem iron ore deposit, though extensive, is of inferior quality. Unfortunately, South India is devoid of any coal resource except probably a small patch in the Godavari Valley, adjoining the Hyderabad State. Lignite, however, has long been known to occur in many parts of the State of Madras. Excepting some good coal in the Ruhr, Germany also does not possess much good coal. It has, however, large deposits of Lignite which they call *Braunkohle*. Germans have also got no good deposit of either iron or oil as well. But they have developed coal chemistry to such a high degree and perfection that the pre-war economy and potential military strength of Germany depended on the mining and recovery of by-products of Lignite.

What may promise to be the biggest and richest Lignite field in India has been discovered in South Arcot District of the State of Madras. The present explored field lies about 11 miles east of the town of Vriddhachalam and about 20 miles south-west of Cuddalore. This field has not been fully explored yet. The known extent covers over 100 square miles. The explored area is over 16 miles in length and six miles in breadth, the present investigation centre being situated near Neyveli Railway Station on the Cuddalore-Vriddhachalam branch line of the South Indian Railway.

"Immature Coal"

Lignite is an interesting member of the Coal family. Lignite is also known as "Brown Coal". It may also be called an "Immature Coal", the process of coalification having been arrested early in its growth for geological reasons. Lignite possesses all the properties of coal, may be probably some more, as some of the valuable ingredients which are not found in coal are found in Lignite.

Coal is the carbonised remains of ancient vegetation which, according to different schools of thought, are supposed to have either grown and sunk at the places coal is now found or were brought down either by the agency

of water or ice from another part and deposited in slowly sinking earth surfaces which thus acted as the receptacles for deposition of the coal fields. Coal, like a full grown man, had to pass through various stages of life. With the presence of vegetable matter under shallow water started the birth and growth of coal. It may be interesting to note here that it took about 20 million years for coal to grow to its full stature.

Decomposition of the vegetable matter under water, out of contact with air, formed a pulp known as "Peat". The "Peat-to-Coal" formation is yet a controversial theory and it will suffice for our purpose now to know that "Peat" became Anthracite, as it got covered up by sand and silt with the substance of the land surface on which the vegetable matter was deposited.

Analysis and Uses

Only a qualified chemist can tell us, after detailed analysis, exactly what by-products and what quantities of each can be obtained from South Arcot Lignite, but the following are mainly suggestions culled from recent work on Brown Coals and Lignites. Samples of Lignite should be subjected to thorough Ultimate, Proximate and Microscopic analysis and to the method of "Rational" analysis as devised by Francis and Wheeler.

A few items of uses of Lignite are enumerated below:—

- (1) Can be used raw—
 - (a) For generation of power—in gas turbines;
 - (b) In industrial boilers, either step-grate boilers or mill-fired boilers; and
 - (c) As a soil improver;
- (2) Can be briquetted and used in hand-fired industrial boilers;
- (3) Can be used for manufacture of plastics after suitable treatment, depending on the percentage of phenolic constituents;
- (4) May be subjected to destructive distillation, i.e., high temperature or low temperature carbonisation and hydrogenation to produce motor benzol and other light and heavy oils;
- (5) May be subjected to oxidation to produce various acids, viz., (a) Acetic; (b) Oxalic; (c) Benzoic; (d) Carboxylic; etc.;
- (6) The tar obtained can be subject to various treatments to yield 1,001 by-products;
- (7) May be used for the extraction of Montan Wax, depending on the Bitumen content of the Lignite;
- (8) May be chlorinated or oxidised with Nitric Acid to produce tanning materials;
- (9) The Humic acid and Ulmins can be nitrated and after reduction to amino form can be diazotised to produce yellow and brown dyes;

(10) (a) Fractional distillation of the tar may produce Xylene; Toluene; etc. (base for Tri-Nitro-Toluid High Explosive)—as also a base for Aniline dyes;

(b) Saccharine (source of greatest sweet);

(c) Various medicines; particularly sulphur group of medicines;

(d) Naphthalene, Creasote, Carboic acid, etc.; and

(e) Fertilizer (Ammonium Sulphate).

Value of By-products

The value of the by-products recoverable from Brown Coal and from Lignite can thus be imagined. South Arcot Lignite, therefore, offers a suitable material for research. In the more advanced countries like Germany, U.S.A., Britain, many necessities of life, both for peace and war, are being recovered from the carbonisation of Lignites, and coal and also from fractional distillation of its tar. Installation of carbonisation and by-product recovery plants (either of the medium or low temperature type) in the coalfields of India is urgently necessary for the advancement of the country to keep pace with others, and to make the nation self-sufficient.

It is imperative, therefore, that the State of Madras should not lag behind to make the best use of its natural resources. The installation of a carbonisation and by-product recovery plant in the Lignite area should not be lost sight of. It may be said with some emphasis that the development of the Lignite deposits of South Arcot deserves equal, if not greater, consideration with the Hydrel and Irrigation Projects of the State. The development of the Lignite deposits of South Arcot forbodes a great future for South India in that it will not only make South India independent of its fuel requirements, but also make it the pride of India when it is able to supply her with some of the vital defence requirements from its by-product factories.

Extraction Justified

(By repeated tests the Lignite deposit of South Arcot has been proved to be of quite good quality to justify its extraction at any reasonable cost.) It can however be safely predicted that even with all the difficulties confronting us, extraction of the Lignite will not be an uneconomic venture. It may be interesting here to note that the landed value of coal from the coalfields of the North costs about Rs. 28 by rail and up to Rs. 55 per ton by sea and rail according to location of the place with regard to rail-head and ports of Madras State.

The political and military strength of a country depends on its industrial progress which again is dependent on its mineral resources. South India is not poor in mineral resources, though, of course, it is wanting in the two essential minerals, i.e., coal and iron. By the adoption, however, of the new processes developed in Germany, for the conversion of non-coking coals, and particularly Lignite, into a metallurgical fuel and the process of conversion of inferior grade iron ores into liquid pig iron by using non-coking fuels in low shaft furnaces (described later), the Lignite deposit of South Arcot and the Iron ore deposit of Salem could probably be utilized to fill up the gap created by the want of the two essential minerals, such as eventually will accentuate the industrial and economic progress of the State. The analytical results of the Lignite deposit

of South Arcot indicate that it is of good quality and is suitable for the purposes mentioned herein.

During the last decade liquid fuels have appeared as an equal partner to coking coal and iron which, till now, held its sway over a country's industrial and economic life. No nation can defend its freedom unless it can obtain liquid motor fuels within its domain.

In the conversion of lignite into shaped metallurgical coke various valuable by-products such as Motor Benzol, Toluene, etc., could be extracted. The various by-products obtained from the distillation of the tar form the foundation stone of a country's defence and the basis of its economic life.

Extensive uses in Other Nations

Peak production of synthetic fuels in Germany, during war period in 1943, was over four million tons. The Allies, therefore, set to work dismantling this potential source of danger from Germany.

Brown Coal is worked extensively in Germany, Australia and U.S.A. By-product recovery plants have also been installed in these countries but Germany leads them all in the line. The Germans have, besides other successful processes, established that it is cheaper to convey town gas in a three-foot diameter pipe over a distance of 150 miles than to convey electric energy over the same distance, provided proper care is taken to prevent leakage.

Australia uses bulk of its Brown Coal production in the generation of Electricity, a part of the production, however, being briquetted for both domestic and industrial use.

U.S.A. however, has concentrated on the production of synthetic fuels. W. C. Shoeder, head of the Office of the Synthetic Liquid Fuels of the U.S. Bureau of Mines—addressing the American Society of Mechanical Engineers recently—said that excluding profit and interest on plant investment, gasoline could be produced from coal at a cost ranging from 9 to 12 cents per gallon. The plant investment would be between 7,000 to 8,500 dollars for each barrel of capacity per day for plants of 10,000 barrels capacity and over, again excluding interest on plant investment and profit.

South Arcot Lignite has been found to contain about 20 to 25 gallons of low temperature tar per ton of dry coal. It has been established in Germany that by the hydrogenation of about 1.2 tons of low temperature tar about one ton of Motor Petrol can be obtained. On this basis about 20 to 25 tons of South Arcot Lignite should yield one ton of Motor Petrol on hydrogenation. Low temperature carbonisation of Lignite is confined to Lignite having a minimum tar content of 10 to 12 per cent. Madras Lignite conforms to this requirement. It may, therefore, be reasonably expected that South Arcot Lignite would be amenable to low temperature carbonisation. By low temperature hydrogenation at 350 degree C it is possible to obtain high yields of Diesel Oil lubricants, etc.

For low temperature carbonisation by some of the patent processes, the moisture content of raw coal has to be reduced to 6-12 per cent before it can be carbonised. Since German Lignites (Brown Coal) contain from 50 to 60 per cent of moisture as mined, South Arcot Lignite stands at a great advantage in this respect. It contains 8-12 per cent moisture, hence extra expenditure on pre-drying before carbonisation may not be necessary.

Processing the Lignite

Briquetting.—Briquetting of the Lignite for both industrial and domestic purposes is practised extensively in both Germany and Australia. About 67 per cent of the Lignite production in Germany and about 25 per cent in Australia is briquetted. The Lignites of both the places, contain 50 to 60 per cent moisture. The moisture content of the briquettes, however, has to be maintained between 13 to 18 per cent. The low moisture content of South Arcot Lignite is a great advantage in this respect too. In briquetting South Arcot Lignite may conform to the following composition:—

Moisture—12 per cent. Ash—6 per cent. F.C.—34 per cent. Volatile—46 per cent. Sulphur—2 per cent and a calorific value of about 11,000 B.T.U. per lb.

Generation of Town Gas.—Besides use of briquettes for domestic and industrial purposes, generation of gases offer another source of energy which can be generated from South Arcot Lignite. It is estimated that South Arcot Lignite will yield a town gas of sufficiently high calorific value which can be piped to Madras, Tiruchirappalli and other neighbouring places for both industrial and domestic uses. It has been proved in Germany that it is cheaper to convey town gas for such purposes in a three feet diameter pipeline for over a distance of about 150 miles than transmitting electrical energy over that distance. The South Arcot Lignite offers a distinct possibility in this direction.

Generation of Electricity.—The further advantage of low moisture content of South Arcot Lignite is that the run of mine coal can be used directly in suitable boilers, without the use of expensive pre-drying mechanisms (as is necessary in the case of German and Australian Lignites containing 50 to 60 per cent moisture as mined) to generate electricity.

Forty-one per cent electricity generated in Germany was obtained by the direct use of Brown Coal or Lignite, in suitable boilers, before the war.

The installed generating capacity of Australia's biggest thermal power station is over 410,000 K.W. It produced 1,503,000,000 Kilo Watt hours during financial year 1944-45.

The power is generated in the State Electricity Commission's Thermal Power Station at Yallourn in the State of Victoria and is transmitted to Melbourne, a distance of about 100 miles, at 132 K.V. on tower lines, and distributed to different parts of the State therefrom.

All this power is generated by the use of Brown Coal obtained from the open cut mines at Yallourn. The Lignite with about 60 per cent moisture are fed by hopper wagons into chutes which in turn feeds step-grate furnaces of the power-house boilers which reduce the moisture content to about 12 per cent before actual combustion takes place under the boiler.

Though the State of Madras has some of the largest hydro-electric installations in India, yet it cannot be called adequate for the growing industrial need of the State. Further, the power is seasonal and wholly dependent on the vagaries of Nature. It is, therefore, essential for the industrial development of the State that it should have a source of steadily increasing power supply to meet the stable Thermal Power Station, with scope of extension, of suitable capacity which can augment the Hydrel supply.

Rural Industrialisation Scheme

A scheme which aims at the intensive development of small-scale rural industries and imparting discipline, habits of self-help and collective effort among the population, will shortly be introduced in two taluks in each of the districts of Nellore and Tiruchirappalli.

The scheme, which the Government have sanctioned as an experimental measure, is based on the one prepared by Sri M. Visveswarayya, President of the All-India Manufacturers' Organization, Bombay, for the industrialisation of the rural areas of the State. The formation of village group units for every 15 to 20 villages with a population ranging between 10,000 to 20,000 and the constitution of village group committees for these units composed of the most competent businessmen and leaders available in the area are also envisaged in the scheme.

These committees will be responsible working agencies which will move among the people and persuade them to give special attention to industries in operation and will maintain a drive to increase production in their area. These committees will be advised and guided by Government in the discharge of their functions. Besides these committees Government have also ordered the constitution of co-ordination committees for each taluk, whose function will be to review and guide properly the activities of the group committees.

Pulverised Fuel Firing of high capacity boilers with friable coal and particularly with inferior coal has long been known to the engineers. Lignite would be a very suitable fuel for the purpose. In Germany many industrial boiler installations are worked on the Mill Firing process using Lignite (better known in Germany as *Braunkohle*) as a fuel.

But what promises to outbid the above developments is the recent research of using coal and Lignite in place of oil in gas turbines for generation of power and even working locomotives.

Source of Montan Wax

Montan wax.—One very important information given by Dr. B. S. Srikantan is that South Arcot Lignite contains, besides other very valuable constituents, from 20 to 60 per cent of "Montan wax" as against a maximum of 12 per cent in foreign Lignites. Montan wax, besides its other valuable uses, is an essential material for the explosives industry and the electrical industry, both of which are again essential for a country's security.

Before the first World War Britain was obtaining Montan wax requirements from Germany, who, besides extracting Montan wax from the Brown Coal (Lignite) deposits of the country were extracting various valuable by-products, viz., Motor Benzol, Toluene, etc., needed for both peace and war.

The ash and moisture content of South Arcot Lignite is fairly low, which makes it suitable for manufacture of briquettes for industrial and domestic use, after extraction of the very valuable bye-products it contains.

In South Arcot, the bed of Lignite is fairly thick and continues over an extensive area. Good quality pottery clays occur both above and below the Lignite bed. The top layer of the clay, therefore, could be extracted without fear of contamination by the Lignite. There is also a layer of oily clay below the bed of Lignite. This clay may also be a source of some Montan wax as in Britain.

As Metallurgical Coke

Another important information which has also been to hand recently is that Lignite can be processed to serve as a metallurgical coke. We were informed by the Czech Mission that Lignite could not be used as a metallurgical fuel. But the present information belies their suggestion. In Germany a process of manufacturing liquid pig iron without the use of metallurgical coke has established itself as a commercial process. This revolutionises the manufacture of pig iron.

The conventional process of iron making in shaft blast furnaces requiring a high quality metallurgical coke made the smelting of iron a practical impossibility in areas where no coking is available. Various processes have been developed to overcome these difficulties, of which the following processes have been used on a commercial scale:

(1) The Swedish Wiberg Process; (2) the Krupp-Ren Method; and (3) the Sturzelberger Process.

Of the above the Sturzelberger Process seems to be best suited for the manufacture of pig iron from the ores available within the State by means of South Arcot Lignite.

The Sturzelberger Process is a small-scale operational method which has successfully established itself in Germany as a manufacturing process for making liquid pig iron without the use of metallurgical coke.

The average capacity of a unit is about 100 tons of pig iron per day. A plant for this yield may cost about rupees 18 to 20 lakhs at present.

Summary of Uses

The probable uses to which South Arcot Lignite may be put to may be summarised as follows:

- (1) Generation of Electricity directly.
- (a) as mined or (b) in Briquetted form or (c) in pulverised form.
- (2) Use in industrial boilers—preferably in Briquetted form.
- (3) Extraction of synthetic fuels, lubricants and other bye-products like:
 - (a) Toluene, Xylene; etc., (b) Montan Wax; (c) Tar; and (d) Pitch, etc.
- (4) Generation of town gas of fairly high calorific value.
- (5) Manufacture of shaped metallurgical coke for smelting of iron, etc.
- (6) Fertilizer, etc.

Gold Bearing Regions South of Kolar

Sri S. Krishnaswami, Geological Survey of India Government of India, has after a geological survey of the gold bearing region south of the Kolar Gold Fields, submitted a report on the occurrence of gold in the different portions of that region. A summary of his report is published for the information of the public.

The region under survey is the southern extension of the well-known Kolar Schist belt which extends for about 15½ miles to the south of Yerrakonda region and includes parts of Chittoor and Salem Districts. The gold-bearing rocks form a continuous belt to the north of Yerrakonda. But on approaching the Madras frontier, this belt splits into smaller branches. One of the main branches runs east as far as Maradapalli and another runs west for a short distance and then turning south, runs past the Adakonda hills and ends near Virupasamudram. The main folds of the Kolar belt are the Eastern or the Yerrakonda fold, the central or the Bisanattam fold and the western or the Malappakonda fold. As a result of the analysis of the various samples of rocks collected from different places in this region, it has been found that barring a strip of of the Bisanattam fold between Rani's Shaft and Kudithannappagramapalli, there are no large economic deposits of gold.

The author has concluded that the only paying deposits which could be worked by any undertaking with a moderate amount of capital occur within the limits of the Bisanattam camp between the Madras frontier in the north and Kudithannappagramapalli in the south. He has further stated that the quartzite rocks of Gowdasannie contain a moderate quantity of gold and that though the deposits are limited, at the present ruling price of gold small capitalists may find it worthwhile to work them.

Water-cess for Kattalai High Level Channel Areas Revised

The Government have passed orders revising the rates of water-cess for the area under the Kattalai High Level Channel including the area under the South Bank Canal and Sricamasamudram Canal in the Tiruchirappalli District.

In August 1949 the Government with effect from Fasli 1359 restored the original rates of water-cess applicable to the area under the Kattalai High level Channel in the Tiruchirappalli District namely Rs. 15 per acre for the first irrigated crop with corresponding rates for other irrigated crops. Subsequent to the restoration of old rates the Government were in receipt of various representations after the consideration of which they have decided on the reduction of the rates of water-cess as follows:—

First crop.—Dry: Rs. 10, Manavari: Rs. 9, Ryotwari the wet assessment, Proprietary wet and minor inam wet: Rs. 7-8-0.

Second crop.—Dry: Rs. 5, Manavari: Rs. 4-8-0, Ryotwari wet Proprietary wet and minor inam wet: Rs. 5.

Third crop.—Dry: Rs. 2-8-0, Manavari: Rs. 2-4-0, Proprietary wet and minor inam wet: Rs. 2-8-0.

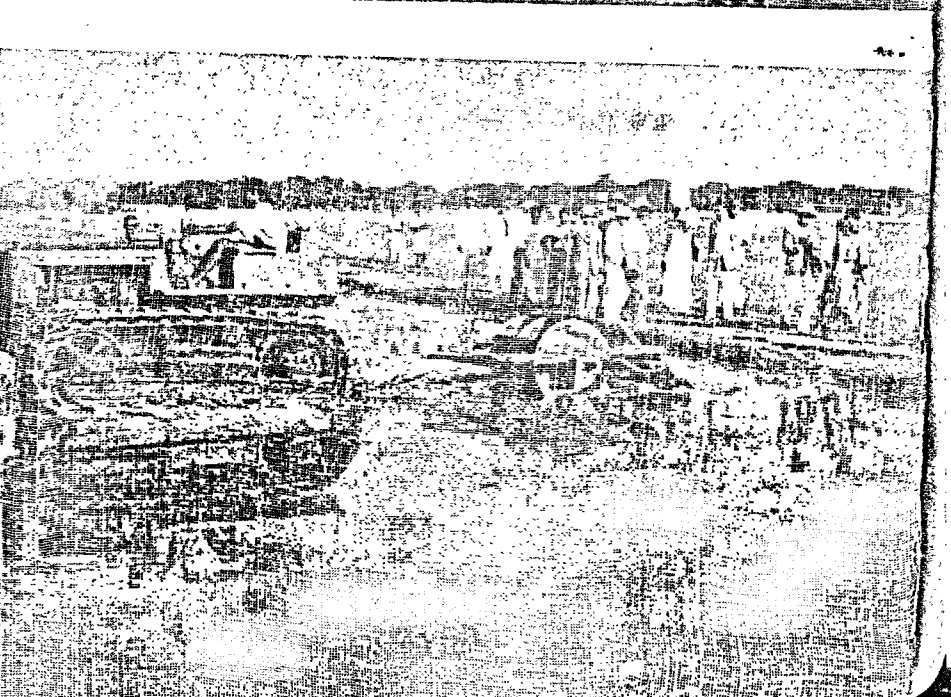
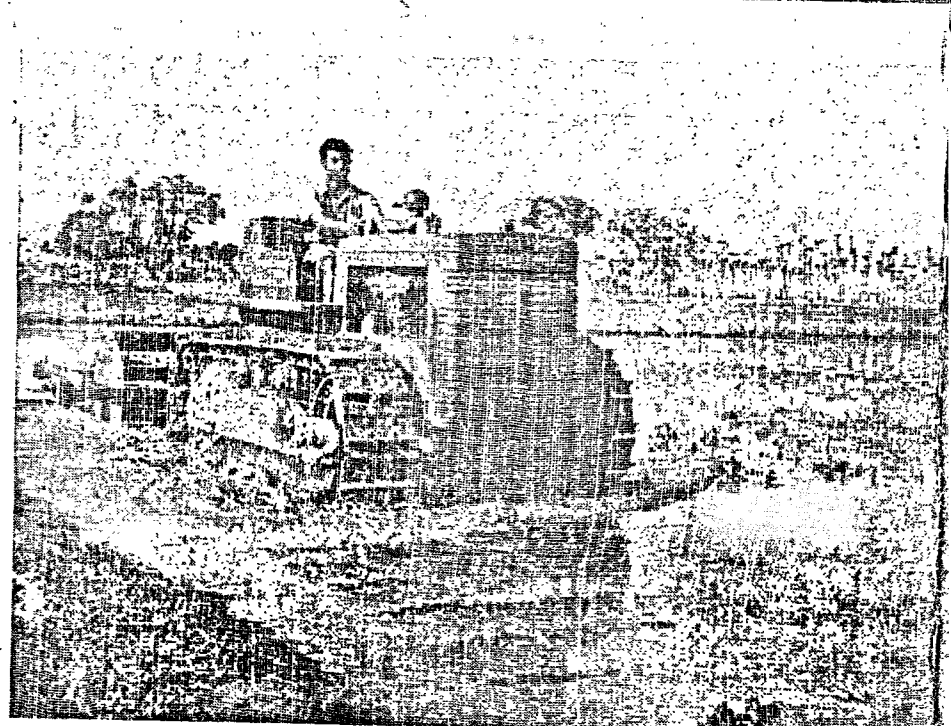
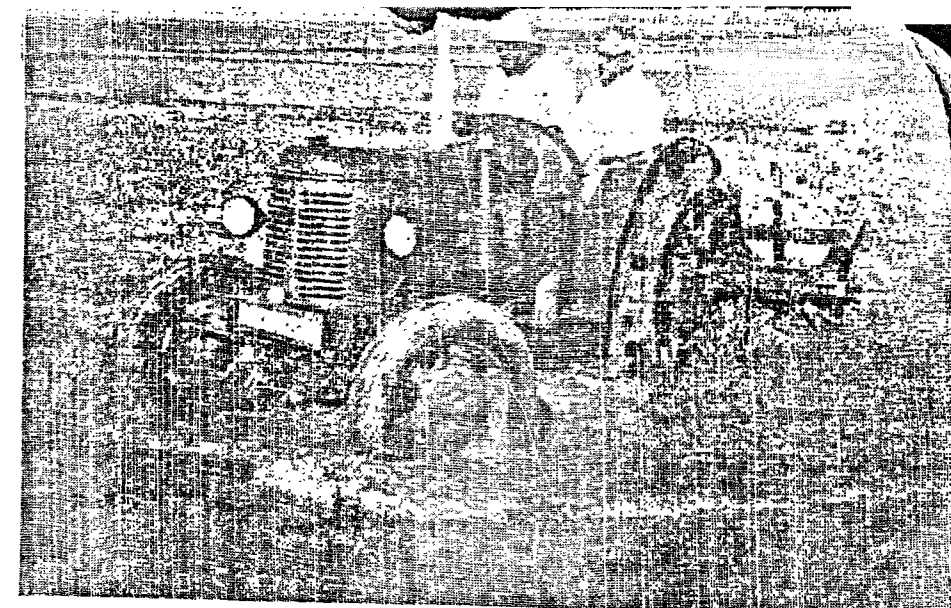
Mufassal crop.—Dry: Rs. 15, Manavari: Rs. 13-8-0, Ryotwari: Rs. 5, in addition to wet assessment, Proprietary wet and minor inam wet: Rs. 12-8-0.

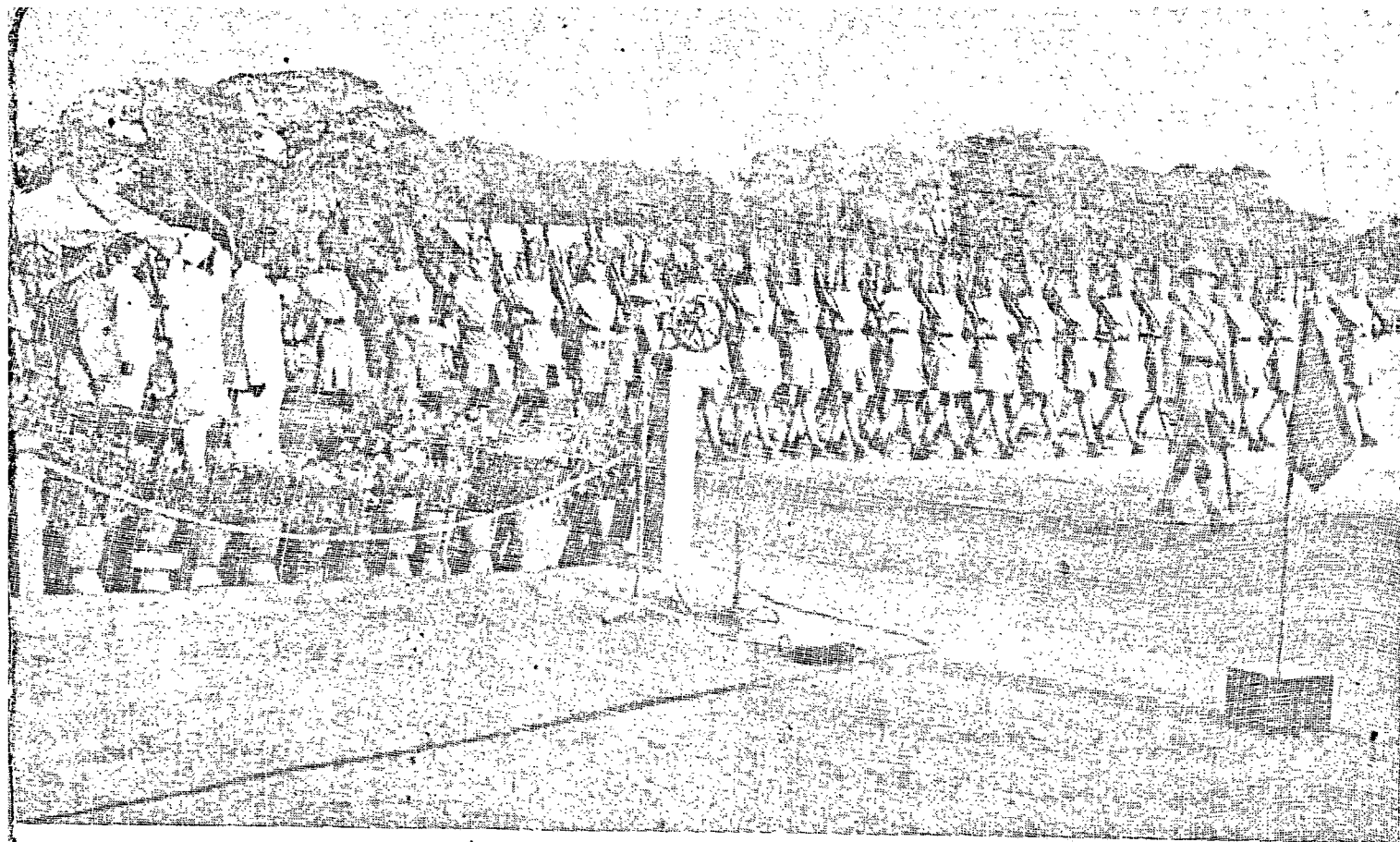
PUDDLING WITH TRACTORS IN WET LANDS

A series of demonstrations of puddling by tractor were held recently on a Chingleput rice field by Sri C. P. Raju, Research Engineer, Coimbatore, in the presence of Sri A. B. Shetty, Minister for Agriculture, the Commissioner of Food Production, the Director of Agriculture, and other officials.

Due to severe drought conditions, the hard, dry Chingleput fields cannot normally be tackled by bullock power for paddy crop transplantation without at least 6 to 9 ploughings. Tractor puddling with implements specially designed by the Research Engineer gave depths of 4 to 5 inches on an average. The tractor puddling costs range from Rs. 7 to Rs. 9-8-0 per acre, compared to Rs. 35 per acre by bullock power.

The puddling was done with three types of implements modified from simple Indian implements, fitted to tractors: A set of wooden country plough wedges, nine mild steel wedges, and a six-bladed 2½ foot diameter rotary puddler.





POLICE PARADE H.E. the Maharaja of Bhavnagar, Governor of Madras, taking the salute at the March Past of the Police at the parade held recently in Madras

H.E. the Governor presented Indian Police Medals for gallantry to the constables. Pictures show H.E. pinning the medal, and the decorated constables Murugappa Naicken and Avitkara House Choyee. The constables of the Special Armed Police Unit, 1st Battalion, were awarded the gallantry medals for effectively tackling a party of raiders in Singavaram Village on the border of Hyderabad State in July 1948



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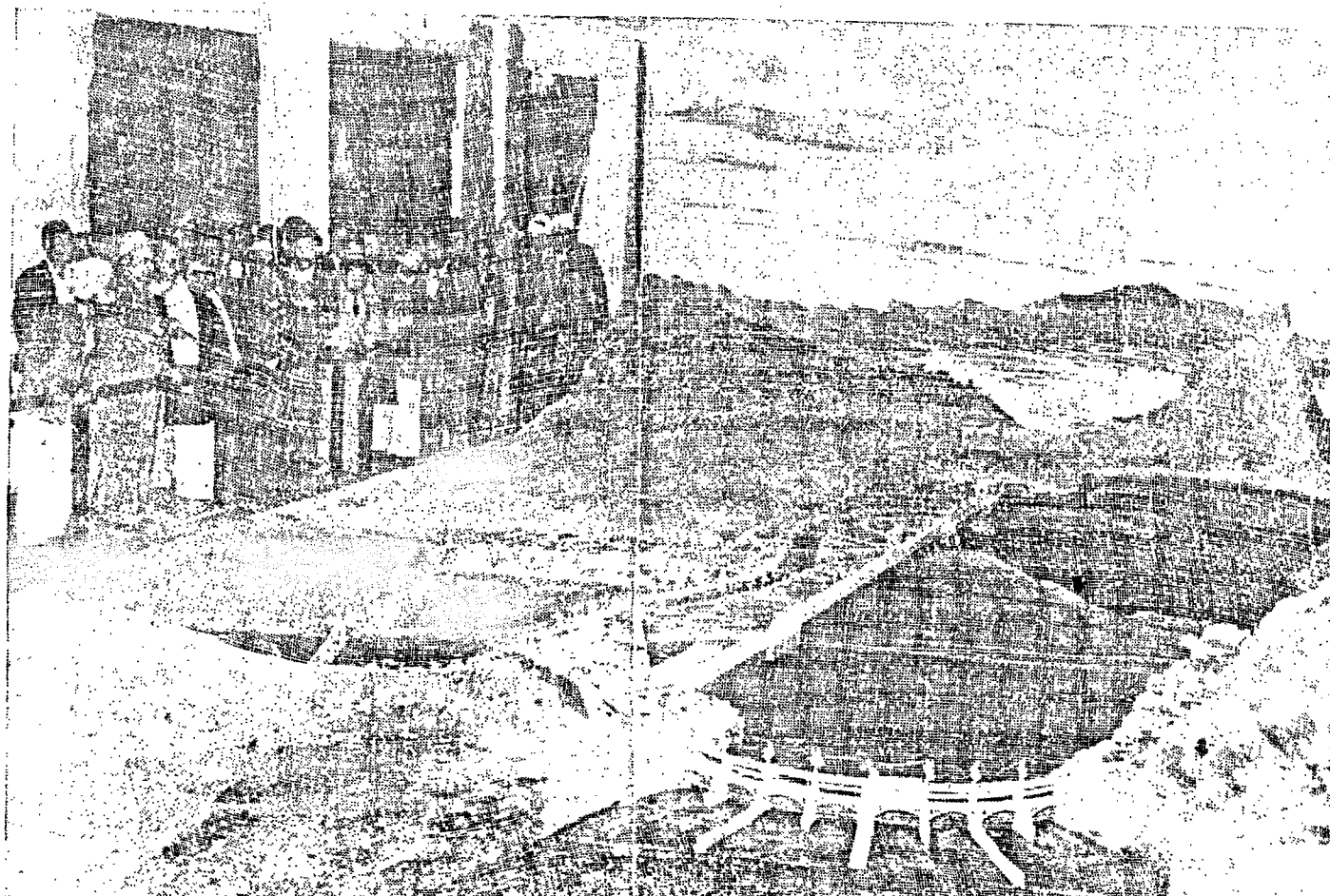
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Sri P. S. Kumaraswami Raja, Chief Minister of Madras, addressing a Conference of the Representatives of Primary Land Mortgage Banks.

Sri M. Bhaktavatsalam, Minister for Public Works, and Sri A. R. Venkatachari, Chief Engineer for Irrigation, view models of the Cauvery Basin and Mettur Reservoir, displayed at the International Congress on Dams, recently held in New Delhi.



Land Mortgage Banks

By SRI P. S. KUMARASWAMI RAJA, Chief Minister of Madras.

The Land Mortgage Banking Movement in this State is the best and most flourishing enterprise of its kind in the whole of India. The Central Land Mortgage Bank, during the last 21 years of its existence, has built up its financial strength by the patient and persistent efforts of its Directors supported by helpful Registrars of Co-operative Societies who functioned as the Trustees of the Bank. Its share capital has risen from Rs. 70,400 to Rs. 14,32,300 and the reserves, including the additions out of profits of the year 1949-50, will amount to Rs. 28,25,000. The primary land mortgage banks, too, have progressed rapidly during these 21 years. Their number has increased from 19 to 124, and their share capital and reserves stand at Rs. 30,65,438 and Rs. 7,47,498 respectively. As the Board of Directors have observed in their annual report, "it is a matter for gratification that in spite of the cyclone in the Northern districts and the dearth of rain in the Southern districts, all the Primary Land Mortgage Banks have met their dues to the Central Land Mortgage Bank."

The Central Land Mortgage Bank had some anxiety in finding investors for its 45th series of debentures which were issued at Rs. 99-8-0 for a period of 20 years for Rs. 40 lakhs. One should have thought that these debentures would be readily subscribed in full not only because they are secured by land mortgage and Government guarantee but also because they are secured by the general assets of the Central Land Mortgage Bank. Yet investors who looked for profit did not support the issue; but the co-operative central banks of the State rose to the occasion, true to the co-operative principle that the strong should help the weak in moments of distress. They did not reckon the profits. In a spirit of service to the agriculturists, they underwrote the issue to the tune of Rs. 34-70 lakhs. With the assistance given by the Reserve Bank of India to the extent of Rs. 8 lakhs, the issue was oversubscribed. This episode demonstrated to the world that within the Co-operative Movement, service and not profit, is the motive force.

New Series of Debentures

In the next few months, the Central Land Mortgage Bank may have to float a new series of debentures. I hope that it will not be necessary for them to float the series at a higher rate of interest than the usual three per cent rate. Borrowing at this rate, the agriculturists in the primary land mortgage bank gets his loan at 5½ per cent. The Gadgil Committee on Agricultural Indebtedness was of the view that long-term loans to agriculturists should be given at four per cent interest and the Government of Madras adopted this recommendation and subsidised the Central Land Mortgage Bank so that it might reach the agriculturists in the Ceded Districts with funds at four per cent.

Agriculturists in other districts asked for similar subsidy so that they too might have their loans at four per cent; but Government did not see their way to subsidise them because their economic condition was generally better than that of the agriculturists in the Ceded Districts. It would be contrary to the wishes of the agricultural masses and to the opinion of an Expert Committee if the rate of interest on debentures is put up and the ultimate

borrower is asked to pay more than the present 5½ per cent. I realise that it may be hard to raise cheap money in the market in the midst of the present tightness of the money market.

I hope the Directors of the Central Land Mortgage Bank and the Co-operative Department will be resourceful enough to tap avenues where money can still be found. They should take heart from the fact that even the 45th series of debentures was subscribed by the general public to the extent of Rs. 3-72 lakhs.

Reduction in Rates of Interest

This brings me to the question as to why the Central Land Mortgage Bank should finance well-to-do agriculturists at a moment when the Bank finds it difficult to raise debentures at a cheap rate of interest. Till the year 1944, the Bank was lending to agriculturists only up to Rs. 5,000 and in rare cases up to Rs. 10,000. In that year, the Government permitted the Bank to lend up to Rs. 15,000 because it had enough money to spare. Considering the present change of circumstances, it may be worth while to stop sanctioning loans exceeding Rs. 5,000 until such time as debenture money can be found easily. To secure ample money for the richer agriculturists by putting up the rate of interest on the debentures will hit the humbler agriculturists hard if their requirements can be found at the existing rate of interest.

Let us not forget that the most important contribution of the Co-operative Movement to the State is the reduction in the general rate of interest to the agriculturists on account of the low rates the co-operative charged for their loans. Besides, there has been a progressive reduction in the rate of interest charged by co-operatives, whether for short-term loans or for long-term loans, and it would be a retrograde step if we are to go back on this achievement.

Principle of Self-help

Probably a direction in which help can be found for maintaining the rate of interest at three per cent is another principle of co-operation, the principle of self-help. Loanable funds may very well be found within the Land Mortgage Bank movement itself. Out of Rs. 30,65,438 which the primary land mortgage banks hold as share capital, they have invested only Rs. 14,42,100 as share capital in the Central Land Mortgage Bank. The bulk of the rest has probably been given as loans by the primary land mortgage banks themselves, and some part may be kept on their investments. The recent amendment to the Land Mortgage Banks Act whereby all the mortgages obtained by the primary land mortgage banks will *ipso facto* become mortgages to the Central Land Mortgage Bank, will tend to prevent the primary land mortgage banks from lending out their funds themselves and divert them as share capital into the Central Land Mortgage Bank.

If in addition, the proportion between the share capital and loans to primary land mortgage banks is raised from five per cent to ten per cent at least in respect of loans exceeding Rs. 1,000, the shares in the Central Land Mortgage Bank

will increase by about at least Rs. 10 lakhs every year. The ultimate objective should be that the Central Land Mortgage Bank should find the bulk of the funds it requires from its own capital. Efforts in this direction of increasing the share capital in the Central Land Mortgage Bank will not only add to the loanable funds of that bank but will also promote thrift in the countryside and bring more rural savings which are so necessary for curtailing inflation.

Classes of Shareholders

This point about share capital brings me to the question of the two classes of shareholders which the Central Land Mortgage Bank has. Only 124 of the shareholders are primary land mortgage banks, while 499 are individuals. The Co-operative ideal is that a central financing organization should be composed if not exclusively of affiliated societies, at least predominantly of such societies. From the co-operative point of view, the individual shareholders of the bank are far too many. I realise that it will be hard to eliminate them all on a sudden, but it would be a wholesome policy if the Central Land Mortgage Bank could put a limit at the present number of 499 individuals and stop admitting fresh individual members.

By degrees, they may eliminate the individual shareholders by transferring all their shares to primary land mortgage banks as and when they become available. This is the policy adopted by the Madras Provincial Co-operative Bank and I am sure it will be welcomed by the primary land mortgage banks. By this process of elimination the bank will become more and more their own.

Yadlapalli Multipurpose Co-operative Society

The Yadlapalli Multipurpose Co-operative Credit Society was registered on 29th May 1942 and was started on its work on 10th June 1942, with 16 members and with a share capital of Rs. 92. Its area of operations extends over the village of Yadlapalli and its hamlet Dundepalem, which is within a distance of one mile. The authorised share capital of the Society is Rs. 5,000 while the maximum borrowing power of the Society is Rs. 60,000 and the individual maximum borrowing power is Rs. 2,000. The Society has to date 31 members with a paid-up share capital of Rs. 1,130.

The Society was converted into a Multipurpose Co-operative Credit Society. The Society applied for a cash credit loan of Rs. 25,000 in its panchayat meeting of 30th July 1950.

The Society was selected for the distribution of chemical fertilisers to ryots during the year 1950-51; as such the Society purchased 31½ tons of Ammonium Sulphate for Rs. 11,337 and nine tons of superphosphate for Rs. 2,186. It distributed the stock of 31½ tons of Ammonium Sulphate and nine tons of superphosphate to 213 ryots for Rs. 13,595, and earned a gross profit of Rs. 435. The Society was also selected for distribution of iron and steel implements and the Society was allotted to Chebrolu Firkha for the distribution. The Society purchased 11½ tons of iron and steel tyres for Rs. 4,204-8-0 and distributed to 110 ryots of 21 villages. Out of the purchased tyres the Society sold the iron and steel tyres for Rs. 2,871, earning a gross profit of Rs. 270. Still there are 133 tyres unsold worth Rs. 1,603. Arrangements are being made to issue agricultural loans to the members and also to admit more members, thereby raising the share capital.

Edayapalayam Multipurpose Co-operative Credit Society

The Edayapalayam Multipurpose Co-operative Credit Society in the Coimbatore District was registered on 19th March 1947 and started on work on 27th April 1947. It is affiliated to the Coimbatore Co-operative Union for the purpose of supervision. The Society has 56 members on its rolls with a paid-up share capital of Rs. 3,340. On 30th November 1950 a sum of Rs. 9,250 was outstanding under loans against members. During 1949-50 the Society issued a sum of Rs. 15,400 in 72 loans to its members for productive purposes. Its maximum borrowing power is Rs. 20,000.

By-laws relating to social and recreational activities have been adopted by the Society. The Society has bought first aid set for free distribution of medicines among members and non-members.

The Society has agreed to bring under plough 7-76 acres of Government poramboke lands under the scheme of intensive cultivation of food-crops, provided the lands are assigned to it. The question of assignment is pending with the Revenue Divisional Officer, Coimbatore. The Society has also amended its by-law 2 (8) "for undertaking manufacturing and sale of jaggery on an agency basis without any financial commitment to the Society." Three ex-tappers were newly admitted in this Society.

The Kambayanatham Multipurpose Rural Credit Society

Kambayanatham is one of the villages in Saliyamangalam Firkha Development area with a population of 3,125. The Kambayanatham Society was registered on 18th May 1921 and commenced work on 8th October 1922.

Today there are 137 members on the rolls with a paid-up share capital of Rs. 1,352. The net assets of the members amount to Rs. 2,44,958 and the maximum borrowing power of the Society is Rs. 6,000 at present. Due to the increase in membership and to meet the financial demand of the members, the Kambayanatham Society has resolved to enhance its maximum borrowing capacity to Rs. 10,000. A member can borrow up to Rs. 500. The Society had advanced loans to its members to an extent of Rs. 6,901, while the amount due to Central Bank amounts to Rs. 4,881. The Society has got a reserve fund of Rs. 1,825-13-0 out of which a sum of Rs. 689-2-0 has been invested in the Co-operative Central Bank, Limited, Kumbakonam. The Society has taken ten shares in the Central Bank to a value of Rs. 500.

Chemical fertilisers worth Rs. 469-13-6 have been purchased jointly and distributed among its members during the season. Agricultural implements such as cart-tyres and spades were purchased and sold to its members for Rs. 193-4-6 under joint purchase and sale system. Ground-nut cakes, cotton seeds and such other day-to-day requirements of the peasants are made available to its members by this institution. The members of the Society have formed into a sangam and have proposed to construct a community centre and instal radio set to educate the rural public of this area and the villagers have come forward to contribute generously for this purpose.

Social Welfare Through Co-operation

By SRI S. R. VENKATARAMAN, B.A., B.L., Member, Servants of India Society.

Whether it be the question of the resettlement of the ex-military men by fitting them to civilian modes of life, or the tackling of the acute food shortage problem with its concomitant of procurement and rationing, and distribution and storage, or finding alternative employment for ex-toddy tappers thrown out of employment as a result of the introduction of prohibition, or reviving the villages through the Firkha Development scheme and the multipurpose co-operative society, the Government of the various States in the Indian Union have demonstrated the full possibilities of the co-operative method by exploiting to the utmost extent possible the great forces underlying the philosophy of the co-operative movement for organising the social, economic and the cultural life of the people concerned.

But unfortunately, co-operation in India has not registered the same progress as in other countries. The reasons for this are not far to seek. The illiteracy of the masses, the *laissez faire* policy of the Government, the narrow ambit within which the co-operative movement was permitted to function and the absence of the right type of leaders to man the co-operative institutions, have militated against the progress of the movement. Now we have reached a stage when efforts should be made by every one, whether official or non-official, whether politician or social worker, to harness the co-operative principle and analyse it in such a manner as to fertilise every field of human activity and produce results calculated to enrich every aspect of human life. No longer can a co-operative society be content with providing only credit facilities or distribution of the daily necessities or facilities for purchasing the daily requirements of the members of a co-operative society. Co-operation must embrace every aspect of an individual's and nation's life.

In Western Countries

In Western countries the co-operative movement has not touched the economic life of its members alone. It has permeated into their social, culture and education fields as well. In England, the co-operative societies are giving liberal financial aid from out of their common good fund for hospitals, convalescent homes, to poor students in the shape of scholarships, for other benevolent institutions engaged in ameliorative work. The life in small industrial towns is enlivened and made bright by the help given by the local co-operative societies to cultural clubs, for concerts and the organization of gala days. There are societies in England which arrange for holiday making for its members and provide recreation clubs, libraries, funeral services etc. It will be interesting to know that co-operative societies in England spend in a year 200,000 pounds or Rs. 30 lakhs.

In America, the development in the co-operative field is still more interesting. The American co-operatives provide health services, medical aid, book clubs, recreational facilities and funeral services for its members. It is said that the co-operative institutions in America are putting into the economic system, a soul which places "service first and profits second".

In Belgium, the co-operative societies, one is surprised to hear, provides pension for its members assessed on the volume of their purchases. Free grant of bread to unemployed and sick members, comprehensive medical help in a well-equipped hospital, payment of maternity and death benefits—the running of a co-operative theatre are other services rendered by the Belgian co-operative societies. "It is shining example of what co-operation can contribute to the various causes of the workers in terms of emancipation."

Co-operation Benefits Community

In Denmark co-operation has many outstanding features which are worth knowing and emulating. "The profits of the co-operative institutions once made, are not distributed merely for the private benefit of the member, but for a variety of praiseworthy social purposes", like the promotion of education, running of a co-operative theatre as in Belgium. In the province of Saskatchewan in Canada, co-operative community halls and other community halls have been organised.

The examples of the western countries mentioned above have opened the eyes of our own Governments and co-operators and they have become alive to the need for canalising the co-operative principle to permeate every field of human activity. The Reserve Bank of India in its review of the co-operative movement in India for the last two years has been stressing the necessity for broadening the basis of the co-operative societies in India and converting all credit societies wherever possible into what are called multipurpose societies. The Madras Government have taken this suggestion and have started several multipurpose societies. The Registrar in his review of the co-operative societies for the year 1948-49, says that 1,271 village credit societies purchased and sold agricultural and domestic requirements of agriculturists to the tune of Rs. 188 lakhs. Some of these societies supply agricultural requisites, collect and sell milk, and promote social and recreational activities.

Conditions and Circumstances

The cautious way in which the Co-operative Department is proceeding with the starting of multi-cooperative societies brings out prominently to light, the absence of the necessary conditions and circumstances in the villages to make the multipurpose societies a success. The members of the society in the first instance must have deep faith in and loyalty for their society. They would not sell their produce to the society, but to some other for immediate cash or for a so-called higher price. Nor would they as a matter of religious duty purchase articles from the society, because they get articles on credit from other shops in the village. Besides, the society must have in stock all those articles in sufficient quantity for a member to choose from.

For this, a society must be able to command the necessary resources, and this cannot be realised unless the Panchayat-dars take the responsibility. But it is a matter for gratification to be told that the Madras Government is keen on starting

such societies so that 50 per cent of the villages and 30 per cent of the rural population may be benefited by such multipurpose societies.

Activities of Multipurpose Societies

Now let us see what are these multipurpose societies.

Just as the village Panchayat is the unit of our civil, political and administrative organisation, the multipurpose co-operative society is the unit for our social and economic organisation in villages. Generally a multipurpose society is expected to deal with the following:—

1. Procuring, grading and storing the village produce.
 2. Processing the articles, such as husking, boiling, etc.
 3. Balanced distribution of the village produce and the imported articles according to the needs of each villager.
 4. Stocking and supplying of the agricultural implements and other implements needed by village artisans for carrying on their occupation.
 5. Stocking and supplying of raw materials like cotton, wool, yarn, metal, etc., for local industries.
 6. The marketing of finished products.
 7. Arranging for the sale or exchange of the surplus village produce for other necessary material goods from outside.
 8. The organisation of important village industries as inter-related co-operative units, so that as far as possible profits and benefits are equitably shared by the village community as a whole.
 9. To make available up-to-date technicians and those with artistic training to village artisans all help and improve their work. The cost of such instruction and supervision should be borne by Government.
- There must be one fully trained co-operative inspector for each firka.

Movement in Uttar Pradesh

Such multipurpose societies have been functioning in the Uttar Pradesh or the United Provinces since April 1947. The object of the societies is to provide the primary needs of the people speedily and to their satisfaction. In addition to the functions of the multipurpose co-operative societies mentioned in the previous paragraph, the multipurpose societies in the U.P. were interested in better farming,

dairying, spinning, weaving, organisation of cottage industries, and distribution of consumer goods. "A compact block of 15 to 20 villages round about each seed-store of the Agricultural department of the Government in the district will be selected for the organisation of societies of each block will in due course have a development union which will take over the seed-store, will have a godown and will stock implements, charkas, consumer goods, etc., for distribution among members."

The results achieved by the U.P. multipurpose societies are interesting. "The number of blocks selected for development during 1947-48 was 909 and the total number of villages in them was over 14,000. In 4,000 of these villages, co-operative societies of the old type were functioning. These societies were reorganised into multipurpose societies and new societies were organised in the remaining 10,000 villages. As a rule no society was registered unless about 70 to 80 per cent of the families in the village joined the society." "During 1947-48 there were 15,894 multipurpose societies in the U.P. with a membership of 3.85 lakhs and a working capital of Rs. 1.67 crores." The Reserve Bank of India in its review of the co-operative movement in India for the year 1946-48, observes that "the working of these societies shows general improvement in most directions and indicates the shifting of emphasis from the credit to non-credit side."

Objects and Functions

The object of the multi-purpose society is that it must touch every aspect of the members and villager's life and be in a position to undertake the functions which co-operative societies in western countries are discharging. Health and medical co-operatives may be started to serve the needs of the middle classes in urban and the villagers in rural areas. In Ceylon such a co-operative society has been functioning for the last fourteen years. Here is a field which is virgin and can be exploited by special workers in towns and villages.

Again, more and more we have to fall back upon the co-operative method for all our social welfare activities such as housing, which has a vital problem so far as the health of the people in towns and villages are concerned. The State Governments, industrialists and individuals can all work in this co-operative field for the creation of a new social order. Those who shoulder the responsibility of building up a new countryside will have the satisfaction that they have done a noble and lasting piece of social work.

Sri K. Chandramouli, Minister for Local Administration and Co-operation, and Sri A. B. Shetty, Minister for Agriculture, at the Conference of the Representatives of Co-operative Wholesale Stores and Co-operative Marketing Federations, held recently at the Rajaji Hall in Madras City



Production and Procurement

By SRI N. S. ARUNACHALAM, I.C.S., Director of Civil Supplies.

The food problem in the State has as many facets as the categories affected and each section has its own diagnosis and its own remedy. The producer is aggrieved at the prices of his own necessities and of the cost of cultivation. The consumer bewails the inadequate ration which is also intermittent and inferior. The social reformer and long-term planner considers the situation a direct result of the standards of agriculture and the mounting burden of population. The carping critic is ready with his refrain and it is his sole contribution that it is the duty of the Government to provide adequate food for its citizens at reasonable rates and that if they cannot achieve it they had better quit.

And to the food administration it is a nightmare of failed monsoons, unrealised import quotas and unsurmountable bottlenecks. It is a continuous attempt to cut the coat according to the cloth and also a continual vigil to secure as much cloth to serve as normal coats for all. It is clear, therefore, that a problem so essentially human cannot be contained by arithmetical equations of conflicting forces or a priori deductions based on norms of logical reasoning. It remains in its short-term aspect a series of compromises with its long-term aim, however, securely based on national self-sufficiency with regulated prices.

Mechanism of 'Food Budget'

The food budget of any State is a matter of simple arithmetic. The Government purchases from the producers and with the assistance of allotments received from the Centre, arranges for equable distribution to the non-producers. Procurement plus imports is, therefore, equal to distribution. The more there is of the two classes on one side, the more there will be available for distribution. A brief view of the steps that have been taken in this State for increasing procurement will, therefore, be an integral part of its food policy. It is not proposed to describe the various measures that have been adopted to increase production itself. This vast subject of Grow More Food is a distinct one, though its importance in relation to the problem and its direct bearing on procurement are obvious.

In the surplus districts to which the State looks for a very large part of its resources, a system of intensive procurement is in force according to which the production of each cultivator is ascertained, as also his requirements. The surplus worked out is then purchased by agents appointed by the Collector. A scheme of crop-cutting experiments in representative blocks of each village through the offices of the Revenue and Civil Supplies Departments has enabled the yield to be ascertained with much greater degree of accuracy than before. It has reduced to the minimum the possibility of mistake and mischief on the part of petty authorities. Better supervision has enabled various leaks to be plugged and the accounts at present may certainly be taken to reproduce with fidelity the prospects for procurement in each area.

Organisation of Procurement

As regards the organisation of procurement, a recent modification has tended towards greater efficiency. The

number of procuring agents who were left to operate in the entire paddy growing tracts are now confined to specified zones and the unauthorised movement of grain from any of those zones to places outside that zone is prohibited. This change has tended to bonafide producers to dispose of the stocks to authorised agents with the minimum of trouble and delay. It has also served to control to a large extent a serious menace which used to be prevalent among the procurement agents—to offer illegally higher prices and subsequently attempting to recoup these by irregular methods.

Special attention is also being paid to the mechanism and order of procurement. In every district there are vulnerable areas from which smuggling is generally rife on account of their situation and or proximity to scarcity areas. While mobile squads of anti-smuggling staff with guards at fixed points have been appointed for checking these illegal activities during the harvest season, the areas for procurement have themselves been arranged in belts according to the degree to which they are exposed to smuggling risks and the attention of all officers concentrated to these pockets so as to mop up the surplus with the least delay. These measures have produced satisfactory results.

Movement of Grains

The prompt movement of the procured grain is essential for the quick and smooth working of the system of monopoly purchase. Railway movements have been programmed for the whole month ahead in close consultation with the officers of that department and steamers are being utilised to the maximum extent. The steamer movements, apart from the relief they afford to the railways, have brought work and prosperity to the minor ports concerned. Grain reserves on behalf of the Government are built up in important consuming regions, so that during the season of peak procurement all facilities may be available to the agents in those districts for assisting speedy purchase. It has also been proposed that in surplus districts Government would buy grains from over-stocked procuring agents and store them in their own godowns with a view to their gradual movement to deficit districts. The aim again is to assist procuring agents with finance and enable them to avoid the blocking of capital with its prejudicial effect on procurement.

Procurement is the State's direct responsibility and it can safely be said that no pains have been spared to maximise it. The second item on the food assets side is "Imports"—and here too strong and persistent representations have been made bringing pointedly to notice the legitimate requirements of the State. The Central direction of food in its major aspects which is an important development of recent years, postulates that the various States' needs have to be equated to the common resources. It is unfortunate that this year some of the States which usually require little assistance have been compelled to put forward heavy demands, but we have a right to demand that the equality of sacrifice which is the main justification for the Central control will be scrupulously enforced between the various States—deficit and surplus.

Important Changes in Food Policy

Recently, certain important changes have been effected in the State's Food Policy. Slight upgrading of prices except in the industrial towns of Madras, Madurai, Coimbatore and Visakhapatnam has been rendered necessary in view of the reduction of food subsidies by the Centre. Intensive procurement is confined to the five northern districts of the two Godavaries, Krishna, Guntur and Nellore and of Tanjore. In four other districts, South Kanara and Madurai, South Arcot and Tiruchirappalli, procurement will be on the basis of a levy to provide for the whole or portion of the districts' needs. Millet procurement has been given up except to a limited extent in South Arcot and South Kanara. Rural rationing has been discontinued in all upland taluks of surplus districts and in all the deficit districts except Malabar and the Nilgiris. Fair price shops are to be opened in major panchayat areas while rationing equivalent to that of a statutory basis will be in force in compact and predominantly industrial areas. The loss of procurement as a result of these decisions will be

Rice	..	..	280,000 tons
Millets	..	..	80,000 tons.

Of course, it is expected that the unprocured grain will circulate in the deficit districts and make up for the lesser imports into those districts.

The full impact of these changes has yet to be appraised. In many areas the price of grains has markedly increased, while in other areas the so-called free market price has come down, obviously because of the larger quantity available from the harvest in the open market.

Fair Price Shops in Affected Areas

The demand for larger number of fair-price shops is being received from all districts especially those like Ramanathapuram, North Arcot, Chittoor, Tirunelveli, Coimbatore and Salem, parts of which have been affected by bad seasonal conditions, while institutions and the fixed group complain of their inability to secure grains at reasonable prices. Such assistance as is possible is being rendered by Collectors in these cases and their ability to help will fortunately be enhanced with the recent promulgation by the Government of orders empowering these officers and their subordinates to requisition stocks from producers and traders.

The cry of "Remove Rationing" was to many rural folk merely an expression of despair and a feeling that the situation cannot worsen. But what will he say and feel in the coming months? Will he be like the woodcutter in the story who called to God to take away his life and on His prompt appearance merely asked him to help him with his load of firewood. Would he, like that woodcutter, desire rationing with all its faults as a necessary evil in times of scarcity?

(By Courtesy, A.I.R., Madras.)

No Sales Tax on Tractors

The Government have issued a notification exempting the sales of all varieties of tractors used for agricultural purposes and their parts and accessories from the Sales Tax.

District and Taluk Food Committees to be Abolished

The Government have directed that all District and Taluk Food Committees functioning in the State be abolished forthwith. Consequent on the abolition of rural rationing and intensive procurement system in the deficit districts, the Government felt that there was no need for the continuance of the District and Taluk Food Committees either in the deficit districts or in the surplus districts. Whenever they considered it necessary the Collectors have been asked to consult the District Food Production Committees on matters relating to food also.

Allotment of Galvanised Iron Sheets for non-agricultural purposes

Due to acute shortage of spelter and sulphur, the Government of India have very drastically cut down the allotment of galvanised iron sheets to the Madras State. It will not therefore be possible to supply sheets for at least a period of six months to come, except to meet absolutely essential requirements. The members of the public who require materials for roofing, etc., are therefore advised to use non-ferrous substitutes.

Irrigation Schemes Sanctioned

The Government in the Food and Agriculture (Food Production) Department, have sanctioned during January 1951 the following two irrigation schemes under the Tank Improvement Scheme:

(i) *Chingleput District*.—An estimate for Rs. 32,000 for works or Rs. 41,634 inclusive of direct and indirect charges, for the construction of a masonry training wall on the right bank of the Palar River spring channel and effecting certain improvements to the same channel. An additional extent of 55 acres will be brought under cultivation besides providing irrigation facilities to an existing ayacut of 30 acres during the second-crop season, yielding a total additional production of 75 tons of food-grains.

(ii) *North Arcot District*.—An estimate for Rs. 77,000 for works or Rs. 1,00,190 inclusive of direct and indirect charges, for the reconstruction of Kadagamañ anicut, restoration of the supply channel feeding the Kadagun and Viruduvilanginam tanks and raising the Full Tank Level of these two tanks. An additional extent of 200 acres of dry lands will be brought under cultivation, besides providing an assured supply to an existing ayacut of 135 acres. The scheme will also benefit second-crop cultivation on an extent of 112 acres. The extra foodgrains anticipated as a result of execution of the scheme is 136 tons of rice.

Annapurna Offers Cheap Yet Good Food

By SRI K. SUBRAMANIAN.

Annas eight only for a lunch and anna one only for any snack from among a dozen different items including sweets! A cup of tea for another anna! Sounds incredible, unbelievable, in these days of daily spiralling prices. But it is true and has been made possible, thanks to the untiring zeal of a band of socially-conscious women led by Srimathi Lilavathi Munshi. She is determined to see that the Food Ministry does not prove to be her husband's political grave as happened in the case of his predecessors.

It is not only cheap, but sumptuous and nutritious too. A lunch comprises four chapatis, a vegetable curry, a dish of dhal and a vegetable salad. Sometimes *dosas* take partly the place of *rotis*.

If anybody wants to check up personally what sounds like a tale, he may walk into Delhi's premier Cafeteria, Annapurna, run by the All-India Women's Food Council on the Queensway near Hotel Imperial. He will return not only not disappointed, but with praise for the Indian women's efforts to help overcome national food shortages.

Delhi's population will not be the only favoured. Madras too will have similar canteens, not one but two; Bombay one, Nagpur one, Hyderabad one, Calcutta one, Indore one, and Simla one. Delhi may perhaps have another. Schemes to bring them into existence are under way, but not in the way of Governments.

On an average 3,000 individuals visit this cheap but well-run eating house and the daily proceeds aggregate Rs. 725. The mid-day lunch available between 12-30 and 2-30 p.m. is enjoyed by 125, snacks enjoyed to the worth of Rs. 450 and 2,200 cups of tea drunk.

Not a Single Grain of Cereal

One might dismiss these things as typical of any restaurant. But Annapurna is unique, and the above-mentioned facts loom in importance when one pauses to think that not a single grain of cereal is used. It is there to popularise and boost non-cereal consumption and relieve the strain on cereal grains. The ingredients comprise *muckee* (maize flour), potato and sweet potato paste, gram flour, several species of pulses, fresh vegetables, *koya* (milk products) and curds.

One should also consider the rapidity with which it attained its popularity. No eating-house can boast of such a rush at its counters within a month of its inauguration. Yes, here the rush is at the counters—the coupon counter and the snacks counter—for there is no table service. Help yourself is the motto. One gets his coupons, walks to the snacks counter, picks up his choice with the aid of a forecups and finally hands over his coupons to a lady-in-waiting who checks them up with the items in the plate. He gets his cup of tea too here.

He retires to the well-furnished hall or corridors or open lawns where umbrellas are provided in view of the impending summer. Seats are comfortably cushioned, no hangovers left on the tables even for a short while. He takes his own time, for in Delhi, unlike in our city, people don't move out of restaurants easily. They discuss matters of

variegated importance and get back only after settling their business.

Spirit of Equality

If the snacks counter inculcate in you a habit of self-help, the ever-crowded tables infuse a spirit of casualness. No man or woman is treated differently from another. Whatever the status—one is struck by the fact that the patrons of this meant-for-middle class hotel are a number of well-to-do people—they all sit together and help in solving the food problem. Srimathi Munshi who is the moving spirit of the campaign, can be seen quite often sharing a table with some of the 'nobodies' that visit this place.

Simply because it is run by the All-India Women's Food Council, don't walk in expecting to witness a women's show with a bevy of girls attending to the work: far from it. There is only one paid employee and another two or three work honorarily in weekly semesters, deputed by the Council. There are no servers or waiters or bearers, by whatever name one may call them. They have been dispensed with. But there are four people to clean the used plates and keep the tables neat. Including these there are 35 employees comprising the cooks, men and women at the counters and the three men in the office. They seem to be a contented lot and they get as much remuneration as they would in a similar job elsewhere.

Clean kitchen with Labour-saving Devices

The Annapurna also provides the answer to the public health faddists. Nothing is touched by hands in the kitchen which is spacious and airy. In contrast to many of the middle-class eating houses, its kitchen is run with labour-saving devices and electric ovens are employed for cooking purposes. However, one coal oven is kept ready as a standby for emergencies in case of electricity failure. Potatoes and vegetables are washed and peeled in a machine that does the job at ten pounds a minute.

Again, water for tea is electrically boiled in a Bartlett water-boiler and decoction made in a Bartlett multipot which keeps it hot for eight hours. The tea is served by the Central Tea Board. The Board has also deputed one of its assistant superintendents, Sri P. C. Rajpal, to run the cafeteria. Although never apprenticed for the job, he is quite at home in it.

Campaign to Change Food Habits

The attempt to popularise non-cereal food is not the only aim of the Women's Food Council constituted in August last under the chairmanship of the first lady of the Nation, Srimathi Rajbansi Devi, wife of President Rajendra Prasad. Annapurna is only one attempt to save our much needed cereals and prevent wastage. Bringing it into existence was the culmination of a campaign to shift the emphasis in food habits from rationed to non-rationed food. The first step was the Supplementary Foods Exhibition held in Delhi in the beginning of December last year. The Council has a booklet on the subject. Those of the women who are not yet socially forward

Registered No. M-4767.

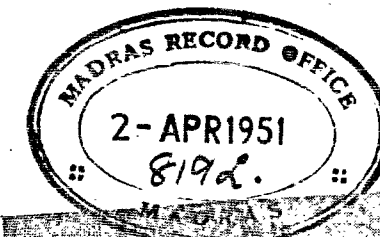
AT THE FLOWER SHOW

The annual Flower Show of the Agri-Horticultural Society, held recently in the gardens of the Society at Teynampet, Madras, with its riot of colours and scent in bud and bloom, attracted many garden workers and flower lovers.

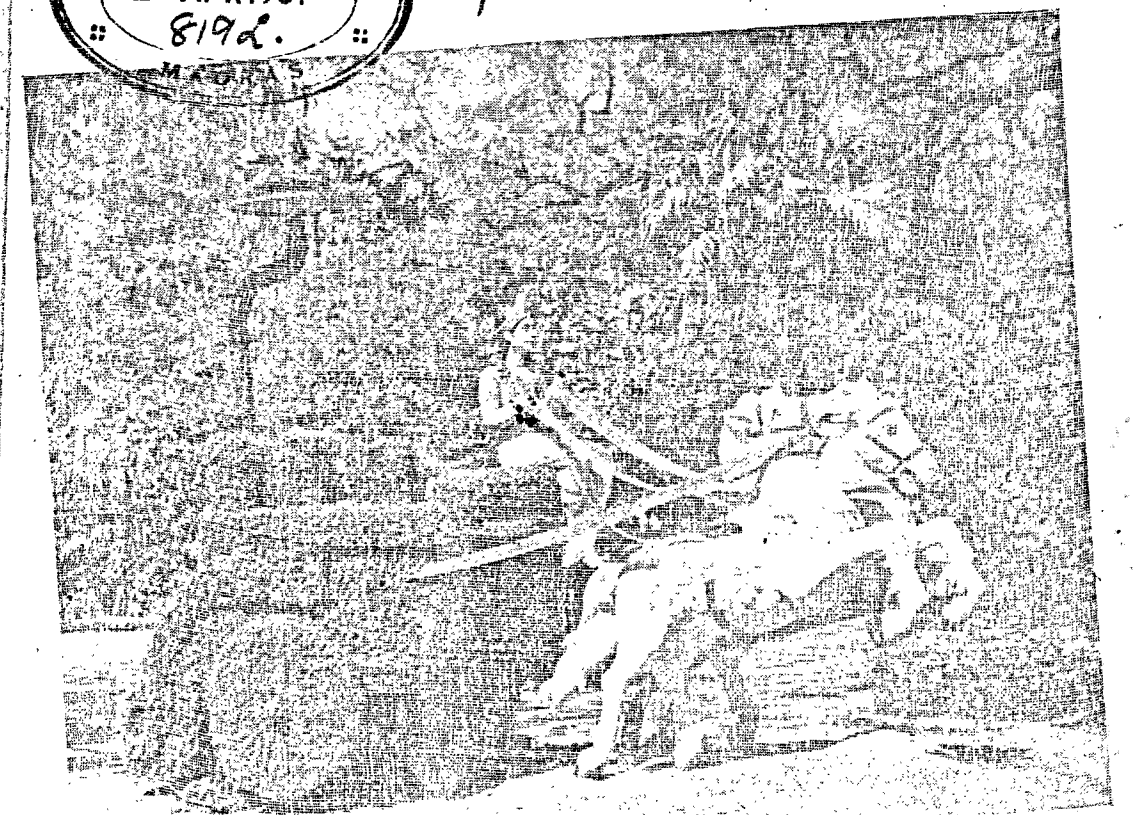
Among the distinguished visitors to the Flower Show were H.E. the Maharaja of Bhavnagar, Governor of Madras, and the Maharani of Bhavnagar. School girls in conducted parties were, as usual, delighted with the exhibits.



MADRAS INFORMATION



32/51.



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Food Offences and Punishments Awarded

During the fortnight ending December 15, 1950, 400 cases of prosecutions were disposed of in the Madras State except in the districts of Anantapur, Bellary, Tiruchirappalli, Visakhapatnam and Srikakulam in respect of food offences.

The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines ranging from Rs. 1—49 in 291 cases, Rs. 50—99 in 21 cases, Rs. 100—199 in 14 cases and Rs. 200—300 in nine cases were imposed. Sentences of imprisonment for less than a month in nine cases, one month to less than three months in 34 cases and three months in one case were also awarded. Twenty cases resulted in acquittal while one case was withdrawn.

Particulars of cases in which heavy punishments were awarded in the districts are described below :—

K. Venkatasubbiah of South Arcot, was fined Rs. 200 with six weeks Rigorous Imprisonment in default, for illicit sale of 325 Madras Measures of paddy.

Tirumalai Naidu of Chingleput who hulled rice without licence was fined Rs. 250 in default to suffer Simple Imprisonment for two months.

N. China Ankineedu, Amartalur, and M. Ramalinga Sastry, Emancyp of Guntur, who hulled paddy without permit were each convicted and sentenced to pay a fine of Rs. 200 with two months Rigorous Imprisonment in default.

M. Venkatasubbiah, B. Sreeramulu and M. Lakshminarayana of Repalle Taluk were each sentenced to pay a fine of Rs. 300 in default to suffer Rigorous Imprisonment for three months for illicit transport of foodgrains.

Kumarachat Manakkal Ashtamurthy Nambudiri, Kapur amsom, landholder of Malabar, who failed to sell surplus paddy to the agent authorised by the Government, was fined Rs. 250 with three months Simple Imprisonment in default.

Vadivelu Ayyar of Salem was convicted and sentenced to pay a fine of Rs. 200 in default to suffer Rigorous Imprisonment for two months for illicit transport of foodgrains.

In the Madras State during the second fortnight of December 1950, 682 cases of prosecutions were disposed of in respect of food offences. The accused persons were people of various degrees of social standing and most of them belonged to the poorer classes. Fines ranging from Re. 1 to Rs. 500 and imprisonment up to one year were imposed.

A fine of Rs. 500 was imposed on T. Veeraraju of East Godavari and Kullagappa of Parusomala of Kurnool for the offences of unauthorised possession and transport of foodgrains, respectively.

T. Ramandy and T. Raghavan of Malabar were fined Rs. 350 for failure to sell surplus paddy to Government. For possession of foodgrains in wholesale quantities without permit, Sadaya Goundan of Salem was fined Rs. 300.

Besides these punishments imposed in courts, departmental action such as warnings, fines, forfeiture and enhancement of security deposits, cancellation and suspension of retail and wholesale licences, was taken in 147 cases.

to come and actively help the Council in its activities may avail of the lessons contained in it and practise the ideals in their respective homes.

To the rice-habituated South Indian, even wheat was something degrading as a foodgrain, if not contemptible, not so long ago. But the stoppage of rice imports from Burma during and after World War II and the successive failures of the monsoon have knocked out the complacency in him that rice will come from somewhere for his food. He had to reconcile himself to wheat, as figures of wheat consumption in Madras State would show. But today even that wheat is in shortage, thanks to the nationwide natural calamities. It is right that some outside help may come. But it can't be depended upon since it, to a great extent, revolves on politics. It is time we begin to depend on what is readily available and if it comes to that, change our food habits. Here you have the help of the All-India Women's Food Council.

Backward Classes' Advisory Committee

The Government have reconstituted the Backward Classes' Advisory Committee. This 18-man Committee will advise Government on all matters connected with the amelioration of the Backward Classes in the State.

The Hon'ble Minister for Rural Development will be the Chairman of the Committee and the Director of Harijan Welfare its Secretary. The Secretary of the Rural Welfare Department will be an ex-officio member of the Committee. The other members of the Committee will be :

Sri L. S. Karayalar, M.L.A., Sri R. V. Swaminathan, M.L.A., Sri A. Subramaniam, M.L.A., Sri G. Latchanna, M.L.A., Sri A. Rayappa, M.L.A., Sri G. Sitharamaswami, M.L.A., Sri V. M. Gatikachalam, Sri P. Lakshmiah, Sri Santha Narayanappa, Sri Sriramamurthy, Sri B. Kurmana, Sri Ramachander, Sri M. Radhakrishna Pillai, Sri R. T. Venugopala Chettiar and Sri K. Kumaran.

Techniques in Increasing Rice Yields

Rice, the most important food crop of Madras State, occupies about 10.7 million acres with a normal production of 4.9 million tons of rice. But the production falls short of the normal requirements by about ten per cent, and in the years to come the production has to be increased not only to meet this deficit but to feed the fresh mouths that are being added on to the existing population. Recognising its importance, work on improvement of rice formed an important activity of the Agricultural Department in many of its Research Stations from the earliest times. What are the results which are achieved in increasing yields of rice? It may at once be recorded that rice culture is one of the most varied in this State and very many peculiarities and special features exist. But what is aimed at in this article is to indicate the general improvements that could be practised normally for securing better yields.

There are three ways of increasing the total output in a crop : (1) by increasing the area under cultivation of the crop ; (2) by enhancing the acre yield by better 'culture,' and (3) by avoiding and preventing wastes during the several stages of cropping.

With regard to extension of the area, it may at once be said that the potential area suitable for growing rice has all been cropped with rice and the lands classed as uncultivated 'wastes' are not useful for rice cultivation. The second important and sure way of improving the yield is by increasing the yield from the area that is at present grown to rice. The yields in our country are poor compared to some of the other rice growing countries such as China and Japan which realise one and a half to twice the grain yields from an acre. The differences of the vital climatic and ecological factors in Japan and China are the major points. It should be possible to take some very useful hints from them to improve our rice yields.

Three Methods for Better Culture

In the better culture of rice three methods suggest themselves—better cultivation practices, better manuring and use of good seed.

Broadcasting and transplanting.—Under the first category it may be pointed out that broadcasting which is practised in some parts of the country is only an expedient and therefore should be given up wherever transplanting could be practised. As the Telugu proverb goes, there is 'No loss to a transplanted crop.' Experiments have shown that a transplanted crop had given 27 per cent higher yield of grain than a broadcast one, though the yield of the straw was more or less the same. Though in the broadcast crop there may be some saving of the expenditure in raising the seed bed and transplanting, the charges of weeding and gap filling which are usually very heavy in a broadcast crop generally more than counter-balance the savings of the aforesaid operations.

Dry ploughing.—Another short-cut method that is practised in some parts of the State is the system of dry ploughing, doing away with puddling. Dry ploughing is also an expedient. Except in very light soils, it was found that the losses in yield in this system may be anywhere from 15 to 35 per cent compared to the normal puddled condition, which is idle for paddy cultivation. By the 'lesse'

condition of the soil which the dry ploughing brings on, there is less freedom of movement of water in the soil; the micro-organic flora and bacteria which are concerned in the supply of oxygen to the roots are destroyed, thus bringing on an unwholesome condition for the rice plant. There is the loss of the weedy growth which the dry ploughing does not allow to grow. There is also a feeling that the volume-weight of the paddy in a constantly dry ploughed land is less than that of a puddled crop.

Nurseries.—The third important factor is with regard to sowing in the nursery. Ryots use very heavy seed rates varying up to 10 lb. per cent of nursery. It has been found from experiments on various Research Stations that the optimum seed rate should be 3 lb. of seed per cent of nursery. Even this rate can be lessened when the size of grain is small, e.g., Kasipichedi or Vankisannam. Whatever be the distance of planting adopted in the field, the seed rate should always be the one mentioned above. One can realise the enormity of the loss when it is said that there will be a saving of seed to feed the entire population of the State for a fortnight by adopting thin sowings of nursery. This sowing is more important in short duration varieties.

Distance between Seedlings

Planting.—There is some controversy about the distance at which seedlings are to be planted and the number of seedlings to be transplanted per bunch. But there can be no hard and fast rule. It is definite that when nursery is raised thin, there is no point in planting more than two seedlings per hole. The distance depends upon a number of factors. But, under normal conditions, it is found that four to five inches is good for short duration and six to eight inches distance for medium and late varieties, secure good yields. Thus 40 lb. seed in 12 cents will be required for short duration and 20 lb. to 25 lb. in seven to eight cents for medium and long duration varieties.

Old puddle.—If possible it is always more paying to keep the land under puddle for some time and then transplant.

Irrigation.—In many places irrigation to the fields is always governed by the quantity of water available. But when it is in plenty, as in the deltas, the tendency for many people is to keep always a good depth of water in the field. But it is found from experience as well as experiments that the optimum depth is not more than one and a half to two inches at any time. It is also better to dry the field 15 days after planting for a day or two till very thin hairline cracks are seen in the field, and then put in water. Renew water to paddy fields every week where it is possible.

Nutrition of Crop

Manuring.—Owing to the very peculiar method of cultivation of paddy as a 'swamp crop,' the nutrition of this important crop is not fully understood. But evidence from every source has declared beyond doubt that green leaf manuring is very essential for paddy. Cattle manure which is the best for many crops, is not so efficient as green leaves. So every effort must be made to raise green manures in the field, or grow leaf-giving shrubs and trees in vacant places and use green leaves as a basic dressing up to 4,000 lb. per acre. There is a wide choice in green



Sri Jogesh Chandra Pant of West Bengal who is one of the three recipients of the title 'Krishi Pandit' which he received at the hands of Dr. Rajendra Prasad. The title is awarded annually by the Indian Council of Agricultural Research under its Crop Competition Scheme, to those "who have made outstanding contribution to the cause of Indian agriculture" in the previous year. Sri Jogesh Chandra Pant raised 73 maunds and 30 seers of paddy on an acre of land during the kharif season 1949-50. The Indian average is 12.5 maunds.

manures. Sunhemp and Pillipesara are very good green mature-cum-fodder crops suitable for sandy or heavy soils if there is surety of one or two irrigations; wild indigo is best suited to sandy loams and can withstand droughty conditions. Daincha comes up even in slightly saline areas. Sesbania speciosa is successful where the interval between two paddy crops is long and where one or two irrigations could be given. Quick growing shrubs like glyricidea can be grown on waste places and channel bunds. Cassiss, Pungam, etc., which give plenty of leaf are very easily grown in all types of soils and waste places. Even if the leaf is dry, it was found that 2,000 lb. of it is as efficacious as 4,000 lb. of green leaf.

The leaf application should be supplemented with 100 to 120 lb. of Ammonium Sulphate or 200 lb. of cake. Super and Bonemeal have given good results on sandy loams and slightly acid soils. In ill-drained soils quantities of green leaf may sometimes do some harm. Such soils require lining and phosphatic manures. The produce from a manured field is found to be more nutritious also. Bulky organic manures keep the soils in 'good heart.' Cakes may be applied at the time of planting, but Ammonium Sulphate is best applied half at planting and the other half

one month after transplanting. Phosphatic manures are to be ploughed into the soil at the time of preparatory cultivation.

Nearly 1,500 District Types Identified

Use of improved seeds.—To suit the diverse conditions of soil climate, irrigational facilities, the number of 'varieties' available in the rice crop runs into thousands. In the Madras State itself nearly 1,500 district types have been identified and are being maintained at the Paddy Breeding Station, Coimbatore. It has been found that many of the characters in the crop are heritable including such recondite factors as yield, disease resistance, etc. It is well known that the variety as grown by the cultivators consists of very many 'bio-types' differing in a number of heritable factors, of which yield is also one. The plant breeder has sought to explore this variability in yield and select the best yielder amongst these types.

Working on this principle, a good number of high yielding rice strains which also combine such characters as earliness, better quality, etc., were evolved from the different stations. Details are available in Villagers' Calendars published from time to time. The Paddy Specialist, Coimbatore, may be referred to on this question. Sometimes these strains suffer from one or two obvious defects as there is nothing absolutely perfect in this imperfect world. By practising 'hybridisation', etc., with another parent which does not contain this defect, these strains have been improved. The following achievement in this direction may be mentioned: Co. 25 blast resistant Nellore Samba, the good quality MTU. 15 Dalwa Senam; MTU. 16 Dadava Kusuma, good quality Adt. 20 Sirumani Kuruvai.

Reduction of Losses and Waste

Pests and diseases take a heavy toll from the potential output of this important crop both in the field and in storage. From a practical aspect it is not easy to prevent or cure any major diseases under field conditions, and breeding for disease-resistant types would seem to be a more promising line of attack. How a combined attack by the plant breeder and pathologist in breeding resistance can be fruitful is evident from the two blast resistant paddy strains Co. 25 and Co. 26 that have been evolved for the southern districts of the State where long duration strains are in demand. Work is also being continued to breed suitable blast resistant strains for other parts of the State where a shorter duration is desired.

With regard to the insect pests of paddy, complete life histories of all the major pests have been worked out in Madras and certain important pests are being controlled by Plant Protection staff by recourse to cheap remedies. The task of breeding resistant types has not been taken up, owing chiefly to the unavailability of the elaborate insect-proof equipment and controlled conditions that are necessary for this one type of study.

Drought Resistant Strains

Losses also occur due to physiological causes, such as lodging of crop due to weak straw, too much shedding of grain, sterility and lack of setting, etc. Attempts are however being made to breed in the Paddy Section, types that are resistant to physiological factors; for example, a

(Continued on page 22)

Menace of Mango Hopper

With the advent of the mango season, the menace of Hoppers stands out in bold relief. During the last season, mango trees blossomed all over the country but the Mango Hopper appeared in thousands and instead of the bumper crop which garden owners expected there were only withered and the sooty branches damaged by Hopper hordes, unequalled in many generations.

Mango Hoppers are a species of sap-sucking bugs, belonging to the family *jassidae*. Both the nymphs and the adults feed on the sap of tender leaves and inflorescence and as a result, the flowers fall off with no possibility of fruit setting. The pests secrete "honey dew" which develops sooty mould imparting a blackish appearance to the trees.

A fertilised female Hopper inserts 200 or more eggs singly in the tissue of panicles, unopened flowers and young leaves. Within a week the eggs hatch out and the nymphs, which are pale yellow in colour, immediately commence feeding.

Earlier methods of controlling these destructive pests which jeopardise the success of this very important money crop consisted in spraying rosin compounds, or dusting flowers of sulphur on affected trees. None of these control measures was found to be entirely successful in putting down the pest which continued to be a serious problem to mango growers till the advent of DDT.

Extensive Experiments

In view of the economic importance of the problem, the Indian Council of Agricultural Research financed an extensive series of experiments on Mango Hopper control with particular reference to its economics. From these experiments and from our experience for the last three

seasons, it is found that the most effective control which is also economical is spraying Guesarol 550, a wettable powder containing 50 per cent DDT diluted in the ratio of 1 lb. of powder to 30 gallons of water. In cases where mildew is prevalent, wettable sulphur may be incorporated along with this spray at the rate of 3 lb. of wettable sulphur for every one pound of Guesarol 550 used. Normal sized trees require about 3 to 4 gallons of the spray each as it is essential to cover the entire tree at a time. Three such sprayings with an interval of ten days each are essential.

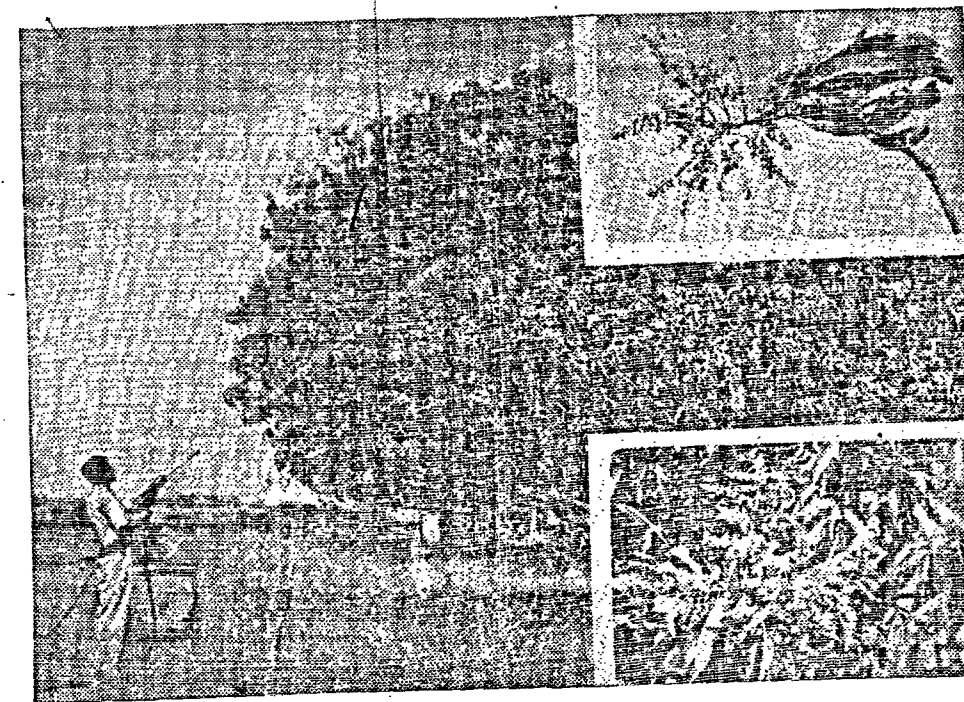
The cost of such spraying will be 8 to 10 annas per tree. Ryots and mango garden owners are requested to take advantage of this method to save their mango crop from damage and loss. The Agricultural Demonstrator of each taluk keeps a stock of Guesarol 550. The Plant Protection Assistants of each district can give a demonstration when required and thereafter the ryots themselves should be able to do the spraying.

Rural Welfare Committees

The Government have directed that in the place of existing Rural Welfare Committees (Firka Development Committees) only one committee to be constituted for each district as a whole, with the following members:

Collector of the district—*Chairman*; Revenue Divisional Officer—*Vice-Chairman*; Rural Welfare Officer—*Secretary*; Centre Khadi Officer in respect of Intensive Khadi areas; one local M.L.A. or M.L.C.; one member, if any, from the district on the State Rural Welfare Board; and four prominent constructive workers—two of them being preferably from the Firka and centres selected and the other two being from the rest of the district; one of these four should be a District Board Member.

Spraying the mango tree with a special mixture of DDT solution helps to control the pest of Mango Hopper. Inset pictures show damaged and flowering sprigs



Co-operative Poultry Farming

The Gooty Poultry Farming and Co-operative Egg Production and Sale Society, Limited, in Gooty Taluk, Anantapur District, was registered under Act VI of 1932 (Madras) on 19th August 1948 and was started on work on 6th November 1948. The objects of the Society are:—

- (i) to establish a poultry farm for developing exotic breed;
- (ii) to enable members to buy and maintain good strains of fowls;
- (iii) to buy and maintain pure bred cocks for the use of members;
- (iv) to arrange for the sale of eggs and fowls produced by members to the best advantage by putting on the market fresher and if possible larger eggs, and healthy and able fowls and
- (v) to promote other measures designed to encourage in the members the spirit and practice of thrift, mutual help and self-help.

There were 29 members with a paid-up share capital of Rs. 405 on 30th November 1950. The executive management of the affairs of the Society is vested in a Board of Directors consisting of seven members elected by the General Body from among the members. Mr. P. M. Smith, M.A., Principal of the Gooty London Mission High School, is the President of the Society. It is the duty of the Board of Directors to arrange for the purchase for cash or on credit the eggs and fowls produced by members on such terms as may appear to them reasonable and for the sale of such eggs and fowls to the best advantage.

The Society has got privileges under its by-laws to establish a poultry farm for developing the stock of exotic breed and for starting auxiliary units wherever possible and to incur such expenditure as may be necessary for the purpose out of the funds of the Society and subsidies that may be granted by the Government. Under the able guidance and responsibility of its president Mr. Smith, the Society has undertaken the scheme of both poultry farming and egg marketing activities.

State Assistance Granted

For the purpose of poultry farming undertaken by the Society, the Government were pleased to sanction to this Society a non-recurring subsidy of Rs. 2,340 for constructing four poultry houses and for purchasing the following equipment, besides the grant of a total recurring subsidy of Rs. 1,751 for the first two years for purchasing foundation stock of pullets, cocks and breeding hens in the first year and for purchasing fresh cockerels in the second year and also for their maintenance and other establishment charge therefor. The Society obtained the entire non-recurring Government subsidy of Rs. 2,340 and with the help of this subsidy the Society purchased the equipment listed below:

Four trap nets, ten feeding troughs, one incubator of 100 eggs capacity, two chicken runs, six rolls of wire netting, two pairs of tickproof supports and tickproof perch of 24 feet length, four chicken coops, one egg candling lamp, mash hoppers.

A sum of Rs. 600 towards part payment of the recurring subsidy for the first year was also availed of by the Society. The Society purchased a foundation stock of 16 hens and five cocks (Rhode Island Red) and commenced its actual work only from 1st March 1950. During the period, the Society produced 1,140 eggs and sold 571 for consumption and 343 for hatching purposes, realising Rs. 126. Forty chicks were obtained as a result of hatching the eggs in the incubator, while 140 were spoiled in the process. According to the scheme sanctioned for being worked by the Society, it was anticipated that ten pullets being the foundation stock would lay 300 eggs during the five years. In practical working the number has far exceeded the estimate, the total number of eggs produced in nine months alone being 1,146.

Hatching of Eggs

But the hatching of eggs in the incubator is behind schedule owing to the difficulties (i) in regulating the heating of the incubator which has no capsule and (ii) the non-availability of the incubator for purposes of refilling as and when eggs are laid, since the incubators can be refilled only once a month as it takes 21 days to hatch eggs and for a few days thereafter it has to be used as a brooder. Further, the hens have an off-season, when moulting or during hot weather and when the laying is not automatic. Since hatching is not advised during the hot season as fertility is likely to be low, the Society had to sell as many as 571 eggs for consumption.

The Society proposes to proceed with the incubation of eggs as rapidly as possible and build more houses and runs for the Farm and also to increase its foundation stock to enable it to put on the market good variety of eggs and fowls.

Import of Cattle into Madras State

Representations have been made to the Madras Government by some of the ryots and agriculturists from the Circars that as there is a dearth of ploughing cattle, they should be permitted to import cattle from the neighbouring States of Madhya Pradesh, Orissa and Hyderabad. As the Madhya Pradesh and Orissa Governments are still retaining the bans imposed by them on the export of cattle outside their States, the Government of India have been approached by the Madras Government to persuade the Governments of Madhya Pradesh and Orissa to remove the inter-State bans imposed by them or in the alternative to allow the export of some heads of cattle from each of those two States to the Madras State. The result of the correspondence with the Government of India is awaited.

So far as the Hyderabad, Mysore, and Uttar Pradesh States are concerned, there are at present no restrictions on the export of cattle from those States to the Madras State. Such of those as are interested in the import of cattle into the Madras State from the States of Hyderabad, Mysore and Uttar Pradesh, are at liberty to make their own arrangements for the import.

The Task Before Us

By SRI S. V. KAMAT, Deputy Palm Gur Adviser, Ministry of Agriculture, Government of India.

Except in some parts of Bengal and Madras, Palm Gur was hardly known in other parts of India. The greatest visionary of our age, Mahatma Gandhi, foresaw the exigency through which our nation may have to pass and instinctively gave an impetus to this industry by initiating its experiments in his Ashram at Sevagram under his personal supervision and encouragement. Gradually, its sphere of influence spread and during this short period of about a decade and a half, Palm Gur has entered nearly all the States through Government aegis as one of their development schemes. From the appended table, the reader will have a rough idea of the circumstances prevailing in different States.

During this short period, various aspects of the industry had to be explored for establishing the industry-survey and study of lands; propaganda for the circumvention of certain prejudices and promotion of the intrinsic qualities of Palm juice and its products, in short an atmosphere had to be created so as to get the Government and public interested in the industry: all this has been done in varying degrees in different States.

What is the next thing to do? And how to do it? The successful establishment of the industry will mostly depend on how efficiently we tackle the issues. A few

hundred selected candidates have been trained by the States and the Centre. This trained personnel is now entrusted with the difficult and delicate task of broadcasting the technical details of the industry to the prospective Palm Gur producers. On them lies the onus of sowing the seeds that would ultimately bring forth a new class of artisans.

Need for Incentives

On account of its novelty the villagers do not show eagerness to take to this industry. Some sort of stipulation in the form of subsidy, free equipment and production bounty, will have to be provided to attract able hands. Besides this there is the question of expenses for maintaining an establishment of instructors-cum-supervisors. All this financial burden cannot be expected to be borne by the industry, hence the necessity for seeking Government aid.

But the nature of the industry is such that it cannot be conducted in an officious manner. The collection of juice is to be done in the early hours; so also the deliming, boiling and cleansing of the pot; if these operations are not done in time and efficiently, then the quality and the output gradually deteriorate. Especially, in the case of

How Palm Gur is Manufactured

The technique of tapping palms and making palm gur is very easy; any person of ordinary intelligence can master this art within six months. The Palmyra, Coconut and Sago Palms throw out spathes when they are in florescence. These spathes are tapped, massaged and bound in order to accelerate the flow of juice. The uppermost portion of the spathes is sliced off with a sharp knife and the exudation of the juice begins. This juice called Neera is then collected into an earthen pot suspended to the spathe. In order that the juice may not get fermented, a small quantity of lime is deposited in the pot. The lime is taken out before Neera is converted into jaggery. Cleanliness of tools, pots and the tapped portion is an important factor in this process.

Neera is then collected and heated and superphosphate is added to it; after the lime is deposited at the bottom, Neera is decanted into the pan for evaporation. It is necessary to remove the scum during the process of boiling. So also the walls of the pan have to be cleared of scum, so that the resultant product may not be charred or turned bitter. When heated to 116° to 118° Centigrade, Neera is converted into jaggery. Striking the pan is done at this juncture and the pan is removed from the furnace. The viscous mass is slowly stirred so that the hot pan may not cause the product to be charred at the bottom. The jaggery is then poured into suitable moulds and hard blocks of gur are ready for use after some time.

Unlike other palms, the date palm calls for a different method of tapping when the tree is 8 to 10 years old: the growing tender portion of the topmost trunk just below the place shooting out new leaves is scraped with a sharp instrument after chopping off the lower leaves. This scraping is an artful operation. Its object is simply to open the pores of the interior skin; hence, a very thin layer has to be scraped every time. From these pores oozes the juice. Subsequent process is same as the above. In order to protect the gur from getting moist during the rainy season it is stored in the paddy stack or in cotton seeds or kept in a warm place in the house.

Palm gur industry can be started with a small capital. The poor farmer can adequately supplement his income by taking to it as a side industry. So, it is the sacred duty of every patriotic citizen of India to spread the message of palm gur.



The Prohibition campaign helps to create healthy citizens out of drink-wrecked ex-addicts. A graphic illustration is afforded to thrilled spectators when a sturdy youth grepples with a leopard.

(Appendix.)

PALMS IN INDIAN STATES.

	Coconut.	Date.	Palmyra.	Sago.	Remarks.
1. Ajmer	X.	M.P.S.U.	X.P.	X.	Training phase.
2. Andamans Nicobar	A.S.U.	P.X.	P.U.	N.U.	Just beginning.
3. Assam	X.	M.P.	X.P.	N.P.	Unusual circumstances.
4. West Bengal	M.P.	A.G.S.	A.G.	M.	Gur-making old industry ; State is promoting it.
5. Bihar	X.	A.S.	A.S.	N.	Partial prohibition.
6. Bombay	A.S.	A.S.	A.S.	M.	Complete prohibition.
7. Coorg	M.	S.	X.P.	A.	
8. Delhi	X.	M.P.U.S.	M.P.U.	X.	
9. Himachal Pradesh	X.	N.U.	X.	N.U.	Need for thorough survey.
10. Hyderabad	X.	A.S.	A.	N.	Vast scope.
11. Madhya Bharat	X.	A.S.	M.P.S.	X.	Do.
12. Madhya Pradesh	X.	A.S.	A.S.	A.	Do.
13. Madras	A.G.	A.G.	A.G.	A.G.	Gur-making old industry, State is promoting it. Prohibition.
14. Mysore	M.	A.S.	X.	M.P.	Partial prohibition.
15. Orissa	A.	A.S.	A.S.	M.	State aid discontinued.
16. Punjab (East)	X.	A.S.U.	P.U.	X.P.	
17. P.E.P.S.U.	X.	A.U.	P.U.	P.X.	
18. Rajasthan	X.	A.S.U.	M.P.U.	X.	
19. Saurashtra	M.	A.S.U.	M.P.U.	X.	
20. Travancore-Cochin	A.G.	X.P.	G.P.	A.G.	State Promotion.
21. Uttar Pradesh	X.	A.S.	A.S.	N.	In some parts tapping unknown. Partial prohibition.

A.—Abundant.
G.—Tapped for Gur-making.
M.—Moderate number.
N.—Not yet properly surveyed.

P.—It is possible to grow more.
S.—Introduced by State.
U.—Tapping unknown.
X.—No trees (therefore, tapping unknown).

NOTE.—Some Centrally governed areas have been omitted as Palm Gur Industry is not feasible there.

The Kavali Palmyra Jaggery Society

The Kavali Palmyra Jaggery Co-operative Society in Kavali Taluk of Nellore District was registered on 6th June 1944 and was started on work on 9th July 1944. Kavali is one of the biggest palmyra jaggery production centres in the district. Though the Society was ushered into existence in the pre-Prohibition days, it was in a moribund condition till the introduction of Prohibition in this district on 2nd October 1947. The Prohibition policy of the Government brought in its wake additional problems, the chief of which was to find employment for the ex-tappers thrown out of employment and the amelioration of their economic condition. As the first step in aid of the contemplated programme, palmyra jaggery manufacturing societies were organised in this district and the issue of licences to tap sweet juice for the manufacture of palmyra jaggery was confined to the members of societies only.

As a result thereof the ex-tappers rushed into this Society, and sought admission for membership and issue of licences. The membership of the Society thus gradually increased from 18 to 600 and the paid-up share capital from Rs. 373 to Rs. 2,545 as on 30th June 1950. There was no production of palmyra jaggery during the period 1944-47 as the affairs of the Society were in a dormant condition. The members began actual production only during 1947-48 after taking out licences, which were issued during March 1948.

Record of Work

The record of work done by the Society during the past three years is detailed below :—

	1947-48.	1948-49.	1949-50.
	Rs.	Rs.	Rs.
Number of members ..	269	517	600
Paid-up share capital ..	375	1,204	2,545
Number of licences issued ..	156	455	500
		MAUNDS.	MAUNDS.
Quality of jaggery produced ..	..	8,041	16,335
Quantity sold ..	..	8,041	16,335
		RS.	RS.
Quantity value ..	..	29,149	69,424
Commission earned ..	..	827	3,230

As on 1st November 1950 the paid-up share capital has further increased to Rs. 2,701. From 1st July 1950 to 30th October 1950 the members produced and sold 28,034 maunds of jaggery, valued at Rs. 1,00,977.

There are about 1,000 families of ex-tappers residing in the area of operations of the Society. Hundreds of them have joined the Society and it is hoped that the rest will follow suit in the coming years.

Providing the Capital

Palmyra jaggery was being manufactured by the ex-tappers of this centre even in the pre-Prohibition days. The local sowcars of the Vysia community who were financing the tappers in manufacture of palmyra jaggery had the monopoly of its sale, as the tappers were bound to deliver the entire produce to them. The innocent tappers who had no capital to carry on the industry

had no other alternative to choose and were thus subjected to the exploitation by the sowcars, who paid a low price for the products and took the quantities by underweight, while charging exorbitant rates of interest on the capital advanced. After the Society came into existence the first endeavour was made to minimise this victimisation and for the final emancipation of the tappers from the evil clutches of the trading community, who managed to secure a monopoly of the trade. Towards this end the Society extended financial accommodation to the tappers by granting short-term loans. The individual maximum borrowing power was fixed at Rs. 25 to start with ; it was gradually increased to Rs. 100 as on date. The extent of financial assistance given to its members during the past three years is noted below :—

Year.	Number of loans issued.	Amount involved.
		RS.
1947-48	45	725
1948-49	209	4,010
1949-50	264	9,665

It may be said that the Society achieved its object to an appreciable extent and it will be possible to reach the ideal in the next five years, if State help is also extended to meet the establishment charges of the Society.

Sale of Jaggery

According to the by-laws of the Society, the members are required to deliver the produce to the Society and without its express permission, no member can sell this produce. The Society arranges for the sale of jaggery produced by the members, recovers the advances and commission and distributes the balance to the members concerned. It is happy sight to see on the days of sale, each member

(Continued on page 33)

Ameliorative campaign includes healthy activities as sports, games and out-door competitions. In Salem District strenuous wrestling bouts and cheduguda are popular pastimes.



Light and Life in the Villages Through the Radio

The sixteenth hundred community radio receiver set was switched on at Senda Nadu, a village in South Arcot, on February 24, 1951, marking another landmark in the progress of community listening in Madras State. It was exactly twelve years ago that on the banks of the River Cauvery, the villagers of the remote hamlet of Komarapalayam in Salem District gathered to listen to the first community radio set, installed under the first Popular Ministry. Since then community listening in the Madras State has increased by leaps and bounds. Today over fifteen million rural listeners, nearly a third of the entire population of the State, are deriving the same benefit which the Komarapalayam villagers were privileged to enjoy twelve years ago. More than 1,200 village panchayats out of 8,000 in the State are served with community receivers. These sets work without restriction of the working hours in the electrified areas and for two hours every day in the evenings in the areas where electricity is not available and the sets are operated by battery.

The radio has come to play as a medium for the purveying of entertainment, news and knowledge. It has potential possibilities, especially in a vast country like India where other means of communications cannot reach the remote villages. In educating and enlightening as in entertaining people, the power of this medium has a vital role in building up our nation. Madras was one of the earliest to recognize the radio as a potent factor contributing to the progress of the community. In the educational field the Government have recognised in this medium a powerful and effective means of spreading knowledge and inculcating in the minds of the young and intelligent interest not merely in the classroom lessons, but in what happens around, and in the world.

Pioneering Undertaking

The first Popular Ministry in the State, as early as 1938, promoted plans for providing listening facilities in the village and educational institutions in the State. The task was no doubt immense. There are about 22,000 villages in the State—of which only 2,000 have access to electricity. There are about 2,000 schools in the State. Starting with a hundred community receivers in 1938, Madras has shown remarkable progress in popularising community listening in the State. Notwithstanding World War II which naturally made availability of receiving sets and components difficult, the progress was maintained. The war, however, gave an incentive and impetus to the industry to develop itself in the country. The Madras Government took up the initiative and pioneered in this field. And as a result came into existence the Research Section of the Provincial (now 'State') Broadcasting Department. Experiments in the State Laboratory in assembling special type simple and low cost radio receiving sets suitable for community listening proved successful and were pursued vigorously. The Department had to face the initial difficulties and handicaps of a pioneering undertaking. Slowly and steadily the Department gathered necessary resources and strength producing at every stage better results, and in the end has evolved a set of the required performance and specially designed to meet the local conditions and needs.

The Department is making a number of essential parts, and is using as much as possible indigenously produced raw and finished products for assembling the set. The sets manufactured in the specially equipped workshop at Madras are carried many miles, on railways, roads, country carts, and on shoulders too, to be installed in far-off interior villages. Venkatapuram, in the Godavari Agency, which can be approached only by 60 miles journey by country carts; Kilakuchetty on the slopes of Kodai Hills reached by a 15-mile winding uphill footpath; Amindivis Islands in Arabian Sea, access to which is possible only by a 50-mile journey by steamer; these are but a few remote spots which keep pace with world events through the only means of communication and knowledge—the Radio.

Widespread Service

Over 23,000 rail miles, 31,000 road miles by public conveyance, 5,100 road miles by country carts, 1,200 road miles on foot and 250 miles up the hills are covered in a month, transporting radio sets, accessories, servicing equipment and batteries; and these 1,000 sets are kept alive for two hours every day. In all, 100,000 programme hours are afforded to the people through all the community sets installed in various places all over the State. The increasing efforts of the Government through the State Broadcasting Department, have made it possible for the vast number of people in the countryside to enjoy this benefit at little or no cost to themselves.

The villagers who hitherto led a neglected and sequestered life in the remote parts of the State and were steeped in their own beliefs and ignorance, unmindful of what was happening outside their ken, are now able to keep abreast of the times and events, thanks to the community listening centre, and they are catching up with their urban brethren in the matter of knowledge of world events and general interest. The special programmes for villages arranged and broadcast by the Stations of All-India Radio give constructive ideas for a better way of life and have brought light and joy to the villages. The villagers have become radio conscious and many of them are now prepared even to miss a meal than the village hour on the radio.

Demand outnumbers Supply

Village panchayats are now vying with each other in getting this amenity and the demand for community sets now outnumbers supply. As on date (March 1951) 300 village panchayats have already advanced amounts totalling nearly Rs. 2 lakhs for acquiring radio sets. Two hundred more village panchayats have asked for the sets whose speedy installation they eagerly demand.

At the end of February 1951, there were 256 sets in use in municipal towns, 1,169 sets in panchayats and 178 sets in other village institutions. There are 363 listening schools which tune in regularly to the educational broadcasts specially arranged and broadcast by All-India Radio.

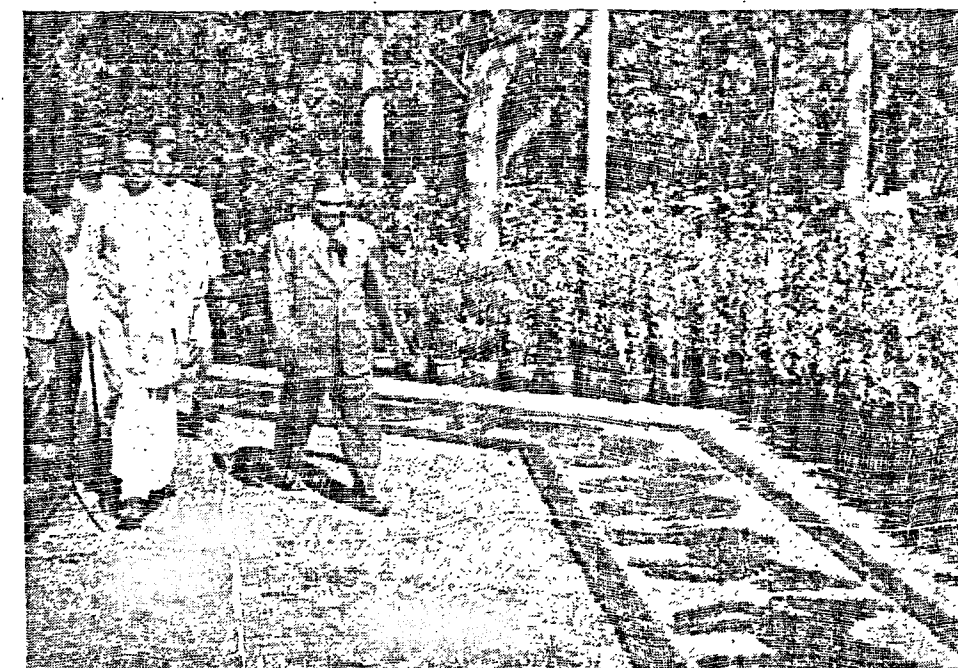
The State is now able to help the local bodies and Government institutions by supplying the high quality, low cost, community receivers manufactured at the workshops and laboratories of State Broadcasting Department and the entire cost of production and maintenance are met by the local bodies and institutions.

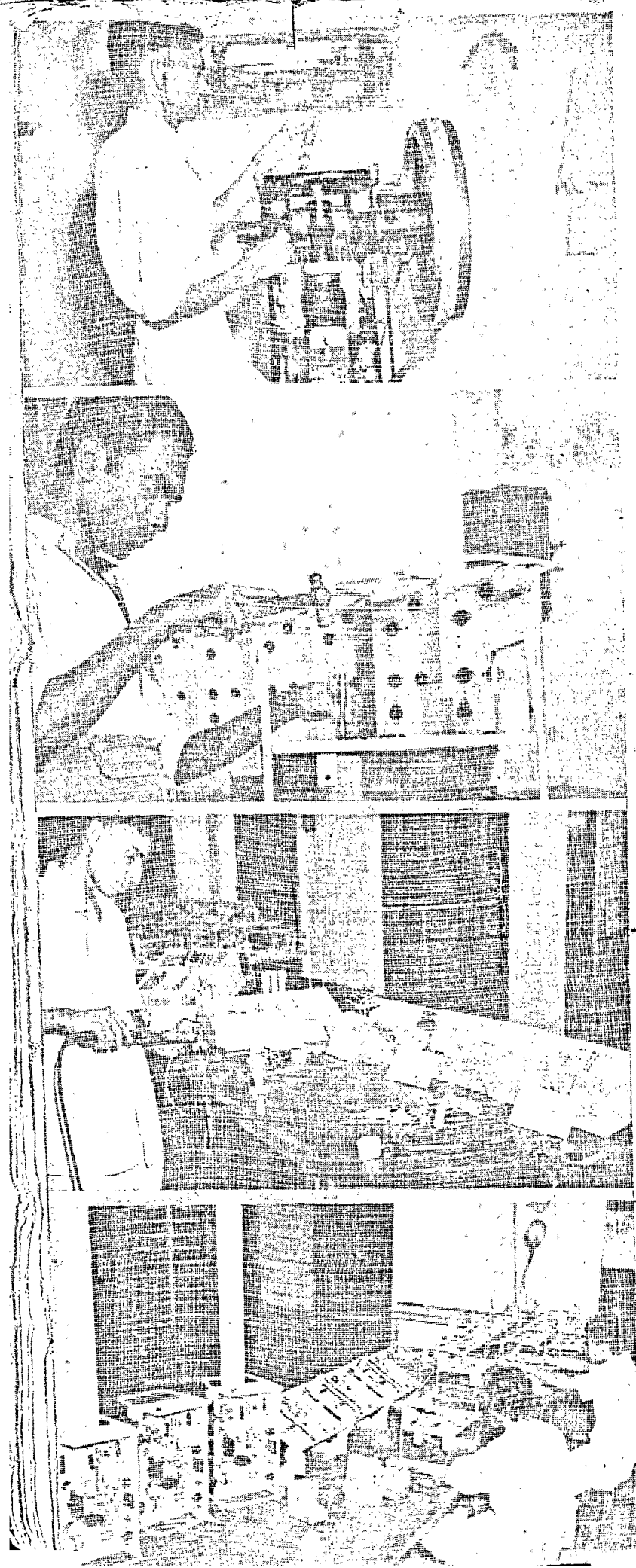
THE CORPORATION FLOWER SHOW

An annual event of great interest to garden lovers in the City is the Corporation Flower Show, held in My Ladyes Garden, a quiet placid island of bowers and shady nooks behind the Ripon Buildings, seat of the Madras Corporation, and opposite the Zoo Lake.

New and gay floral patterns with Indian motifs were the highlights of this year's show. One such was the Ashoka Pillar, a moss covered column of superb proportions. A close-up of the pillar serves as cover page design in the present issue, along with a Gita theme—Lord Krishna as the charioteer for Arjuna.

The Chief Minister, Sri P. S. Kumaraswami Raja, was an interested visitor, and he was conducted round the show by Sri C. Narasimham, Commissioner, Corporation of Madras. The Flower Show paid equal attention to vegetable gardening. Among the exhibits was this luscious crop of tomatoes.





BUILDING RADIO SETS FOR

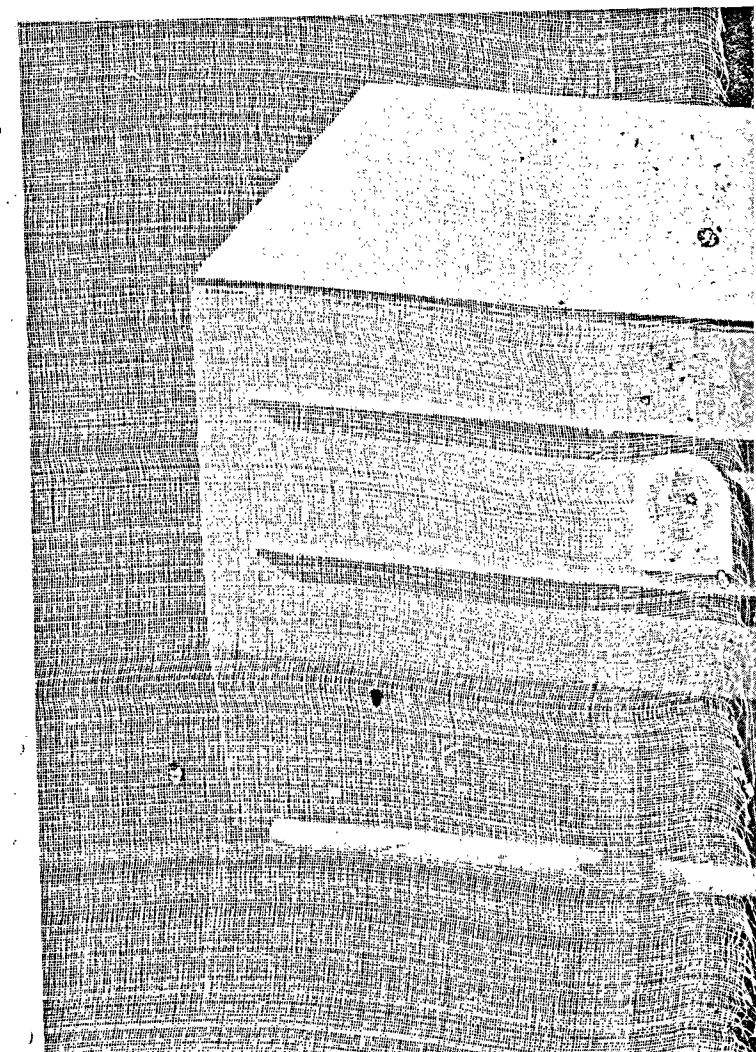
Community listening in rural areas has become a common feature of village life today, affording as it does an enlightening experience in knowledge and culture, forging a new link between town and country. In more and more villages community radio sets are much in demand, and the listener groups are gradually knit into a friendlier democratic brotherhood, in the wake of

Left (top to bottom): 1. In the punching press, veins for tuning condenser are being punched

2. A special frame-type chassis is designed for easy maintenance. The chassis is finished 'tropic-proof', using indigenous paints. Here the valve socket is being fixed on the chassis

3. The hundreds of parts that go into the sets are grouped in sub-assemblies, economising in labour

4. Here the parts and sub-assemblies are being fitted to the chassis. The entire assembly work is pre-determined and carried out with precision



COMMUNITY LISTENING

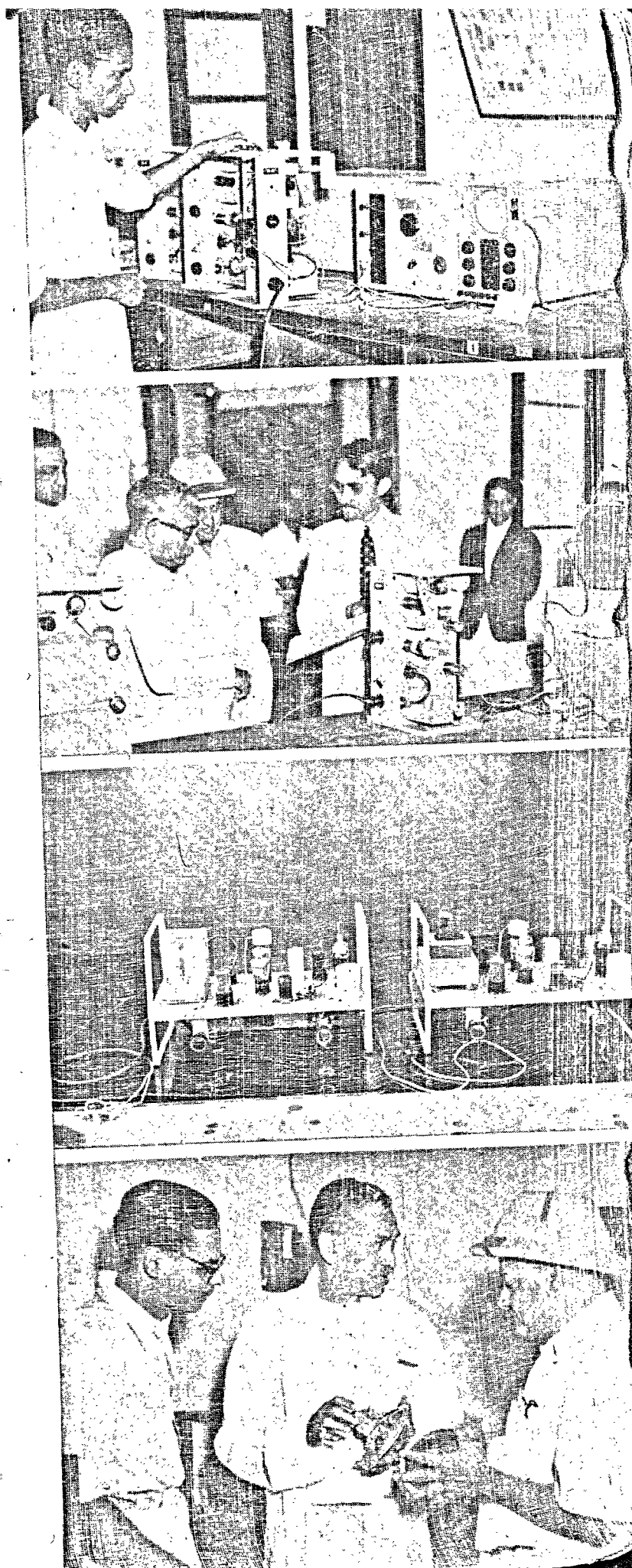
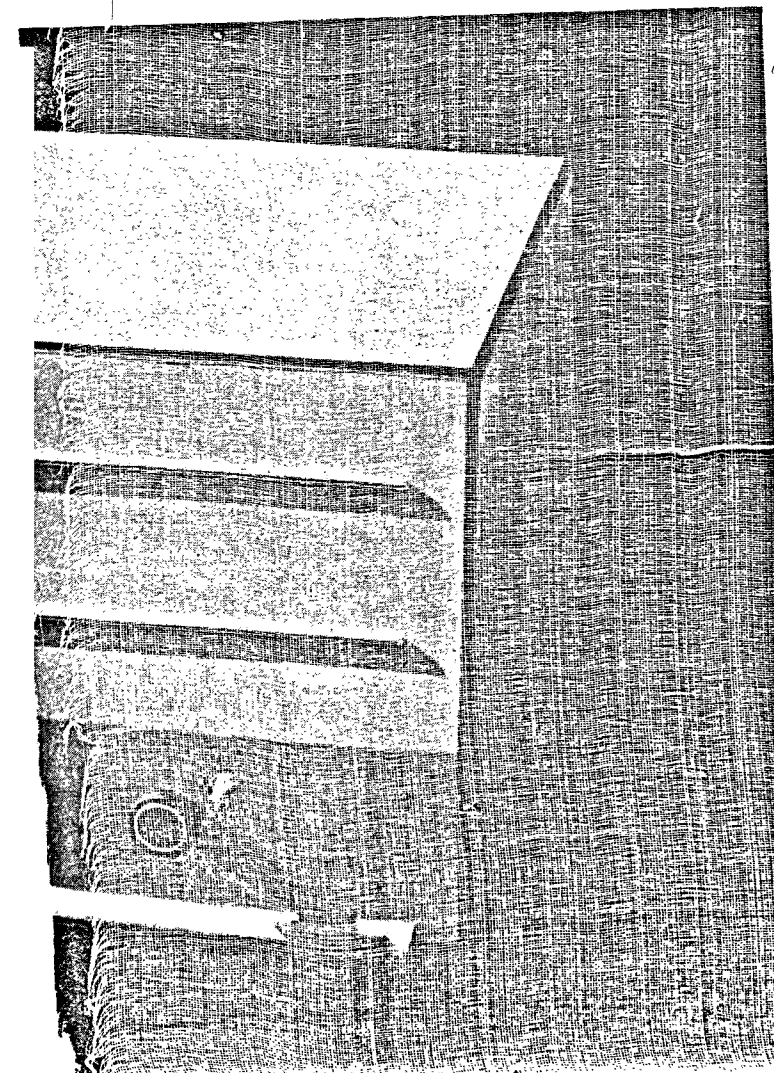
the panchayat, the gramasangham, and the village uplift agencies. Cheap but sturdy radio sets are needed for the villages, so at the Madras State Radio Laboratories, after careful research and experiments, a new type of set has been designed to help advance the rural broadcasting programme. Pictures show the manufacture of these sets in the Laboratories, stage by stage:

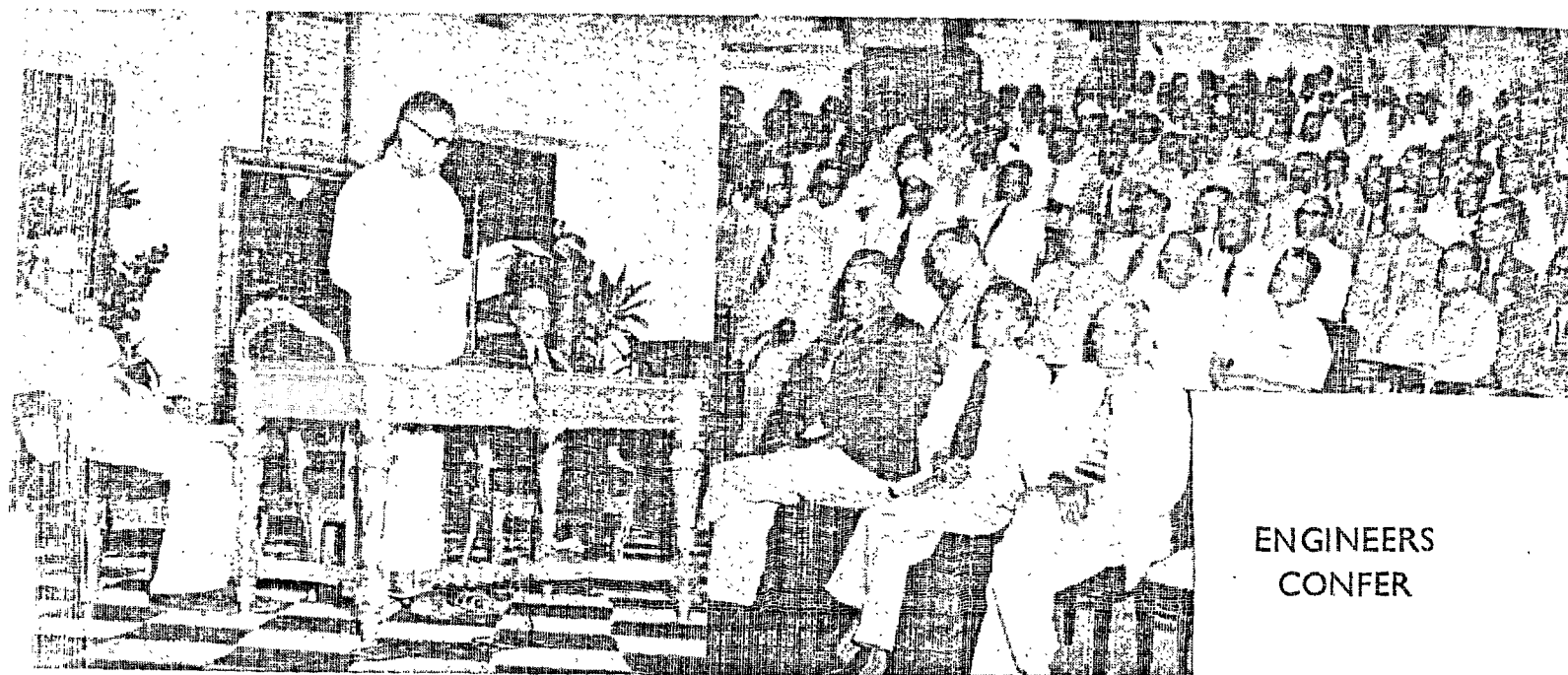
Right (top to bottom): 5. Every set assembled is put through a series of tests and detailed records of performances are made. The receiver is aligned with oscilloscope to get the required selectivity and sensitivity

6. Sri H. Joga Rao, Radio Engineer, explains to Sri M. Bhaktavatsalam, how the tests are conducted

7. Completed, wired and tested receiver. With the interchangeable power packs the receiver can be operated either on mains or batteries

8. Sri P. S. Kumaraswami Raja evinces keen interest in the research work done on development of loud-speakers

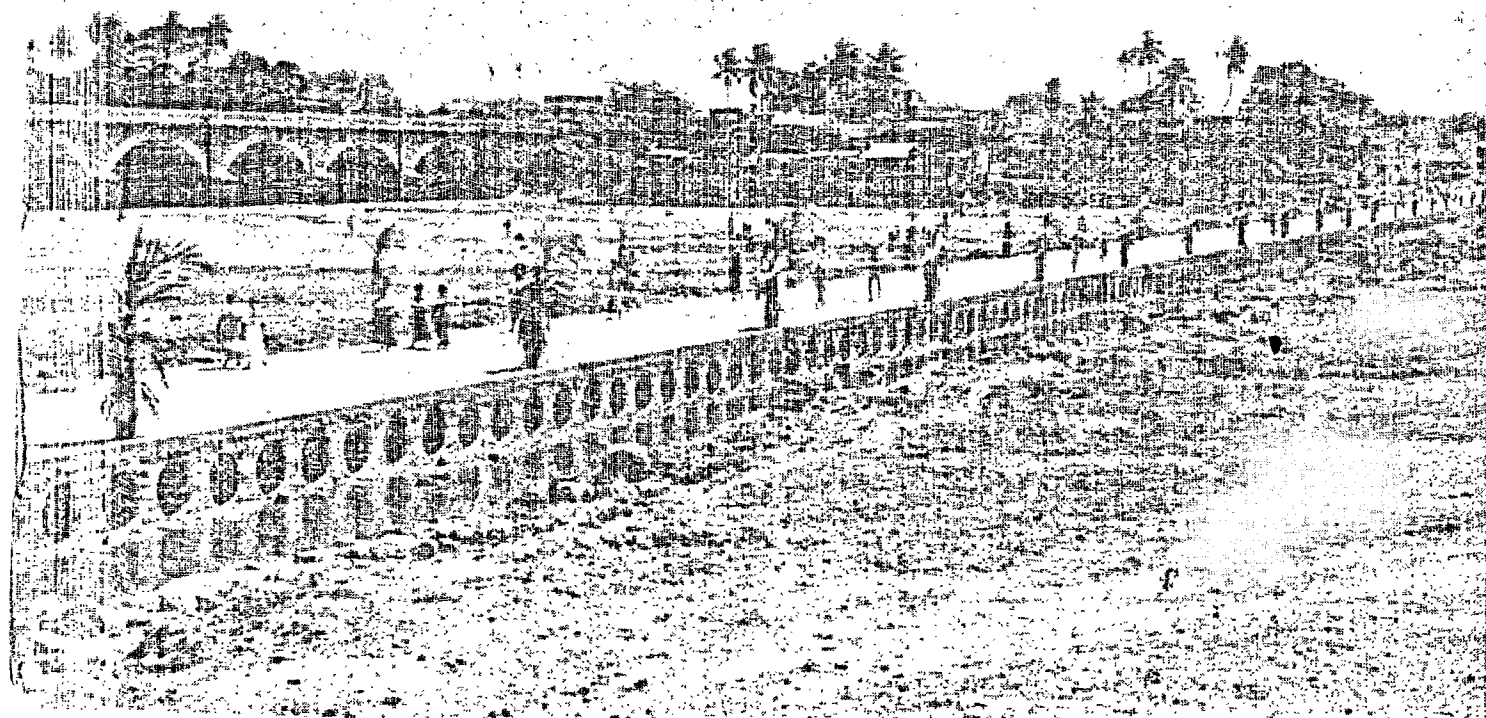




ENGINEERS
CONFER

Sri P. S. Kumaraswami Raja, Chief Minister of Madras, addressing a Conference of Engineers at the Rajaji Hall, Madras City. The occasion was the annual meeting of the Institute of Engineers (India), South India Centre.

The new causeway over the Vaigai at Madurai provides a cheap but effective solution to bridging the river.



PROGRAMMES

19

MADRAS INFORMATION

The Government State Broadcasting Department has helped several municipalities in installing the Wire Broadcasting System. The Wire Broadcasting System is a cheaper means of providing, particularly municipal towns, with the benefit of radio programmes, in several places, as also local programmes or speeches relayed from the Central unit. It is also possible to broadcast through this system programmes and speeches on public health, civic consciousness, festivals, local sports and other events.

Revival of Traditional Feature

Community gathering and listening is nothing new to India and particularly in South India it has a hoary past. Be it a wedding, or a temple festival, it has been made an occasion for people not only to meet and improve their social relationship but also to exchange views and create better understanding among themselves. As in the ancient past, even today in many villages people gather in the

temple or a common place in the evenings after a hard day's work, and listen to Harikatha Kalakshepams, join in Bhajanas or community singing and participate in folk dances. Radio brings one more facility for community entertainment and recreation in the villages.

Madras State leads in this direction of helping people in the villages to have this amenity and it is by far the most advanced State in India in the matter of development of community listening. The amount spent on providing this amenity to nearly fifteen million rural listeners through over 1,600 community sets is just a minute fraction of the revenue expenditure of the State, viz., two thousandth of it. Madras State has spent in three years from 1948 to 1951 on the average only Rs. 3,10,000 per year for State Broadcasting providing accessibility for community radio listening to over 1½ crores of people in villages and towns in the State in 1951. In other words, it costs the State Exchequer only one rupee for every 50 people who are listeners at a community centre.

Number of Installations as on 1st March 1951

District.	Emchayat Boards.	Private Body.	Government Institutions.	Municipalities.	Sets in propa- ganda vans.	Schools.	Total.	Number of service stations.	Revenue towards annual main- tenance charges of sets.	Expendi- ture on maintenance of sets.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10) Rs.	(11) Rs.
1 Srikakulam ..	16	3	1	4	..	..	24	1	2,840	6,000
2 Visakhapatnam ..	20	3	2	7	..	1	33	1	3,710	8,250
3 East Godavari ..	89	..	..	9	1	1	100	6	10,560	25,000
4 West Godavari ..	82	4	..	9	..	1	96	3	9,660	24,000
4 Krishna ..	66	2	1	11	..	2	82	4	7,910	20,500
6 Guntur ..	110	..	..	12	1	5	128	5	13,180	32,000
7 Nellore ..	48	7	..	4	1	..	60	3	7,870	15,000
8 Chittoor ..	24	10	..	5	..	..	39	2	5,140	9,750
9 Cuddapah ..	17	3	..	4	1	..	25	1	3,890	6,250
10 Kurnool ..	32	4	..	5	1	3	45	2	5,940	11,250
11 Bellary ..	35	1	4	8	1	1	50	2	6,410	12,500
12 Anantapur ..	35	5	..	9	1	1	51	2	6,530	12,750
13 Chingleput ..	20	1	4	7	..	4	36	2	4,010	9,000
14 North Arcot ..	40	4	2	14	1	..	61	1	7,300	15,250
15 South Arcot ..	44	4	..	9	..	..	57	2	5,880	14,250
16 Tanjore ..	44	2	..	22	1	1	70	3	6,920	17,500
17 Tiruchirappalli ..	44	2	..	13	1	..	60	2	6,460	15,000
18 Madurai ..	79	3	2	14	1	..	99	4	10,950	24,750
19 Ramanathapuram ..	54	..	1	25	..	..	80	3	6,490	20,000
20 Tirunelveli ..	60	2	2	17	1	14	96	4	9,960	24,000
21 Salem ..	55	6	2	8	..	5	76	3	8,240	19,000
22 Coimbatore ..	66	8	..	21	1	..	96	4	10,760	24,000
23 Nilgiris ..	11	..	3	6	..	..	20	1	2,090	5,000
24 Malabar ..	40	11	..	13	1	7	72	3	9,250	18,000
25 South Kanara ..	38	3	..	..	1	..	42	3	5,750	10,500
26 Madras ..	..	..	4	..	1	..	5	..	2,200	1,250
Total ..	1,169	88	28	256	16	46	1,603	67	179,900	400,750

Self-Help in Thirumangalam

The Rural Development Scheme of the Madras Government is essentially based on Gandhiji's constructive programme, and is designed to help villagers to maintain a better standard of living and cultivate a new outlook in life. Simplicity of living, dignity of labour, decentralised methods of production—the techniques reoriented to cardinal principles of truth and non-violence—are the fundamental features of the programme of work. The immediate and ultimate aims involve the raising of material, moral and cultural values, so vital to a benign humanity.

Accordingly to the General Plan formulated by a Board of Experts, Firka Development work (as it was originally termed) centres round the following five main items of activities: (1) Agriculture and Village Industries; (2) Sanitation, Health and Housing; (3) Village Education; (4) Village Organisation and (5) Village Culture. A short review of the work accomplished in Thirumangalam Firka (Madurai District) from 1947 to July 1950 will indicate how valuable has been the services of the Rural Development Department in giving a lead to villagers to help themselves.

The old firka area in Thirumangalam comprised 64 villages of which 52 were in Thirumangalam Firka and 12 in Kallupatti Firka. The villages were divided into six groups and each group was put in the charge of a trained Grama Sevak. A Firka Development Committee was organised. In addition to the usual staff of one Rural Development Officer and six Grama Sevaks, the following Special staff were also appointed exclusively for Rural Development work: (1) Agricultural Demonstrator and a Fieldman; (2) Minor Irrigation Supervisor; (3) Health Inspector, and (4) Co-operative Inspector. These officers work under the immediate control of the Collector, in consultation with the Rural Development Officer and render necessary assistance to the villagers as and when required.

Survey Conducted

In June 1950 a survey was conducted with a view to study the prevailing conditions of the villages.

Construction of a village community centre is under way. Such centres will help to accommodate not only the panchayat, but also reading room and library. In similar premises the concept of village swaraj will be nursed to fruition.

The total population of the firka (old and new) is 152,061 of which 74,211 are males and 77,851 are females. The castewar statement shows that 122,332 are Hindus, 25,133 are Harijans, 1,781 Christians and 2,766 Muslims.

The total extent of wet lands available is 15,303 acres which works to an average of about 10 cents p capita and that of dry lands 100,164.96 acres. The extent of lands lying waste is 8,987.69 acres of which 812.31 acres are cultivable and the remaining unfit. The area now used for food-crops is 67,132.46 acres (which works at 40 cents per person including wet lands) and non-food crops 43,548.90 acres. The extent of lands used for growing vegetables is 5,415.53 acres.

The total number of wells in the firka used for irrigation purposes is 4,535 and that of Minor Irrigation tanks 80 and other private tanks 59. Total extent cultivated by tanks is 14,691.20 acres.

There are now 134 elementary schools within the firka area. The total number of children of school-going age is 21,788 of which 12,611 are boys and 9,177 girls. Of the above the number attending schools is 12,091 consisting of 8,124 boys and 3,967 girls. It will be seen therefrom that 63 per cent of the boys and 33 per cent of the girls are attending school. The percentage of school-going children is only 55.

An economic survey with special reference to the effects of Prohibition was also conducted in selected villages.

(1) AGRICULTURE AND VILLAGE INDUSTRIES

There are 80 Minor Irrigation Tanks in the firka area of which 41 have been repaired and 22 others are in good condition. Instructions have been issued to attend to the repairs to the irrigation tanks at once. Intensive propaganda is being done to grow more food-crops and to encourage compost manufacture. The digging of manure pits is supervised. An Agricultural Sub-Committee with leading non-officials and District officers has been formed to concert ways and means to improve agriculture. Two hundred pairs of cart-tyres were distributed to deserving ryots. Agricultural implements worth Rs. 1,000 at half cost were also supplied to poor ryots. Free supply of industrial implements was given to 15 artisans.

(2) VILLAGE SANITATION, HEALTH AND HOUSING

A lump sum provision of Rs. 30,000 was set apart for Rural Water Supply and a similar amount was granted for communications. A total sum of Rs. 25,000 was also placed under the Discretionary Grant of the Collector for providing other amenities to the villages. Except in the case of Harijans, local contributions not less than one-fourth of the estimated value of the work executed have also been insisted to be paid and there was great response from the villages in all the activities.

Rural Water Supply: From 1948 till March 1950, twenty-five new wells of total value of Rs. 35,532 were constructed, of which 12 were exclusively for Harijans and 13 for common purposes. Thirty-two wells (11 Harijan wells and 21 common) were also got repaired at an estimated cost of Rs. 26,705. The total value of work done for completing the above 57 wells which extended over 33 villages was worth Rs. 62,237, of which Rs. 40,259 were spent by

Government and the balance Rs. 21,998 was contributed by the villagers. Ten other new wells are also in progress for which part-payments have been made. Total amount spent so far is Rs. 43,959.

Communications.—Roads completed in the firka area after the inauguration of the Firka Development Scheme till the end of March 1950 are noted below, with the cost incurred against each:—

	RS.	A.	P.
1 Rengapalayam Village Road: 1 mile, 1 furlong.	3,099	0	0
2 Gandhiniketan Ashram Feeder Road ..	2,544	6	0
3 Thirumangalam-Koodakoil Road: 6 miles, 5 furlongs.	15,000	0	0
4 Nedungulam Branch road from Koodakoil, 1 mile, 1 furlong.	2,785	8	0
5 Alamampatty-Naduvacottai Road; 2 miles.	8,550	0	0
6 Sengulam-Subbulapuram Road ..	3,991	6	0
7 Silarpatty Village Road ..	1,221	14	0
8 Extension of Koodakoil Road to village limits.	2,493	0	0

Except items 2 and 7, funds amounting to Rs. 36,012 were met from the District Board. In the matter of communications one-fourth total cost of the land value and one-fourth cost for the formation of the roads are met by the people themselves.

Discretionary Grants.—From the Collector's Discretionary Grant, a sum of Rs. 21,420 was spent towards 71 items of works as detailed below. The total estimated cost of these items of work amounted to Rs. 89,200 of which Rs. 46,760 were contributed by villagers either in the form of money or labour. Details of works are:—

(1) New wells for Harijans	2
(2) Improvements to wells	1
(3) Levelling of streets and formation ramps. ..	6
(4) School buildings constructed	14
(5) Night Schools and Reading Rooms	12
(6) Culverts constructed	2
(7) Latrines—Open type 3, Wardha 10	13
(8) Hospitals and Maternity Centres	3
(9) Women's Welfare Centre	1
(10) Manure pit	1
(11) Bathrooms for Harijans	6
(12) Sangham buildings	1
(13) Drains and disposal pits	7
(14) Other works	2

Street drains were constructed in the villages in the old groups extending to a length of about 12,000 feet.

From the Harijan Welfare Fund 18 items of work, viz., Bathrooms for Harijans 8, Approach road to Cheri 1, Wardha type movable latrines 8, were done for the use of Harijans at a total cost of Rs. 4,200.

Programme of work for 1950-51.—A programme of work drawn up for 1950-51 was approved by the Firka Development Committee in July 1950. A sum of Rs. 20,000 has been set apart for this year for constructing 116 approach roads covering a length of about 15 miles in the new areas. Proposals have already been sent up for forming five roads. Under Rural Water Supply there is a provision of Rs. 20,000 for the new area and it has been proposed to construct 24 new wells and to improve 31 other wells of which the numbers set apart for the use

of the Harijans are 20 and 16 respectively. It has been proposed to provide new community latrines in all villages. Disposal drains will also be provided in areas where street drains were constructed by the people themselves. Construction of drain works have already been commenced in four villages and about 2,000 feet drains were finished at villagers' cost.

Provision is also made to start five maternity centres and two leprosy clinics in the new area and to provide at least one midwife in each group. A pucca building put up by the villagers at Pappayapuram for a maternity centre is nearing completion. A moving dispensary has been started in the firka area by the District Board with a mobile van, necessary staff and equipment, and this would afford medical relief to the people in the villages. Adequate preventive measures are also being taken against communicable diseases such as smallpox, malaria, typhoid, cholera as and when reported from the villages, and inoculation was done on an intensive scale in the affected areas.

(3) VILLAGE EDUCATION

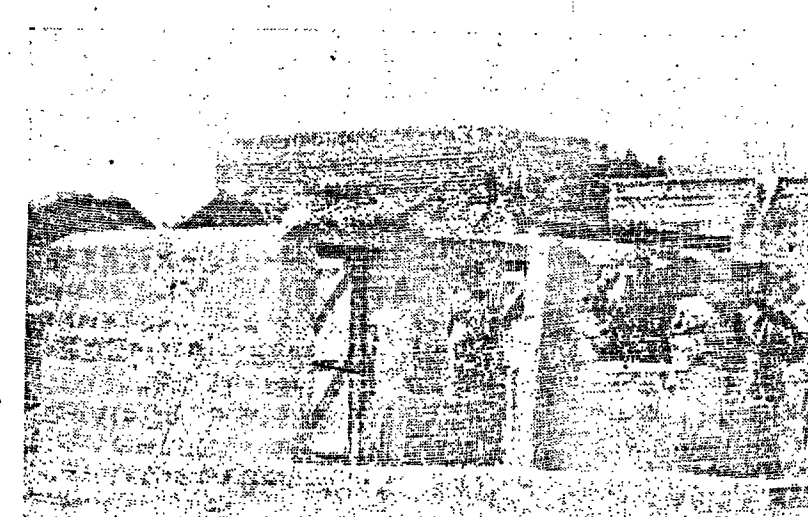
For propaganda work a new projector generator with necessary films for village use has been purchased. A detailed programme has been drawn for education. Orders have been issued to convert 11 schools into basic schools in the Kallupatti firka. Applications have also been received from four other villages offering two acres of land and Rs. 3,000 each towards building grants for basic schools. These are under consideration. There are already 72 primary schools in Thirumangalam firka, 39 in Kallupatti firka and 21 in the Kalligudi and Pannikundu firkas. Recommendations have been made to start 12 more schools in the new area, seven reading rooms, four adult centres and one night school.

There is a Central Library in the Head office under the charge of a Librarian and there are 45 branch libraries in the villages. The total number of books available now is 2,334 worth Rs. 3,126.

(4) VILLAGE ORGANIZATIONS

Co-operative Societies and Panchayat Boards are being formed in the new firka areas. The number of co-operative societies formed in the old firka area was 56, and the number of Panchayat Boards 33. The total number of Grama Sevak Sanghams formed was 48.

A well and washing place built by the villagers in Thirumangalam. The rural people are thus encouraged to provide badly needed amenities by their own efforts.



Development of Village Industries

The Government have approved of a scheme for the formation of Co-operative Agencies to aid the implementation of the comprehensive scheme sanctioned already for the development of village industries.

It may be recalled that in January 1950 the Government had, with a view to revive the dying village industries, sanctioned a comprehensive scheme which envisaged the distribution of a few models of improved labour-saving tools to enterprising artisans free of cost and also envisaged the storage in the villages of sufficient quantities of raw materials for sale to artisans at cost price during all seasons of the year. The storage and distribution of tools, implements and raw materials had hitherto been attended to by the Rural Welfare Officers. According to the new scheme now sanctioned, the procurement, distribution and storage of the implements and raw materials will vest with co-operative agencies.

Twenty-five firkas at the rate of one in each district have been selected for the working of this new scheme. The several co-operative societies formed in the villages in the firkas will be federated to 12 FIrka Cottage Industries Co-operative Federations to be set up in 12 selected firkas.

Grama Sevak meetings.—Usually there will be at least four Grama Sevak meetings in a month when important subjects relating to the works to be carried out in the villages and other important topics are discussed. Of the four meetings at least two will be held in villages as per a programme from 9 a.m. to 5 p.m. In the morning 'Saphai' work will be done in the villages with the help of the villagers at least for a period of two hours when the way to construct manure compost pits and latrines will be demonstrated. In the afternoon there will be a sacrificial spinning for half an hour when the villagers will also be requested to take part.

A procession consisting of the students and other members of the village will be taken round the street with chorus music and at the end a public meeting will be held when the ideology and methodology of the FIrka Development Scheme will be explained. The meeting will terminate with Bhajans and other cultural activities. These meetings have helped a great deal in creating a new outlook in the minds of the villagers and to induce them to do good work. Sarvodaya Bhajan Sanghams and Saphai Mandals were formed in fifteen villages.

(5) VILLAGE CULTURE

Intensive propaganda was also carried on in all villages by means of lectures, magic lanterns and cinemas on agriculture, sanitation, conversion of rubbish and night soil into manure and communicable diseases. It was found possible to bring forth a new outlook among the

villagers and to create 'Sanitation consciousness' in them. The villagers readily co-operated with all the activities and contributed their share both by money and labour wherever necessary. Construction of drains, school buildings, reading rooms, maternity centres, latrines, bath-rooms were certain important items of works undertaken by the villagers. Adequate attention was also paid in developing the cultural activities and in organising games in the villages.

Harijan Welfare Work.—The Harijans in particular took a keen interest in the work and availed themselves of the opportunities afforded for their general welfare. Under Rural Water-supply, 30 works amounting to Rs. 23,438 were done for the use of Harijans. In five Harijan cherias in the villages of Kundathur, Kallupatti, Nedungulam, Retrapatti and Karaikeni bathrooms were constructed for them and these are very popular. Harijan community centres were organised in 12 villages and five reading rooms were started. Nine works amounting to Rs. 7,422 were carried out from the Collector's Discretionary Grant for the use of Harijans. In four villages 37 acres of lands were granted for agricultural purposes. A housing scheme estimated at Rs. 4,821 is taken up at Kallupatti and acquisition proceeding are in progress in seven villages to give house-sites for the Harijans.

They take keen interest in developing cultural activities such as folk dances, Bhujans, etc. The Women's Welfare Organisers at Kallupatti and Pudupatti conduct Adult Centres for Harijan women and the centres are very popular and largely attended. Adult Education is also arranged in 12 centres for males. Two female Grama Sevikas trained in midwifery have been posted to the Kasturba Trust Agency, Madurai, for maternity and child welfare work.

Relief for Handloom Industry

The Government have directed that, with effect from February 15, 1951, sales of handloom cloth in this State be levied Sales-Tax at the rate of one and a half pies in the rupee on the turnover, instead of the present rate of three pies per rupee. This action has been taken by the Government in order to give the handloom industry an immediate relief.

Techniques in Increasing Rice Yields

(Continued from page 12)

variety from Bengal, S.R. 26-B, which is found to be fairly resistant to saline conditions is being recommended for some areas. Crosses between these and other rice varieties are under way. Work for evolution of drought-resistant strains is also taken up. It can be claimed that the production of higher-yielding varieties by plant-breeding methods is a sure and in the long run one of the least expensive methods for improving the productivity of the State. The evolution of improved types suitable for growing on marginal lands with a precarious water-supply is one such item.

In conclusion, it is expected that all those who are concerned in this important crop will produce as much as possible by following the simple and sure methods indicated above and help to keep the spectre of want at a distance.

(By Courtesy, A.I.R., Tiruchirappalli).

Development of Leather Industry

The present problems and future development programme of leather and leather goods industries were discussed at a meeting held recently in the office of the Planning Commission, Government of India, New Delhi. The meeting was attended by the representatives of the Ministry of Industry and Supply, Government of India, Mr. A. J. Hardecastle (Tanners' Federation of India, Kanpur), Mr. T. Abdul Wahid (Southern India Hide and Skin Merchants' Association, Madras), Mr. C. A. Ferens (Leather Goods Manufacturers' Association, Bombay), Mr. Shankerlal J. Parikh (Footwear Merchants and Manufacturers' Association, Bombay), Mr. B. M. Das (Honorary Leather Adviser to the Government of West Bengal), Mr. S. Raja (Government Tanning Institute, Bombay), and Mr. J. C. Mazumdar (Government Tanning Institute, Jullundur).

It was stated in the course of the discussion that 26 large tanneries functioning on a mechanised basis and producing finished vegetable tanned buffalo leather and chrome tanned upper leather occupy an important place in the tanning industry. At present the installed capacity of these tanneries, on the basis of single shift work, is 31,84,200 vegetable tanned hides, 19,76,400 chrome tanned hides. The actual production in 1949 was about 5.8 lakh pieces of chrome tanned hides and 18.35 lakh pieces of vegetable tanned hides.

Groups of Tanneries

The second group of tanneries, about 500 in number and concentrated mainly in South India, is represented by small and cottage scale units with a combined annual production capacity of about 100 lakh tanned hides (East India kips) and about 190 lakh tanned skins (East India Tanned skins). The leather produced in these tanneries is tanned and constitutes an important source of foreign exchange to our country.

The Chinese chrome tanners with their small-scale operations in about 250 units centred mainly in the Calcutta area form another section of the tanning industry, whose production during war time when the main tanning industry was working on Government orders, was about 30 lakh tanned hides.

Another sector of the tanning industry, whose position is not well-known but is nonetheless important, is constituted by innumerable village tanneries which utilise 80 to 90 lakh raw hides and nearly 40 lakh raw goat and sheep skins.

Footwear and Luggage Goods

Discussion further showed that the organization of the leather footwear industry is also similar to that of tanning, the production being distributed between machine-made footwear and hand-made footwear, the latter being manufactured both on factory and cottage industry basis. The installed capacity of the nine existing mechanised factories was estimated at 47.21 lakh pairs as against 130 lakh pairs of western type leather footwear and 700 lakh pairs of Indian type produced by the small and cottage scale units.

An assessment of the raw material requirements on the basis of present production showed that the tanning industry would require 200 lakh pieces of raw hides, 50 lakh pieces of raw skins and 1,32,035 tons of tanning

materials and chemicals including dyes and pigment finishes. The weakness of the tanning industry in respect of the indigenous availability of tanning materials, particularly wattle bark, was emphasised and long-term measures for cultivation of wattle plantations and babul tree plantations were recommended for consideration of the appropriate authorities.

Facilities for Production

The annual requirements of leather for the leather footwear industry were estimated at 108.5 lakhs of tanned hides and 40 lakhs of tanned skins. The manufacturers urged that Government should assist the industry in respect of imports of such raw materials and equipment as are not available in the country by placing many of them on O.G.L. On the other hand, it was also maintained that necessary facilities should be given to Indian manufacturers to produce such articles as could be locally produced as was done during the war. It was agreed that if any concrete proposals were forwarded, they would be immediately examined by the Planning Commission and the Ministries of Commerce and Industry.

In view of the fact that the indigenous tanneries have been working far below their installed capacity, the manufacturers suggested that the export of raw hides should be completely banned. It was also pointed out that by exporting the same quantity of hides in the finished state, the gain in foreign exchange would nearly be doubled. The representatives of the tanning industry also contended that the position in respect of raw hides would considerably improve if the slaughter of cattle which are unproductive was permitted.

Future Development Programme

The quality of raw hides and skins was considered to be capable of improvement and several suggestions were put forward to achieve improvement in this direction. In connection with the future development programme of the industry, it was suggested that new tanneries should be located at a distance from the big cities and nearer to the main raw material centres, and that training should be given under Government auspices to village shoemakers to produce modern types of footwear as a measure of achieving further expansion of production in rural areas contiguous to large towns. Attention should be concentrated to some extent on the expansion of the production of glazed kid leather, and as a long-range policy, the possibilities of re-tanning and currying of East India tanned leather so as to export finished leather rather than crust tanned stock should be kept in view.

In quantitative terms, the target for 1956 for footwear production was fixed as 960 lakh pairs as against the present production capacity of about 850 lakh pairs. The development programme for the tanning industry visualised an annual production of 240 lakh pieces of tanned buffalo and cow hides, 362 lakh pieces of tanned goat and sheep skins to be realised by 1956. The total capital investment required for attaining the above targets was estimated at about Rs. 6.5 crores while the development would expand the value of exports of leather by 4.5 crores, and reduce imports of leather mill stores by Rs. 1.2 crores per annum.

Capitalisation of Labour

By SRI J. M. LOBO PRABHU, I.C.S., Secretary, Development Department.

Of all forms of slavery, the worst is the slavery of the mind. India as a country is free, but Indians as a people may be bound by habits of thought forged by a long history of suppression. The thought synthesis of the people derives from at least three sources—first that of self-preservation arising from conditions of foreign rule, second that of atavistic longings for a glorious but old past, and third of power consciousness introduced by political equality. The result, it is asserted by competent thinkers, is a stegoant attitude supported both by fear and pride, and impervious to all outside influence. Some critics maintain that never has freedom found a people more determined to remain enslaved in its own mistakes.

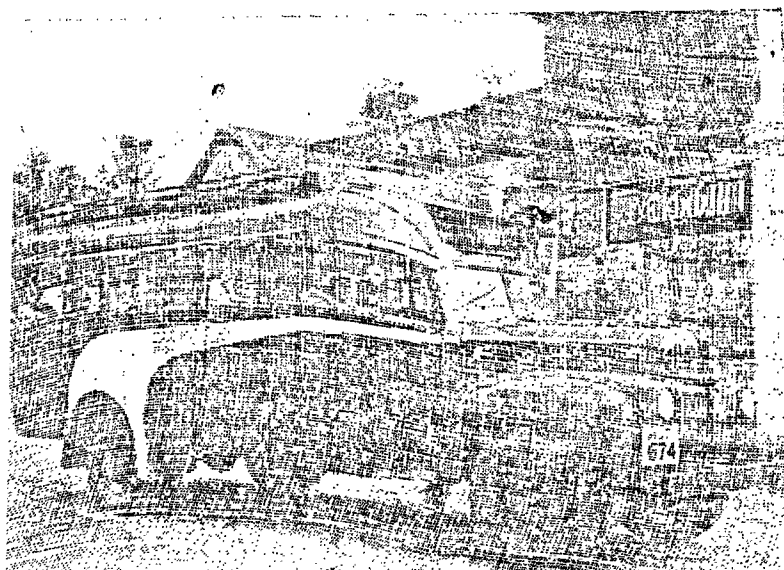
This would explain why the policies and plans of Government in themselves, as good as any in the world, are not bearing fruit. There is an invisible wall of resistance to all change. Gigantic efforts in many directions are fetching no results, while production is static and poverty is increasing with the population. The U.N. survey published today bears evidence of the economic regression.

Basic Wealth of Labour Potential

What can the country do? What are its potentials? The basis of wealth is land, labour and capital. We have little industrial capital, while our finances have been stretched to the point of danger. Our land is almost exhausted but we have labour, which is our only superfluity, and therefore our wealth. In this connexion, it deserves to be remembered that land receives its value from labour, and capital is only an accumulation of past labour, to intensify and economise present labour. We therefore possess the basic element of wealth. At present it is largely wasted. It is computed that the cultivator works only for 120 man-days in the year, the factory worker

THE SOUTH ARCOT DISTRICT CO-OPERATIVE MOTOR TRANSPORT SOCIETY, CUDDALORE.

This bus service plies between Cuddalore and Pondicherry. Run by ex-servicemen, it is another instance of the co-operative movement tackling diverse problems of resettlement and transport.



is not a quarter as efficient as his counterpart in Europe and America, the women are largely unemployed, while the joint family system, and public charity support large numbers of idlers and beggars. On the best estimate we are not using even a third of our labour potential.

The reasons for this are many. In U.S.A., the labour potential is utilised by constant increase in the standards of consumption largely on the instalment basis so that almost every worker's time is mortgaged. In U.S.S.R., the simple dictum is that to each according to his needs, from each according to his means. In England and in other socialist countries, the dictum is, to each according to his needs but from each according to his wishes, as collectively expressed by his Union. In India, the position is nearly the same, except that the Government, more than unions, determines the wage rates. In one sense, the U.S.S.R., is hardest with its labour, because it takes the last quints of its effective power.

Towards an Economic Code

Is this the secret of its success? If so, can we capitalise our labour by methods other than those of the Communists? The incentives for efforts are commonly money, power and position. In the stage of physical and psychological starvation into which our labour has fallen, these incentives have little meaning. Even money, the strongest of them, has been weakened by its recent vagaries, and is of not much use when there is so little to buy, even if the worker could be convinced he needs anything new at all. In the last analysis, the worker is ruled, not by hopes, but by fears. The question is whether his disposition to fear should be utilised to create a disposition to hope. If a moral issue is raised, how many good schemes of men, including religions, are not based on fear? As men are made, the majority act for fear of losing than for hope of winning. Psychologically, it will be incorrect to ignore natural tendencies.

The question then is, if fear should be exploited, as was done in the beginning in the U.S.S.R. by blood and iron. This process not only involves suffering but can be injurious to the organism of general growth. Fear should remain fear, and not become fearfulness. Its use should be therapeutic, attacking only the diseased spots of ignorance and indolence. It deserves to be realised that any person who does not render a proper account of his land and labour is as much a criminal against society, as one who takes away more directly life and property of others. In fact, he is a worse criminal because insidiously he robs the children of their right to develop according to existing opportunities and of the country to capitalise its human and natural resources. An economic code, enforcing a proper discipline of working and spending, may therefore be of greater urgency today than the Penal Code.

"Physical and Psychological Cramp"

Precisely the waste of resources is greatest in the agricultural sector. Our agricultural production is computed, according to the yields of principal grains like

rice, wheat, cane and cotton, to be only about 55 per cent of what it is in other countries. Considering that the aggregate of agricultural income is about 14 times the income from other productive sources, any increase, even in a small percentage, will not only step up the national income, but will expand and intensify nearly all other incomes, which are functional co-efficients of the income of the largest majority, 70 per cent of the population in agriculture. Secondly, the quality of the Indian population is similarly exploited only in part. Indians abroad, in Africa, Canada, Burma, West Indies, have demonstrated their industry, intelligence and capacity to capitalise their opportunities.

In India there is a cramp, both physical and psychological. The physical cramp can be removed only in course of time, as man heavy agriculture is relieved by industrial and other occupations. The psychological cramp must be removed first. The cause of this is primarily fear of change in a population living so long on the margin of subsistence that it clutches with desperation to habit. This fear cannot be overcome individually; being general, it must be subject to a mass attack. It is the village and not the individual that must be target. During the war, the foreign rulers used collective responsibility to save their order; even earlier, for instance in the time of the Moghuls, the scheme of Government was based on the collective responsibility of the village, for revenue, defence and Government. Men do in a mass, what they procrastinate or fear to do alone. Collective responsibility also subjects the recusants to pressure from the more efficient.

Authority for Village Executive

The village therefore has to be charged to secure increased and improved production, being given the power to enforce the appropriate discipline. If it is rewarded or punished collectively, the village will accept the authority of its executive, which may be elected by itself, and may be subject to appeal only to another body, elected for a number of villages. If a simple blueprint of the more obvious improvements, like consolidation of holdings, contour bunding, conservation of manure, use of pedigree seed, improved methods of tillage, irrigation, reclamation is given, such elected executives will have something to start with. To the extent the executive will be democratically elected, it will not only be able to exercise authority but to command loyalty, which Government organisations with their long tradition of indifference and inefficiency can never do. Considering how emotional the Indian people are, the plan can be expected to generate its own power and proceed from agricultural to other improvements.

The authority of the village executive, to be effective on the individual and the mass, requires to be based on a proper psychological strategy. In this connexion some very original thinking has been done by the Thinkers Club, whose publication 'Nationalization of Labour' (Paul & Co.) deserves attention. The strategy is insurance for a living wage, against enlistment for whatever work one is considered suit. In agriculture, the work to be rendered will be in one's own holding, according to the blueprinted plan. Labour surplus to agriculture according to the plan, and otherwise under-employed or unemployed, will be mobilised into a Land Army for new colonisation, industrial, building and roads schemes, the number of which cannot be exhausted for many years.

Where is the finance to come from? From labour itself, as it did during the last war, in which peak industrial and agricultural production was achieved simply by increased employment, on created money. If it is suggested that the result was inflation, it is forgotten that the same inflation involved redistribution of incomes, making vested interest with fixed incomes to lose their previous share, and allowing cultivators and workers some new purchasing power on which our economy has been subsequently sustained. Inflation is a form of revolution, increasing the production and purchasing power, at the same time, and, on a total scale. In any case, the inflation in India is less than in the majority of other countries. It is therefore possible to be unnecessarily intimidated by inflation. It is argued that the fundamental factor is production which if increased can take care of surplus money. In fact, in underdeveloped countries, there is a large body of opinion that inflation cannot be occasioned by money created for productive purposes.

Strategy of Organised Pressure

For the recalcitrants, the Thinkers Club propose a strategy of organised pressure. If within a time limit, they fail for avoidable reasons to comply with the plan, they may be penalised by their holdings forfeiting the rights of heritability and transfer. Their holdings may also be assessed to a higher revenue, or at least to the cost of necessary works, which may be done for them by other villagers. It is felt that such penalties will be effective, even as threats. The necessity for them arises from the desperate food situation and the depressed economic position.

In industry, the returns of labour are far from their potentials for various reasons. First, it is stated that labour in so many industries is paid so little that it lacks the physical capacity to render an account of itself, and the purchasing power to sustain expansion of the economy. Secondly, industry has grown to such proportions that the relations of the worker to his work and employer have become impersonalised, losing that innate loyalty and pride for the craft for which our workers were famous. In consequent of this impersonalisation, the only interest left for the worker is in money to be obtained with as

THE VISAKHAPATNAM CO-OPERATIVE MOTOR TRANSPORT SOCIETY.

A bus belonging to the Visakhapatnam Co-operative Motor Transport Society. Such co-operative efforts helps to solve the problem of resettling ex-service personnel who own and man the service, and also the problem of mufassal transport.



B.C.G. Vaccination Campaign Will Help Beat T.B.

Tuberculosis is one of the biggest man-killers in India today. At least five lakhs die every year of tuberculosis—most of them young people—on whom the Nation has to depend for the future. It is said, one man per minute dies of T.B. It is our duty to diminish this figure by every possible means at our disposal. For this the living conditions have to be raised, and facilities made available for treatment and isolation of patient and for aftercare when the disease has been overcome. But the Government can only deal with these far-reaching measures step by step. Fortunately, something can be done quickly and at a small cost—that is B.C.G. Vaccination.

In order to help countries where tuberculosis is spreading on a vast scale, the United Nations International Children's Emergency Fund, the World Health Organization, and the Scandinavian Voluntary Organizations have joined their efforts in the International Tuberculosis Campaign to assist in a B.C.G. Vaccination Campaign on a mass scale. In all, 22 countries have benefited from this Campaign and up to the end of November 1950, 31 million had been tested and 14 million of them received the B.C.G. Vaccination.

The Government of India has also launched a campaign with the assistance of the International Tuberculosis Campaign. This campaign was started in February 1949, and the main object of the Scandinavian teams from the International Tuberculosis Campaign has been to train national doctors and nurses in a special technique. Ninety national teams are now working all over India, and by the end of November 1950, 2,538,011 persons had been tested and 865,968 vaccinated.

To explain the B.C.G. vaccination it is necessary to mention some facts about tuberculosis. Nearly all people will be infected by tuberculosis during childhood or adolescence. Fortunately, most of the infected will overcome the infection without any symptoms, and their bodies will, as a result, develop an immunity against new attacks of the disease. The unfortunate people, mostly those undernourished and living under insanitary conditions, cannot overcome the primary attacks and will develop tuberculosis disease.

By the B.C.G. vaccination, a completely harmless and effective protection, acting just like the natural immunity, can be built up without the risk of tuberculosis disease. This is the same kind of protection as from smallpox and other vaccinations.

The letters B.C.G. stand for Bacillus Calmette Guérin, named after the two French doctors who discovered the vaccine after years of careful experimentation in 1908. Vaccination with the B.C.G. vaccine has been done on a vast scale, especially in Scandinavia, and long-term investigations show that B.C.G. vaccination can reduce the tuberculosis death rate by four-fifths, if carried out extensively.

In order to distinguish between those who already had their primary infection and those who are still virgin soil, a test is made. This is called the tuberculin test, and it is performed by an injection in the skin of the forearm. The result of this test is read after three days, and if no reaction is found—the person is called "negative"—the vaccine is given. If the person has already obtained natural immunity, the result of the test will be a little red swelling and B.C.G. vaccination is not necessary. These persons are called "positive".

The B.C.G. vaccine is given by an injection in the skin of the left shoulder. The injection will not cause any fever or weakness as in many other vaccines. The only thing that can be seen is a tiny ulcer 3-4 weeks after vaccination, leaving a scar similar to smallpox vaccination. The testing and vaccination are completely harmless and no ill effects have been observed amongst the many millions vaccinated by the International Tuberculosis Campaign.

little effort as possible. The impersonalisation may be reduced by organising the workers in social and sporting clubs, as some foreign concerns are doing. The money interest may be satisfied by making the workers co-sharers in the profits above the level required to pay interest, management and depreciation charges on the capital. In fact, this is already being done by awards on disputes by Industrial Tribunals. If employers, it is argued, only saw their interests, they could capitalise with grace the inevitable, by themselves offering, in advance, bonuses related to such profit as may be made. Profits would then become the natural interest of both labour and capital.

Hence the paradox that our labour is our capital. The Indian worker in the fields or factories is capable of industry, intelligence, even emotional intensity if only he can be set on work which satisfies his physical and psychological needs. It may be necessary to press or push him up to a point in order to overcome the rut in which he has fallen. This is a matter for study, not from books of Mill or Marshall, Pigou or Robbins, but from the very pages of life before us. If our economics can be orientated in this direction, it may perhaps save itself and the country from the slavery of thought into which both seem to be in the danger of falling.

Independent Criminal Judiciary

By Sri S. BALAKRISHNAN, Assistant Secretary, Public (Separation) Department.

The year 1950 which has just ended will be a memorable year for centuries to come and will, without doubt, shine in golden letters in the annals of our history because it gave birth to our Republic. So far as our State is concerned, the year saw not only the birth of Free India, but also what we may call the baptism and the rapid and robust growth of a free criminal judiciary.

A free and fearless judiciary is the very foundation and an infallible index of any form of democratic government. Our motherland attained the status of a Sovereign Democratic Republic just a year ago and the Constitution which we have given to ourselves secures to everyone of us the greatest measure of justice, liberty, equality and fraternity. Following the British and American examples, our Constitution has shown an abiding faith in the Judiciary as the guardian of the liberty and the dignity of the individual guaranteed by it. In fact, this only reflects the faith of the average citizen in the courts of law as the bulwark of his liberty. The independent functioning of the judiciary in Free India need therefore no more be a matter of hopes, aspirations or sentiment.

Prestige of Civil Judiciary

Civil Judiciary in our land has always been absolutely independent and has, for this reason, been enjoying a prestige and reputation which is no whit less than what obtains even in the most advanced countries of the world. It has had the most happy existence even during the foreign government because it has never been subjected to any kind of executive interference. Nobody had at any time any the least suspicion that the judges were anything but just and impartial, not only between party and party but also between the State and a party. Such, unfortunately, has not been the case with the Criminal Judiciary. For various reasons, political and historical, the administration of Criminal Justice was part and parcel of the executive administration and the same officer had to discharge the functions of the policeman, the prosecutor and the presiding judge.

Now, as a system, this was essentially bad, for it is generally very difficult for the same man to view things from entirely different angles. Thus a Magistrate who is also responsible for the peace of the district inevitably has or develops an unconscious bias in favour of a conviction. What is worse, there was not merely a combination of distinct functions, judicial and executive, but there was also a definite subordination of the judicial to the executive. The Collector as District Magistrate was in a position to dominate the will and influence the decision of the other Magistrates under him. This inevitably led to sap the moral courage of these Magistrates, who consequently lay themselves open to the charge that they gave decisions, not according to what they felt was right but according to their guess of what the District Magistrate would like them to do. This suspicion was particularly strong in cases with a political colour because the executive was controlled or manned by foreigners. That is how the combination of functions which in the early stages might have been made on grounds of administrative convenience, later on came to be associated with politics.

Provision in Constitution

That is also, perhaps, why nothing could be done in this matter anywhere in India although the need for keeping the judiciary free from executive control was generally recognised and although there was a strong agitation for a reform which goes by the conventional name of the demand for the Separation of the Judiciary from the Executive. It is not without significance therefore that our Constitution contains a specific provision among the Directive Principles of State Policy to the effect that the State should take steps to separate the Judiciary from the Executive.

To Madras goes the credit of having given effect to this all-important reform in a unique manner even in anticipation of the Constitution. A workable scheme of separation was evolved and was introduced as a token measure on the birthday of Mahatmaji in October 1949. The scheme was finalised and rapidly extended to a number of districts in the course of the year 1950. It is, I believe, unnecessary for me to explain the details of the Madras Scheme as they are all fairly well-known now. All that is necessary to remember about the scheme is that it has been formulated within the four corners of the existing statute law without recourse to any legislation. It operates by means of executive orders only and entails no material change in general administrative structure. The scheme has been in operation for more than a year and it is therefore time to take stock of the situation and to see whether, after all, the keen desire for the reform was justified by the results achieved.

I may say at once that the experience so far gained in the working of the scheme has only served to confirm the highest hopes entertained by its sponsors, namely, that it will be a great boon to the people at large. We are in a position to say that the scheme is a great success. I shall proceed to deal with some of the more outstanding effects of the scheme.

Complete Freedom of Action

In the first place, the creation of a separate class of Magistrates unattached to the executive and directly under the High Court has had a very salutary effect, as this has ensured complete freedom of action to our Magistrates. It will henceforth be impossible to associate the Magistrates with the police or the executive. Secondly, the very system of recruitment to the various posts of Magistrates has conduced to their independent outlook. District Magistrates are chosen from senior Sub-Judges. These officers with their long judicial experience behind them are able to try a criminal case with due judicial detachment and decide it without thought of anything except the merits of the case. They are by habit and training absolute strangers to any kind of influence or interference in the matter of their decisions. So also Sub-Divisional Magistrates are officers of the rank and status of District Munsifs and so are able to bring to bear the same judicial outlook in criminal cases as they do in civil cases. Sub-Magistrates are selected mostly from young members of the Bar by the Services Commission and appointed by the High Court. One can see that

unlike the Magistrates of old, all the new Magistrates will be having legal qualifications and training; the insistence of such qualifications has more than casual significance.

With the establishment of National Government, the tendency is to regard the State as a welfare State rather than as a police State, and consequently the nature of criminal litigation has also changed. The statistician will tell us that the number of cases under the Penal Code has of late shown a definite decrease and the bulk of the work of a criminal court nowadays relates to cases under certain social legislations. Accordingly, it is in criminal courts that many difficult legal questions, particularly on Constitutional Law, are discussed and it is therefore quite essential that the Magistrate who is called up to decide the case should be having an adequate knowledge of law. Moreover, the judicial attachment so indispensable to a judge is a characteristic easily acquired by one who is trained in law. In this respect, therefore, the Madras scheme has brought about a very desirable change for the better and one is able to feel it actually.

Change in Atmosphere

The next important change is in relation to the general impression one gets about the criminal court. One is familiar with the old Magistrates' Courts. Few can deny that there was something in the very atmosphere which differentiated it entirely from what one feels in a civil court. This was an inherent defect of the system of combination as such, and, I must add, not a defect of the individual officers. Anyone going round the criminal courts established under the scheme is able to notice a distinct change in this respect. The atmosphere of cool impartiality which should necessarily pervade a court of justice and the peculiar dignity are no more the monopoly of civil courts and can also be felt and seen in criminal courts. The accused comes to the court with great confidence and feels assured that no extraneous considerations will prevail with the Magistrate in the disposal of the case. The nightmares of an accused person that the decision in the case will be according to the dictates of the police are things of the past.

The Magistrate himself is in a much happier position today than his opposite member in the old order of things. It has to be remembered that the officers of the executive who were entrusted with the technical work of administering criminal justice had to labour under severe handicaps. Their promotion and prospects were in the hands of the head of the executive who generally acted in close collaboration with the head of the police and who was therefore not altogether disinterested in the decisions in criminal cases. The Magistrate under the scheme is happily free from all such restraints. His promotion and prospects are in the safe hands of the High Court. This vital change has contributed substantially to make the magistracy absolute fearless and independent, which is what the public earnestly desire.

Among other concrete benefits secured by the public, I may refer in particular to the definite advantage we have secured in that the new Magistrates, just like civil judicial officers, are all stationary and have fixed hours of sitting. We are all familiar with the system of touring Magistrates we had before the reform. It is usual to say in defence of such a system that justice will thereby be brought to the doors of villagers. What exactly we saw in practice was

quite the reverse. Litigants had often to run after a Magistrate throughout the length and breadth of his jurisdiction. It was not unusual to hear of Magistrates resorting to this questionable device or tiring out a party to force a disposal of the case. Moreover, these officers lost a good deal of time in actually moving about and rarely kept regular hours of sitting. The scheme has put a stop to all this inconvenience.

Smooth Working of Scheme

Before concluding, I wish to refer incidentally to one or two matters in respect of which the actual working of the scheme has dispelled certain illusions entertained by well-meaning critics. The most important of this is in relation to the question of maintenance of law and order. As an argument against the reform, it was urged that by interfering with the well-tried arrangements of the magisterial set-up, the maintenance of law and order would become very difficult. It can now be definitely stated that the Madras scheme has had absolutely no adverse effect upon the peace and tranquillity of the land. There has been no instance of any detriment to the law and order position in this State as a consequence of the scheme.

Secondly, there was a respectable body of opinion which took the view that by having two sets of Magistrates under different controlling authorities with functions defined by executive orders only, there will be ample scope for mutual conflict, resulting in undesirable effects on the administration as a whole. This view has been disproved. The respective functions are being discharged smoothly and without any conflict. In this connection, I may refer to a school of thought which would have us believe that an independent judiciary will be a hindrance to the executive and will thwart it. It has been found in actual experience that this assumption has no basis whatsoever. The new Magistrates are quite alive to the needs of orderly government. Lastly, certain persons anticipated legal difficulties in the working of the scheme. Here again, the apprehensions have not materialised.

On the whole, the experience gained in the working of the scheme for more than a year has definitely proved that the Madras scheme is safe, sound and salubrious. Criminal judiciary of our land has at least been emancipated and the results achieved thereby has not only satisfied the sentiments of the people but has also proved the actual working to be a great blessing to the people. The independent criminal judiciary that we have the good fortune to get is surely the sweetest of the fruits of freedom.

—(By Courtesy, A.I.R., Madras.)

Dismissed on Corruption Charge

It was brought to the notice of the Government that Sri T. V. R. Chari, while he was Assistant Engineer (Highways), Puttur sub-division, South Kanara District, was corrupt in his dealings with contractors. The Tribunal for Disciplinary Proceedings framed two charges against the Assistant Engineer, conducted an enquiry in April-May 1950, and found two instances of corruption proved. The Government accepted the findings of the Tribunal and dismissed Sri T. V. R. Chari, Assistant Engineer (Highways), from service. They also directed that the amount contributed by the Government towards his Provident Fund during the last six months' period of his service be withheld.

Corruption Among Government Servants

During the month of October 1950, corruption among Government servants was brought to notice against 336 persons including those against whom proceedings were pending at the end of the previous month. Of these, 17 persons were let off as charges against them were not proved and proceedings against 302 were pending at the end of the month. Corruption was successfully detected in the case of the remaining 17 persons and they were suitably punished. Of these, three persons were awarded minor punishments. The names and designations of the 14 persons who were awarded severe punishments are as follows :—

I. Cases dealt with by the Tribunal.

A. Gazetted Officers—Nil.

B. Non-Gazetted Officers—

1. P. K. Vasudeva Bhaktha, Deputy Tahsildar, South Kanara District—Dismissed.
2. M. Sridhara Shenoy, Deputy Tahsildar, South Kanara District—Dismissed.
3. K. S. Veeraraghava Ayyangar, Deputy Tahsildar, Chingleput District—Dismissed.
4. R. Jeyvarathnam Mudaliyar, Loans Deputy Tahsildar, Cuddalore—Dismissed.
5. P. J. Sampath Naidu, Revenue Inspector, Chingleput District—Dismissed.
6. K. Palaniappa Pillai, Clerk, Taluk Office, Cuddalore—Dismissed.
7. N. Govindaswami Pillai, Clerk, Taluk Office, Cuddalore—Dismissed.

C. Inferior Servants—Nil.

II. Cases dealt with by departmental authorities.

A. Non-Gazetted Officers—

8. Abdul Rahman, Constable, Chingleput District—Dismissed.
9. Ponnuswamy, Constable, South Arcot District—Dismissed.
10. Shanmuga Thevar, Railway Police Head Constable, Tiruchirappalli—Dismissed.
11. Dasari Panniah, Forest Guard, Guntur Division—Services dispensed with.
12. Sivaprakasam, Temporary Prohibition Guard, Madras City—Discharged from service.
13. Dharmalingam, Prohibition Guard, South Arcot District—Dismissed.
14. B. Padmini, Prohibition Guard, Visakhapatnam District—Discharged from service.

Tiruchi Police Round Up House-breaking Gang

Between December 1947 and December 1948, there was an outbreak of house-breaking and snatching cases in Lalgudi Circle (Tiruchirappalli District) and its borders in Tanjore District. The individual efforts of the Sub-Inspectors of Police concerned to spot out the criminals were not successful. A Special police party was therefore deputed to enquire into these cases. By moving closely with the public and gaining their confidence and co-operation and by their diligent enquiries, they were able to arrest on 5th December 1948, at Lalgudi, two Vadamadurai Kallars of Madurai Urban District, Vettikarappa Thevan and Thavasi Thevan and two Thiruvarambur Kallars, K.D. Ekambaram and Palaniyandi Malayechthan, Village Munsif of Elandaipatti, Tiruchirappalli District, with house-breaking implements, while they were preparing to commit a burglary that night. The persons of the locality willingly assisted the Police in the arrest.

Further investigation revealed that there was a gang of 26 persons responsible for these crimes and they belonged to the districts of Tiruchirappalli, Tanjore and Madurai. Palaniyandi Malayechthan was the leader of the gang. As many as 19 cases of house-breaking and theft were

unearthed. A separate case in crime No. 1 of 1949 of Lalgudi was registered under Section 401, I.P.C. and 24 more persons were arrested; 27 items of vessels, clothes and jewels valued about Rs. 9,000 were recovered.

A preliminary charge-sheet was filed in January 1949 before the Special Second-class Magistrate, Tiruchirappalli, and the final charge-sheet was laid in May 1950. The case was then committed to Sessions. The trial in the Sessions was a prolonged one; and 87 prosecution witnesses and 17 defence witnesses were examined and 97 material objects were exhibited. Finally the Assistant Sessions Judge, Tiruchirappalli, in his S.C. No. 62 of 1950, dated 10th October 1950, agreeing with the verdict of the jurors, convicted and sentenced six of the accused to three years' R.I., and acquitted the rest.

In this case, the useful information and help given by the general public with regard to the movements of strangers and the incidence of crime supplemented by the knowledge of crime and criminals in the possession of the Police officers in charge of the investigation of the case resulted in the successful termination of the case.

Age Limit Concessions Extended to Candidates who took part in National Movements

It is hereby announced for the information of the public that the Government of Madras have decided to extend the concession regarding relaxation of age-limit for purposes of recruitment to the public services announced in Press Note No. 58, Public Works (Information and Publicity), dated 26th March 1949, and No. 208, Public Works (Information and Publicity), dated 10th November 1949 (copies annexed), to candidates who took part in "National Movements" up to 31st December 1961.

Annexure.

[Copy of Press Note No. 58, Public Works (Information and Publicity), dated 26th March 1949.]

Following the concessions granted by the Government of India in the matter of entry into Government service to persons who took part in the national movements and were thereby prevented from availing themselves of the normal opportunities for such entry into Government service, the Government of Madras have decided to give the concessions mentioned below to such persons when seeking entry into the public services of this province:—

(1) Where the prescribed conditions regarding qualifications are strictly fulfilled and any other considerations affecting the assessment of merits of candidates are equal, participation in national work should be regarded as an additional qualification and preference accorded to candidates who have made sacrifices in the cause of the country's independence.

(2) Relaxation of the age-limit in favour of such persons in deserving cases should also be made.

2. To be eligible for the age concession referred to in paragraph 1 above, a candidate must have taken part in the national movements and must:—

(a) (i) either have been actually debarred from employment or refused admission to a selection or examination on account of his political activities; or

(ii) have been imprisoned or detained on account of his political activities, thus preventing him from appearing for such a selection or an examination; and

(b) at the time when he was so debarred or prevented from appearing for such selection or examination he should have been within the normal age-limits prescribed therefor.

Note.—It is not necessary for the purpose of this concession that a candidate should have been actually imprisoned or under detention at the time of selection or examination, if he would otherwise have been a candidate, but for his imprisonment or detention.

If a candidate fulfils the above conditions, the age-limit will normally be relaxed in his favour provided he is not over 35 years on the date of commencement of examination (written or oral or both) where selection is made by the Madras Public Service Commission and on the date of appointment in other cases.

3. A candidate who claims the concession for relaxation of the age-limit should submit, along with his application for appointment or for admission to any examination or selection, a certificate from a member of the Central or Provincial Legislature, or an affidavit filed before a

First Class Stipendiary Magistrate by a respectable person testifying to the facts about the candidate's participation in the national movements. The appointing authority or the Madras Public Service Commission, as the case may be, will admit the application if it is otherwise in order. The question of relaxing the age-limit will be considered by the Government if the applicant is actually selected for appointment.

[Copy of Press Note No. 208, Public Works (Information and Publicity), dated 10th November 1949.]

It is hereby announced for the information of the public that the Government of Madras have since decided to extend the concession regarding relaxation of age-limit mentioned in Press Note No. 58, dated 26th March 1949, to candidates whose date of completion of studies was put back as a result of their conviction or dismissal from educational institutions on account of their participation in national movements and thus became age-barred. This concession will apply only up to 31st December 1950.

Seller of Unauthorised Lottery Tickets Convicted

During October 1950, one Kasa Rama Reddy of Hyderabad State, posing as one of the Managers of a registered company known as "Sri Venkateswara Company", Tirupathi, sold numerous lottery tickets at rupees two each to several persons. Various articles such as gramophones, cycles, vessels and fountain pens were offered as prizes to the successful drawer of the lottery and these details were listed in the printed and signed receipts given by him to the purchasers of tickets. The proceeds of the lottery were also promised to be utilised for the construction of a Shiva Temple. The draw was to take place on 30th November 1950.

Several villagers in and around Avalapatti in Somala Police Station limits, Chittoor District, were induced to purchase tickets. On 2nd November 1950, the Police of Somala station arrested Kasa Rama Reddy on suspicion while he was selling lottery tickets, and recovered from him a book of counterfoils of the tickets that had been sold. Investigation by the Police disclosed that there was no company of the name "Sri Venkateswara Company" at Tirupathi and still less a registered one. Evidence was gathered by contacting the persons who had purchased the tickets, and the accused was charged before the Subdivisional Magistrate (Judicial), Madampalle.

Though the accused denied the offence and pleaded not guilty, the evidence as deposed by the various prosecution witnesses against him was overwhelming. The Magistrate was satisfied that the accused had initiated an adroit scheme calculated to beguile a number of innocent people and would have succeeded in trapping several others into his snare but for the timely intervention by the Police. Being convinced of his fraudulent and dishonest intention in selling the unauthorised lottery tickets, the Magistrate on 21st December 1950, convicted and sentenced him to nine months' rigorous imprisonment under Section 420, I.P.C.

The Problem of Juvenile Delinquency

By SRI V. D. MANTRAMURTI, Headmaster, Senior Certified School, Chingleput.

Juvenile delinquency is one of the most knotty problems that have been worrying the minds of the politicians of India, nay of the entire world, and very many ways and means are being discovered and put to practice for the effective solution of this vital problem. Madras State has, as it has always done, stolen a march over the other States in India so far as juvenile reclamation is concerned and the Department of Certified Schools has, of late, become really a department of Social Service, as the entire atmosphere, within the four walls of the institutions under its purview, has been totally changed and the methods adopted therein just now are more psychological than physiological.

Juvenile delinquency is slightly on the increase at the present moment and the institutions dealing with these juveniles are very much overcrowded. These institutions are akin to hospitals where patients are taken for correct diagnosis and effective treatment. On careful analysis, it is revealed that the causes for juvenile delinquency are many but apart from what the State is doing, every individual member of the State has a sacred duty to perform in the matter of solving this great problem and it is imperative that each and every one of us should endeavour his or her utmost to see that these unfortunate children do not turn out to be delinquents.

"The fear of the Lord is the beginning of wisdom" and this is more true in the case of these delinquent children, for at least 90 per cent of these unfortunate children have absolutely no religious background and hence they are thoroughly ignorant of the very existence of the Creator, the Omnipotent, Omnipresent Lord, as the result of which there is in them a total absence of the innate awe, respect and reverence for the Lord. The recognised moral code is unknown to them and the resultant social offences committed by them are but quite natural. The parents are to a very great extent, if not completely, responsible for this state of affairs and if they could only instil in their children, from the very outset, the fear of the Lord, they will most certainly grow into respectable and wise citizens and admission into the Certified Schools, houses of correction, shall, I say, will be very much limited.

Healthy Influence of Happy Homes

Broken homes constitute quite a lot towards juvenile delinquency as is evident from the figures available at the Government Senior Certified School, Chingleput, where 50.1 per cent of the inmates have either lost their mothers or fathers or both and in most cases, the parent, if surviving, does not exert any healthy moral influence on the children owing to his or her own way of living. These parents, in the interests of their own children, should exercise and even exhibit a high standard of morality and should endeavour their utmost to see that their sacred homes are not converted, by their own actions, into brothel homes but are on the other hand converted into a worthy temple of God where these unfortunate children will find abundant consolation and comfort.

The existing economic condition among the masses is yet another cause for juvenile delinquency, as quite a number of parents find it almost impossible to keep the

pot boiling at home. They are not in a position financially to feed and clothe their children properly, and consequently the home affords practically no attraction for the child who strays out in quest of food and thereby falls an easy prey to bad and undesirable company resulting in juvenile delinquency. Owing to deplorable pecuniary circumstances, some parents positively encourage their children to indulge in many an anti-social act like pick-pocketing, pilfering, etc. Is there any possible way of removing this cause for juvenile delinquency? If every employer, who is better placed in life, pays his servants adequately enough to enable them to meet their legitimate demands, the parents of these unfortunate children will be able to feed and clothe them fairly well. The controlled commodities, especially foodstuffs, must be made easily available to the poor people so that there will be no dearth of food in their homes.

Lack of Discipline Leads to Delinquency

The partial, if not the total, absence of proper discipline at home leads to juvenile delinquency, as quite a number of parents suffer under a thoroughly wrong notion of love and affection towards their children with the result that the parents have absolutely no proper control over their children who virtually dictate terms in the home. The figures available at the Government Senior Certified School, Chingleput, bear eloquent testimony to this cause for juvenile delinquency. About 51 per cent of the boys committed to my care are either the first born or the last born or the only son or the only child in the family. Parents in general, and Indian parents in particular, are extremely fond of their children, especially if the child belongs to one of the four categories mentioned above and there is always a tendency on the part of the parents to shoot off the mark in that respect, resulting in an atmosphere thoroughly detrimental to healthy discipline at home. Both the father and mother, very foolishly indeed, take upon themselves the roles of humble servants in the realm of the child who is made virtually the monarch of the house, blessed with the rare privilege of dictating everything that takes place therein! They are equally responsible for converting the child into a thoroughly haughty, egoistic milk-sop and the entire household is made to revolve with the child as its nucleus.

The child is now well on the road to delinquency as he cannot possibly occupy that place in the wide arena of life outside his house. He, therefore, develops a complex which gives rise to defiance, insubordination and insolence so far as his attitude towards his parents is concerned. What is the ultimate result? Juvenile delinquency indeed! The parents must bear in mind that if their children should grow up into worthy sons and daughters of the soil, they should be brought under proper discipline. The parents should realise that there should be a judicious combination of affectionate love and stern control so far as their attitude towards their children is concerned and the child must be made to realise at the very outset that he is not after all a deity before whom the entire household should solemnly prostrate itself. The children should be made to understand, very clearly indeed, that they are

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Developing Fish as a Foodstuff

By D. P. HOPKINS, Fellow of the Royal Institute of Chemistry, Great Britain.

Each year 20,000,000 people are added to the world's population. But only 29 per cent of the earth's surface is land—and of this only one-tenth to one-ninth is suitable for crop production. Has enough attention been paid to the harvest of food that can be won from the world's seas?

The development of fish as a foodstuff has long been handicapped by its perishable nature. From the time of catching, the problem of preventing bacterial decay commences. In earlier times fish were caught in near shore waters and largely consumed by the coastal populations. Later, with the development of simple preservation methods, fish found a place in the diet of more inland populations. The world's fishing industry has great opportunities in the next 50 years, for more food of all kinds will be needed. Can greater tonnages of fish be landed each year? Can better methods of preservation be developed?

Problem of "Over-fishing"

Until this century it was generally assumed that fish could be caught in unlimited quantities. By introducing the steam trawler, Britain undoubtedly hastened the recognition of the "over-fishing" problem. Man's "catching power" was enormously increased. As the years of steam trawling went on, it became clear that still greater efforts

Among the various fishing research centres in Britain, the Scottish Home Department Marine Laboratory at Aberdeen, Scotland, occupies an important place. Many experiments connected with fishing population are being carried out at this institution. In this picture a scientific officer is shown examining a herring which had been tagged in the month of July, thrown into sea, and recaptured two months later at a distance of 180 miles. This particular work deals with the problem of the migration of fish.



were needed to maintain annual landings from the supposedly inexhaustible fishing grounds of the North Sea.

Today it is widely recognised that even the most prolific fishing ground can become less productive as a result of "over-fishing". In establishing this as a biological truth fishery research in Britain has played a leading part. Long before the problem was revealed by fishery statistics, her scientists were studying the biology of marine life. In 1876, the first research ship, the *Challenger*, returned to England after a four-year voyage exploring the life of the world's seas. Fifty books were needed to publish the results. A few years later the famous Biological Research Station at Plymouth was founded. Other Marine and Fishery Research Centres were set up in Scotland at Millport and Dunbar, and at Lowestoft in England. Four Universities—Durham, St. Andrews, Hull, and Liverpool—established Fishery Research Departments. Later the Dunbar Research Centre was transferred to Aberdeen.

Tagging Fish to Collect Data

Hundreds of thousands of fish have been marked with metal tags and thrown back into the sea. The frequency of recapture, their further growth, the time and place of recapture and other data of this kind have provided invaluable evidence for assessing the effects of catching upon the future fish population in a particular area. Graham, one of the leaders of Britain's fishery research, has stated the problem thus: "Fisheries that are unlimited become unprofitable." The Arctic cod fisheries are not unlimited because, so far, the market for cod has itself been limited. The same is true of the herring fishing waters of Europe.

But it has been possible to expand the market for such fish as plaice, sole and haddock as fast as the fishing industry's ability to catch them. For these fish each fishing ground has a natural limit. Fishing at an annual rate about that limit reduces the stock and leads inevitably to a decline in yield; and a climax is reached when the catches are of less value than the costs of the efforts that has to be made. Fishing grounds can also be underfished. The stock left each year is then too large for the natural supplies of food in the area, and the rate of fish growth is small. Fishery research in Britain is aimed at the best use of the fish stocks in various sea areas to advise the industry when increased catching is desirable, and to recommend limitations when stock is diminishing.

Preservation of Yields

Another major problem of the fishing industry is preservation. If larger tonnages of white fish are to be caught, more distant fishing grounds must be developed. Decline in North Sea yields led the trawlers to the waters of Iceland and the Arctic; but the seas of West Greenland and Newfoundland are being investigated as additional centres of European fishing effort.

But bulk stowing the catches with crushed ice—the traditional "preservation method" of steam trawlers—is only effective for a period of ten to twelve days for white fish, and for three to five days for ungutted fish with higher fat content such as herring. If trawlers are to catch

large quantities of fish in distant waters they must carry their own refrigeration plant and freeze the fish at sea.

Britain's scientists and some leaders of the industry are convinced that this development is essential for the future. It has been proved that fish can be kept in fresh condition for several months at a temperature between 5 degrees and 20 degrees Fahrenheit. For the best product the catch should be gutted as soon as possible, and put through a quick freezing process. At the present time a move is being made to develop this operation of freezing on Britain's trawlers. The *Fairree*, a converted 1,500 ton minesweeper, is being used experimentally.

Mechanised Freezing Equipment

Before packing into the trays of the quick freezer, the fish is gutted and filleted when necessary to reduce thickness. After quick freezing the trays are removed to cold store for low temperature maintenance. The output of the quick freezer is one ton per hour. One new development in trawler design makes it possible for this additional equipment to be carried without reducing the weight of fish which can be brought back from the longer fishing trips, the introduction of the diesel engine, which greatly increases the amount of space for stowage and freezing plant. The Torry Research Station at Aberdeen is also studying possible improvements in the design of mechanised freezing equipment for trawlers.

The possibility of using chemical antiseptics to arrest bacterial decomposition has been investigated, but the general view is that suitable substances may lead to problems of adulteration and flavour. Freezing the fish at sea, as soon as possible after catching, is undoubtedly the best way to bring this important food back to the ports in a fresh, undeteriorated condition, however distant the actual fishing ground.

B.I.S.

Change in Designation of Surgeon-General

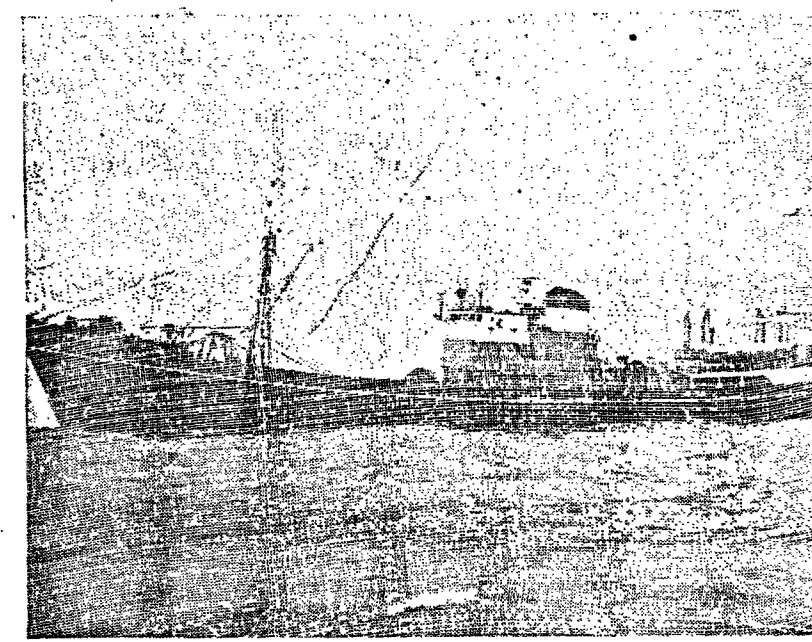
The Government have changed the designation of the 'Surgeon-General with the Government of Madras' as Director of Medical Services. It may be recalled that the posts of Surgeon-General with the Government of Madras was previously reserved for an officer of the Indian Medical Service (Civil) who was usually in the grade of 'Major-General.' The Indian Medical Service (Civil) has now been abolished and the post of Surgeon-General has been included in the Madras Medical Service.

The Government consider that the designation "Surgeon-General with the Government of Madras" is no longer appropriate and hence have directed that the head of the Medical Department be designated as Director of Medical Services.

The designation of the posts of Deputy Surgeon-General, Assistant to the Surgeon-General, etc., will be altered accordingly as Deputy Director of Medical Services, Assistant to the Director of Medical Services, etc.

Pension to Jamadar's Parents

The Government have sanctioned the payment of a monthly pension of Rs. 11-6-0 each to the father and mother of D. Seethapathi, Jamadar, Special Armed Police, who was killed in an encounter between the police and the Communists in the Karimnagar District of the Hyderabad State.



Fish is becoming more and more a vital foodstuff, and research in Britain is being directed towards the greater economic development of the various fishing regions. Where ships go long distances in search of fish, it is necessary to carry out factory operations on the vessel to preserve the fish. This picture shows the recently-built Princess Elizabeth, the first trawler of her kind amongst Britain's fishing fleet to be equipped with a special fish meal plant. The fishroom capacity is more than 17,000 cubic feet. The plant has a total capacity of ten tons of offal, providing approximately two-and-a-half tons of fish meal—which is fed to poultry—every 24 hours.

The Kavali Palmyra Jaggery Society

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takes away to his home lump sums of Rs. 200 to Rs. 500 cash, which represents the fruits of his labour for the past five months. The Society proposes this year to issue rewards and prizes to the members for the largest quality produced and for the best variety of jaggery manufactured, and provision has been made in the by-laws of the Society for issue of such prizes.

During 1949-50 under the auspices of the Society, six tappers were imparted training in the improved methods of Palmyra Jaggery at Battadinne centre. But it is discouraging to note that these tappers who have undergone training did not apply themselves to the new methods, owing to certain practical difficulties. It is proposed to train in the next season another set of persons who will be loyal to the Society.

Most of the tappers are agriculturists and as a measure of augmenting their income, it is proposed to work the intensive food production scheme through the Society by applying to the Collector, Nellore, for the grant of fallow lands lying waste at Matnivaripalem. An extent of about 50 acres of lands was cultivated by the tappers last year under the Grow More Food rules in order to ensure a living income out of it; it is proposed to obtain a 10-year lease of the lands to the Society and to sub-lease them to the members in turn.

City Improvement by Controlled Expansion

By SRI A. RAQHAVA REDDI, Chairman, City Improvement Trust, Madras.

It is common knowledge that each and every city is growing in population and size. While the growth is slow in respect of some cities, it is phenomenal in others. The growth is again due to various causes. Take for instance the City of Madras. Its population, according to the last census, i.e., 1941, was about 7½ lakhs. To-day it is roughly estimated to be 15 lakhs. In other words, the population has increased by hundred per cent within a decade. The main reason for the increase is heavy influx of population into the city due to more than one cause. City life affords better facilities, when compared to rural parts. The city provides also better chance for employment as a lot of odd jobs are available; even otherwise, people can easily drift in such big places earning their livelihood by foul or fair means. In days of scarcity, rations are assured in the city for the simple reason that it is a very compact area. Naturally the influx of population into the city is continuous and I am afraid it will go on if timely action is not taken to prevent it or till living conditions improve considerably in the rural parts.

What is the effect of such a heavy influx coming to a particular area. The answer is plain. Such an influx disturbs the normal city life. It is impossible to control or regulate growth, which was not anticipated or planned for; the result is haphazard development, growth of slums, jerry building resulting in bad environment and ill-health. Such influx further gives scope to unscrupulous persons to speculate on land values. The speculators taking advantage of the innocence of the people who get into the city, exploit them in many ways and further expose them to all difficulties such as eviction, avoidable expenditure and other discomforts. Thus the city life gets complicated and the Government and local authority find it difficult to tackle the problem.

Aftermath of World War II

If today we have many slums spread throughout the city it is due to the fact that we have not in the past carefully thought over the changes that were to come. The second world war had its effects and in its wake brought tremendous changes in every walk of life. The entire social fabric has been shaken up and changes of a very revolutionary nature have surged out. History bears evidence that great events like wars and civil wars have resulted in great upheavals and post-war effects have been tremendous. Being aware of this we should have anticipated our future needs and planned accordingly to regulate and control the growth of cities. For some reason or other we have failed to rise to the occasion in this respect with the result that we are now paying dearly for the past omissions. Madras is now in such a predicament very largely due to the causes referred to above. If further ruin should be prevented we have to look into the matter in earnest and take timely steps to prevent further deterioration. Let us be late than never.

We should, therefore, lose no time in controlling the expansion of the city. Expansion can be controlled by proper planning and enforcing strict rules and laws for development within the planned area. But if control

should be effective and if our plans should succeed we must have a keen and penetrating vision into the future and we must be able to anticipate our needs clearly and correctly. It may not be difficult for us to plan accordingly, having seen the post-war effects of two world wars and also having known the causes that contributed to the phenomenal growth of the cities. It is also not very difficult to anticipate the future. At a time when the threat of another world war is overhanging—God forbid it—it is very necessary that plans for the future development are drawn up well in advance so that we may avoid with advantage the mistakes of the past. If we take timely steps to prevent further deterioration of the city, we would have done our job well and paved the way for the future. We have therefore to evolve a comprehensive plan which should be our guide.

Formulation of Master Plan

For the sake of convenience, we can call this a General Plan or a Master Plan, but it should clearly indicate our needs in respect of several matters concerning city life. I have remarked already that we can anticipate, but it is likely that our anticipations might go wrong. Consequently we cannot evolve a rigid plan. We must remember here that the city is a living organism which is continuously growing. Therefore, there should not be any rigidity about planning. When we prepare such a plan for the proper growth and expansion of the city, we have, however, to take special steps to eliminate all the existing cancer spots.

In planning for the future, it is wise, therefore, to indicate only the general lines of development and to make suitable provision to enforce such development. Life is changing very rapidly and the individual is asserting his right. He is naturally demanding higher standards of living—physical, economic, social and cultural. Looking into the trend of times, it is, therefore, wise to take timely and suitable action to meet the situation. We should not forget the fact that to-day's luxuries are becoming the needs of tomorrow and the needs of tomorrow are fast becoming the necessities of the day after, and when changes are coming so rapidly and when human nature is asserting itself, we will be failing in our duty if we adopt a *laissez faire* policy. We must, therefore, take time by the forelock and act accordingly. Otherwise ruin is certain.

Implementing Schemes on Regional Basis

We have, therefore, no other alternative except to move in advance of the times. We often hear of plans being prepared for re-building cities. We also hear of plans for building new towns and nay, the entire world itself. That is how bigger and enlightened minds are working. The reason is that they have realised that prevention is better than cure. But unfortunately we have not realised this. We are rather starting at the other end. We deliberate and deliberate inconclusively and then start to set right the disorder that is already established. Take for instance the slums. We think of improving them after they are created by thousands; we think of constructing houses when there is tremendous dearth of houses and we

think of planning when planning itself has become very difficult. It is really unfortunate that we have failed to appreciate the need to act quickly in matters concerning the city life. It is a further pity that we are showy. We are satisfied with a certain amount of window dressing and we do not get to the root of the problem. We, therefore, require a new approach to the problem and our attention should therefore be fixed on the future set-up which will stand well against time and tide.

City planning is naturally formidable as the area involved is big. It is, therefore, desirable to tackle the execution of schemes on a regional basis in such a way that these schemes fit into the Master Plan. In big cities where distance matters much, there will be no justification for too much centralisation. It will be meaningless to think of one civic centre, one shopping centre and one industrial area. Such a kind of planning would result in considerable handicaps and difficulties in many ways. Firstly, take the problem of transport. It will create the biggest bottleneck because movement of men and women will be a tremendous problem. With the growth of the city, people have to go from one part of the city to the other to attend to the workshop or workplace. But most of their energy will be spent in waiting for transport and in the actual journey over long distances, let alone the cost of travel. It is, therefore, absolutely necessary to plan for the expansion on a regional basis where full facilities could be extended without causing much hardship.

Control Over Construction

Again, it may not be enough if mere plans are prepared, but effective provision should be made to secure control over the construction of buildings, as otherwise unscrupulous speculators and builders will not hesitate to resort to jerry building and rack renting which will ultimately bring about ruin of the city. It may be argued that in view of the difficulty experienced in securing materials, rigid controls may discourage house building. The alternative for this situation is encouragement of construction of semi-permanent buildings under proper control, till conditions improve. It may be clear from what has been said above, that the work relating to planning and enforcing control over expansion and development is formidable. Notwithstanding these difficulties, the object should be achieved. If the public realise that the planning and control of the City is in their own interest, the problem should become simple.

It should be noted that in the matter of planning and control of expansion, the question of land ownership and land use, comes up for consideration. It is here that the people should rise above self and act magnanimously. It is a question of sharing the available land by the entire population in some order and plan. It is again a question of land use for different purposes such as industry, trade, play-fields, residential purposes, etc. Unless the public co-operate with the authorities in charge of planning, the object of securing control over expansion cannot be achieved.

The City Improvement Trust which has been created for the purpose of improving the city, by opening up congested areas, removing slums, providing open spaces for ventilation and recreation, building houses for all the inhabitants of the city, zoning areas for several purposes and enforcing control on expansion and development,

earnestly requests the public to co-operate with it unreservedly. On such co-operation alone the future good and welfare of this great city depends and I count upon it to a large extent in my efforts to do something for this city.

(By Courtesy, A.I.R., Madras)

The Problem of Juvenile Delinquency

(Continued from page 31)

but little members of a big family and should at all times conduct themselves in such a way as to follow the sacred traditions and the moral codes of the family. It is incumbent on the parents therefore, to see that a high standard is maintained so far as the family traditions are concerned. The innate traits of the child should be carefully observed by the parents who should strain every bit of their nerves to see that the instincts are diverted along worthy channels. They should also realise that for the harmonious development of the child's personality, the most congenial atmosphere at home is absolutely necessary and therefore it is of paramount importance that the parents should set a worthy example to their children by their own ways of living.

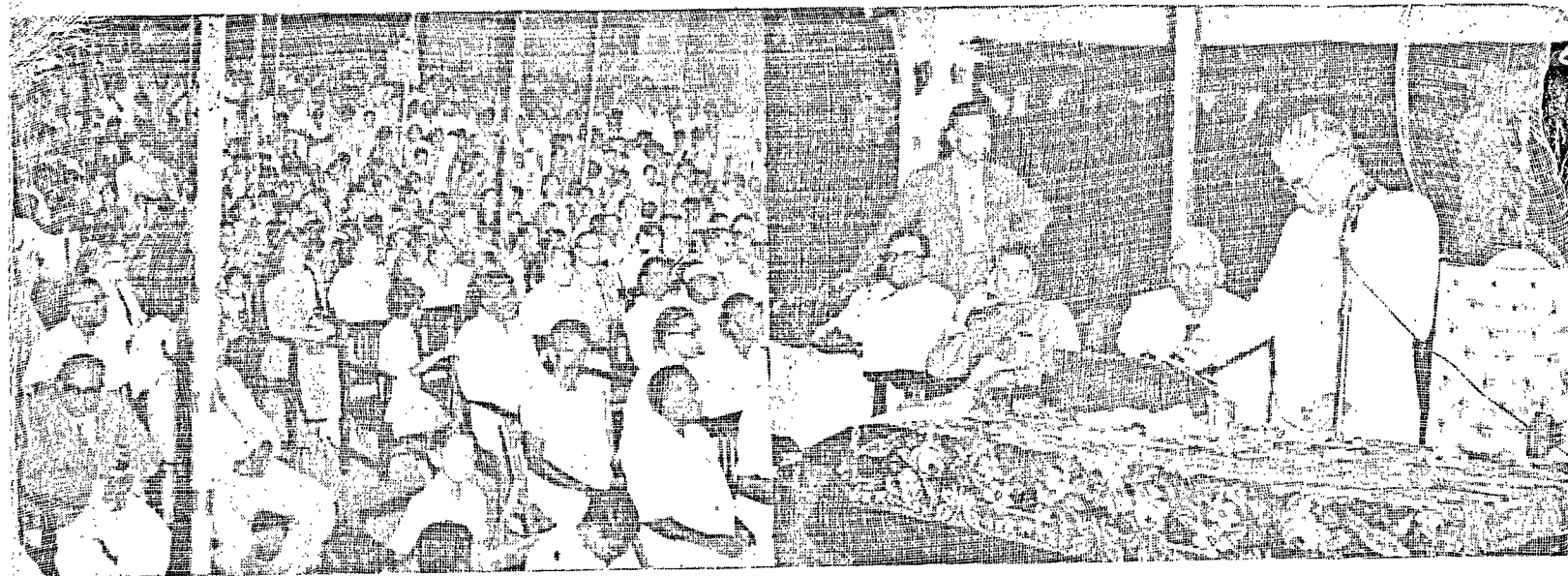
Preventing Reversion to Crime

After spending the prescribed period of training in a correctional institution, juvenile delinquents go home with the definite idea of living an honest life but very often there have been cases of reversion to crime. There is a stigma attached to these unfortunate children and the so-called respectable people look down upon these children turned delinquents owing to certain factors beyond their controls. As already mentioned, the people in general and parents in particular have been totally responsible for such an unhappy state of affairs so far as these children are concerned. Therefore, there need be no stigma whatsoever attached to these children. They should, on the other hand, be taken as normal children and treated as such if they should turn out to be useful citizens. The fact that these children have been in a reformatory institution need not, may should not, be a bar to their employment and for that matter, apart from what the State is doing for these children, every one must take upon oneself the sacred duty of finding a job for these children so that they may not have the temptation to revert to crime. Then and then alone would a worthy solution for this vital problem of juvenile delinquency be found.

Therefore it is quite clear that we the grownups are to blame for the very existence of the juvenile delinquents. Unless we realise the enormous task that lies ahead of us in the matter of training and converting these anti-social children into useful citizens, we do not for a moment deserve to call ourselves worthy sons and daughters of Mother India.

Gift of Maternity Ward

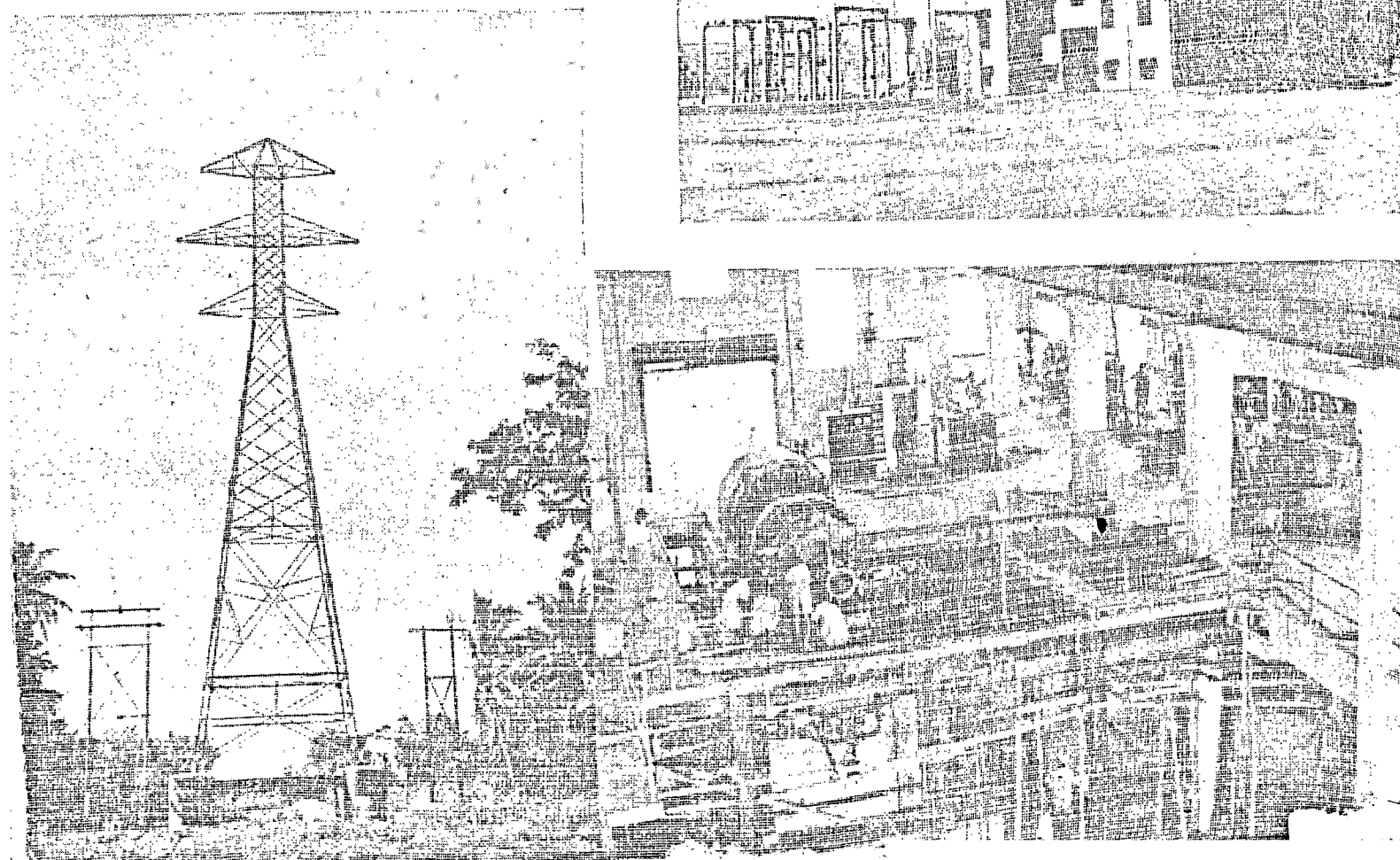
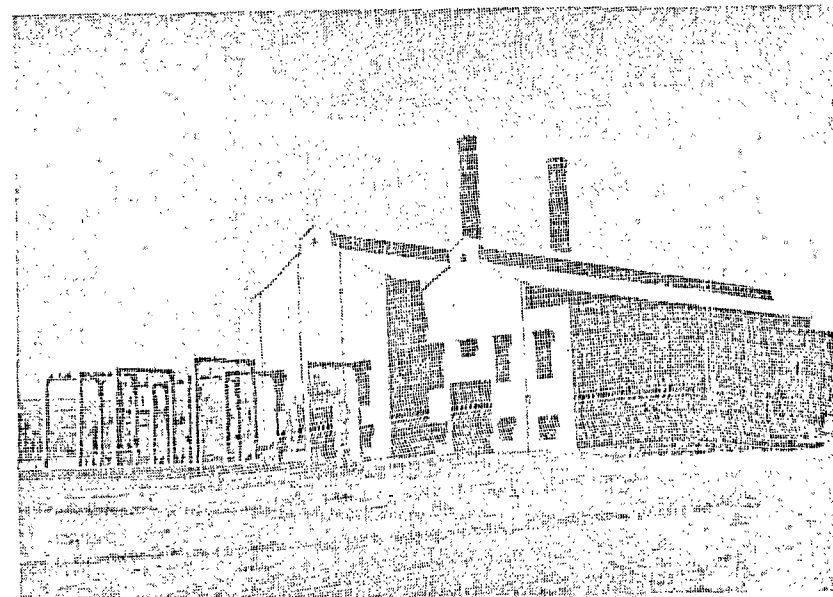
The Government have accepted the offer of Srimathi Kannham Venkamma, wife of Sri K. Sreenivas Rao of Bukkarayanasamudram, Anantapur district, to construct a maternity ward of two beds in the Government Headquarters Hospital, Anantapur, and to hand it over to the Government for maintenance.



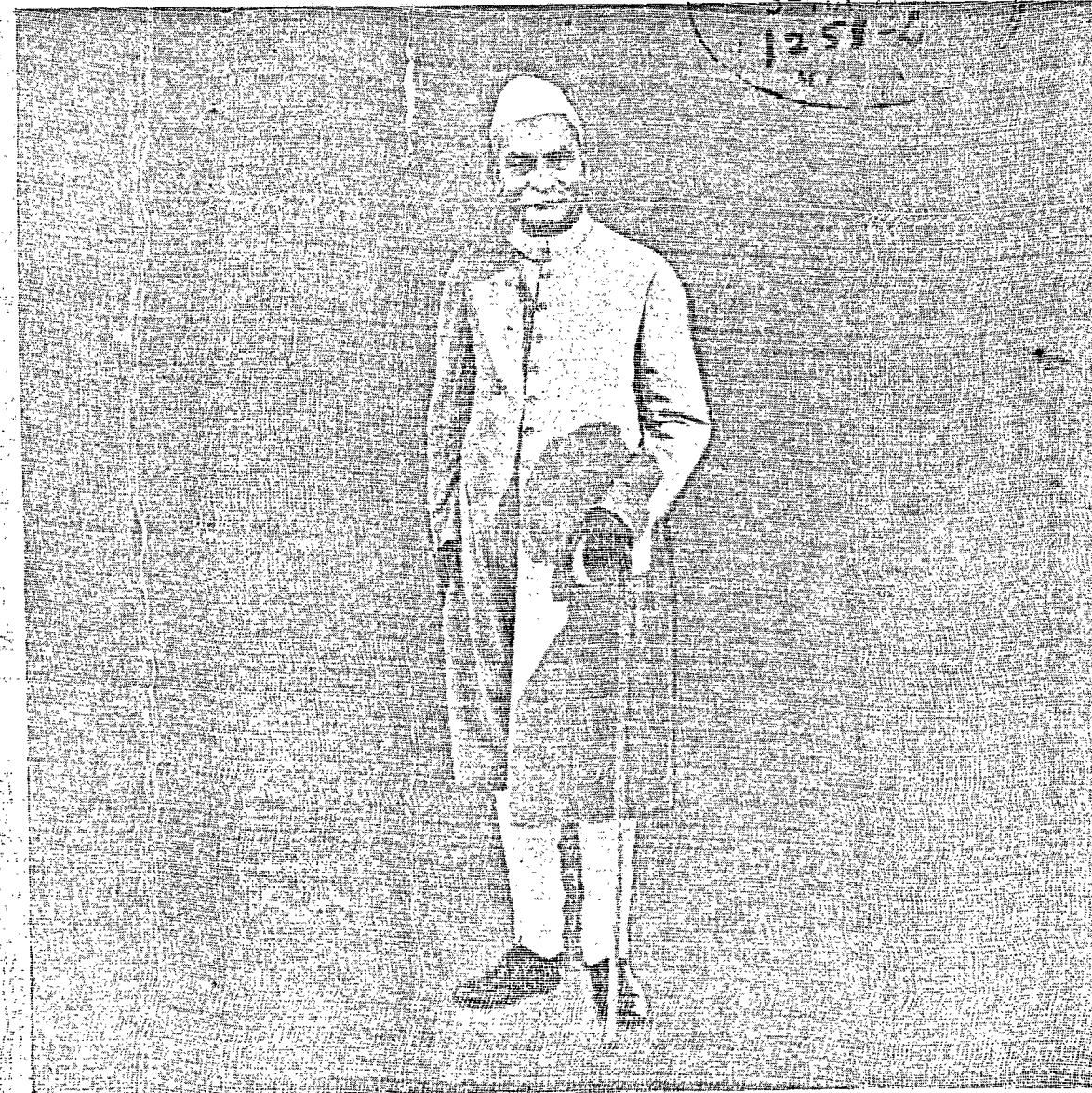
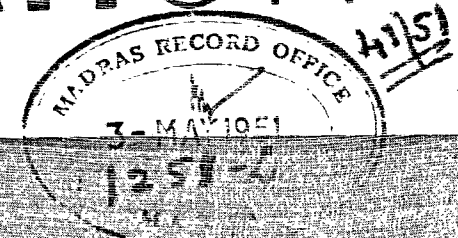
POWER FOR MADURAI

Sri M. Bhaktavatsalam, Minister for Public Works, switches on the Madurai Thermal Power Station at Samayanallur. The Thermal Station is designed to be an auxiliary station for supplementing the power output in the Papanasam hydro area, especially during the dry months.

Pictures at right and below show exterior and interior views of the Thermal Station. Initial cost of the scheme is Rs. 64.32 lakhs for the 4,000 KW installation; ultimate cost is Rs. 131.60 lakhs for the addition of the 10,000 KW set.



MADRAS INFORMATION



Merger of Foreign Possessions

THE PROBLEM OF FRENCH INDIA

By Dr. N. V. RAJKUMAR, Foreign Secretary,
Indian National Congress.

Published by the All-India Congress Committee,
7, Jantar Mantar Road, New Delhi.

Pages : 103. [Price : Rupee one and annas four only.]

India's policy with regard to the small foreign possessions scattered here and there over the territory of the Union is very clear. Addressing the Indian Parliament on February 11, 1949, Prime Minister Jawaharlal Nehru stated: "We believe that for a variety of reasons it is natural and proper that all Foreign Possessions in India should be united with India. We propose to give effect to this policy through friendly discussions with the powers concerned." This statement endorses the Jaipur Congress Resolution on Foreign Possessions in India.

In the volume under review, Dr. N. V. Rajkumar, Foreign Secretary to the Indian National Congress, presents a well-documented case for the integration of the French Possessions in India with the Union. The French have five settlements in India—Pondicherry, Karaikal, Mahe, Yanam and Chandernagore. The first four are in Madras State. Chandernagore which is in West Bengal, joined the Indian Union after a referendum held in June 1949, though it is legally still held under France. It would have been a graceful gesture if the French and the Portuguese had quit India, following the footsteps of the British; but imperialist elements in both countries appear determined to maintain "their precarious hold over the tiny areas they have been able to secure in Indian territory at a time when India was down and out".

French Establishments are solely dependent on Indian aid for their economic requirements. In response to the people's insistent demand for immediate and unconditional merger, the French authorities yielded to the extent of the June 1948 Agreement and assured that "the French Government solemnly declares that it intends to leave to the populations of the French Establishments in India themselves, the right to pronounce their future fate and future status".

Dr. Rajkumar with personal and intimate knowledge of French election tactics, exposes the chicanery, malpractices and rowdism rampants at the polls, where voters are intimidated, ballot boxes tampered with, armed officials interfere, hired goondas assault assessors. The author describes French elections as "the prostitution of a democratic device to ascertain popular will".

How best to end such decadent French colonial administration? Since a free and impartial referendum is not possible, Dr. Rajkumar advocates an outright transfer of these areas under mutually agreed conditions, scrapping the weak June 1948 Agreement. Otherwise, he warns, these foreign enclaves might well be used as bases for future operations against us by our enemies.

—P.V.S.

INDIAN TOBACCO

Published quarterly by the Indian Central Tobacco Committee (under the Ministry of Agriculture, Government of India), Madras.

Single copy, annas twelve. January-March 1951.

TOBACCO BULLETIN

Published monthly by the Indian Central Tobacco Committee.

Single copy, annas two. January 1951.

India stands third in the total tobacco production in the world; first and second being the U.S.A. and China respectively. Tobacco is the seventh important export item; it earns foreign currencies to the extent of about Rs. 14.57 crores, contributes about Rs. 26.00 crores to the Government treasury. Madras produces over half the total quantity produced in the country. Tobacco is grown practically in every district of Madras State; there is a vital need therefore for authoritative journals to introduce new improved techniques in growing and marketing.

The two journals, whose inaugural numbers are to hand, are laudable efforts to publicise facts and information regarding Indian Tobacco and its products from the culture, use and sales point of view. *Indian Tobacco* is a handsomely printed magazine containing lucid articles on production, research with particular reference to the economic angle, marketing and prices with practical notes on exploitation. The journal should prove very useful to all dealers in tobacco—grower, trader and manufacturer—who are interested in recent advances in tobacco methodology.

Tobacco Bulletin is a smart cyclostyled production with a wealth of statistics on acreage, production, prices, exports, imports and consumption, inland and foreign market news and views.

—P.V.S.

Pay of Agricultural Instructors

The Government have passed orders revising the scale of pay of the Agricultural Instructors in secondary schools under all types of managements as Rs. 100—5—140—E.B.—10—220.

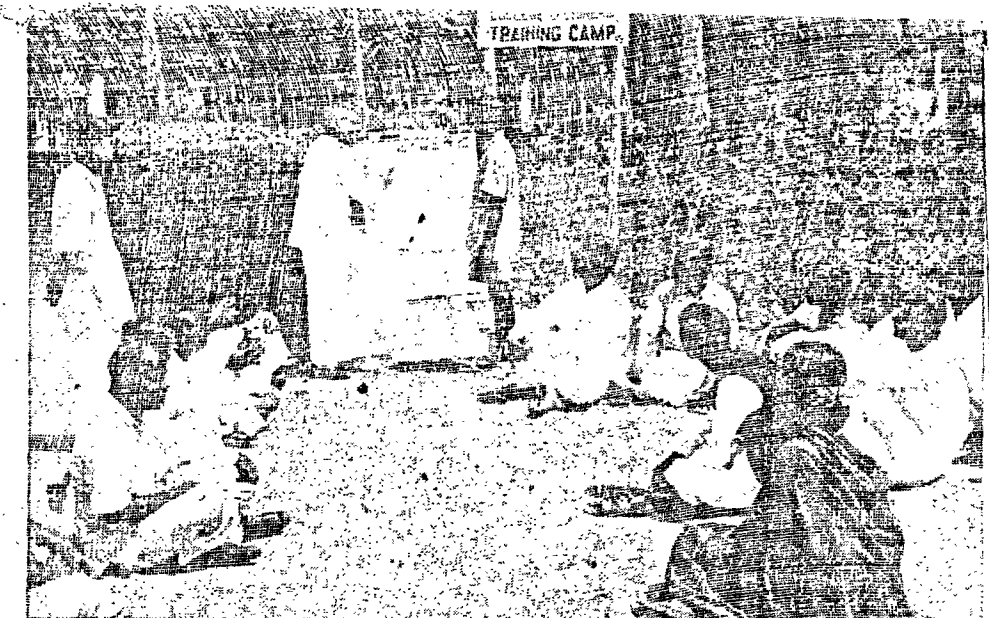
Madras Dental Council

The Government of Madras have nominated Dr. S. R. Bhatt, Sri J. B. Chenoy, and Sri M. G. Rao, as members of the Madras Dental Council. They have also nominated Lieut.-Col. Sangam Lal as President of the Council for a period of five years. Lieut.-Col. Sangam Lal has also been appointed as Returning Officer for conducting the first election to the Council. The Returning Officer will publish a preliminary electoral roll in the issues of the *Fort St. George Gazette*, dated May 8, 1951.

WIPING OUT ADULT ILLITERACY

Recently in Madras City, under the auspices of the Adult Education drive, a training course was held to provide teachers for adult education centres.

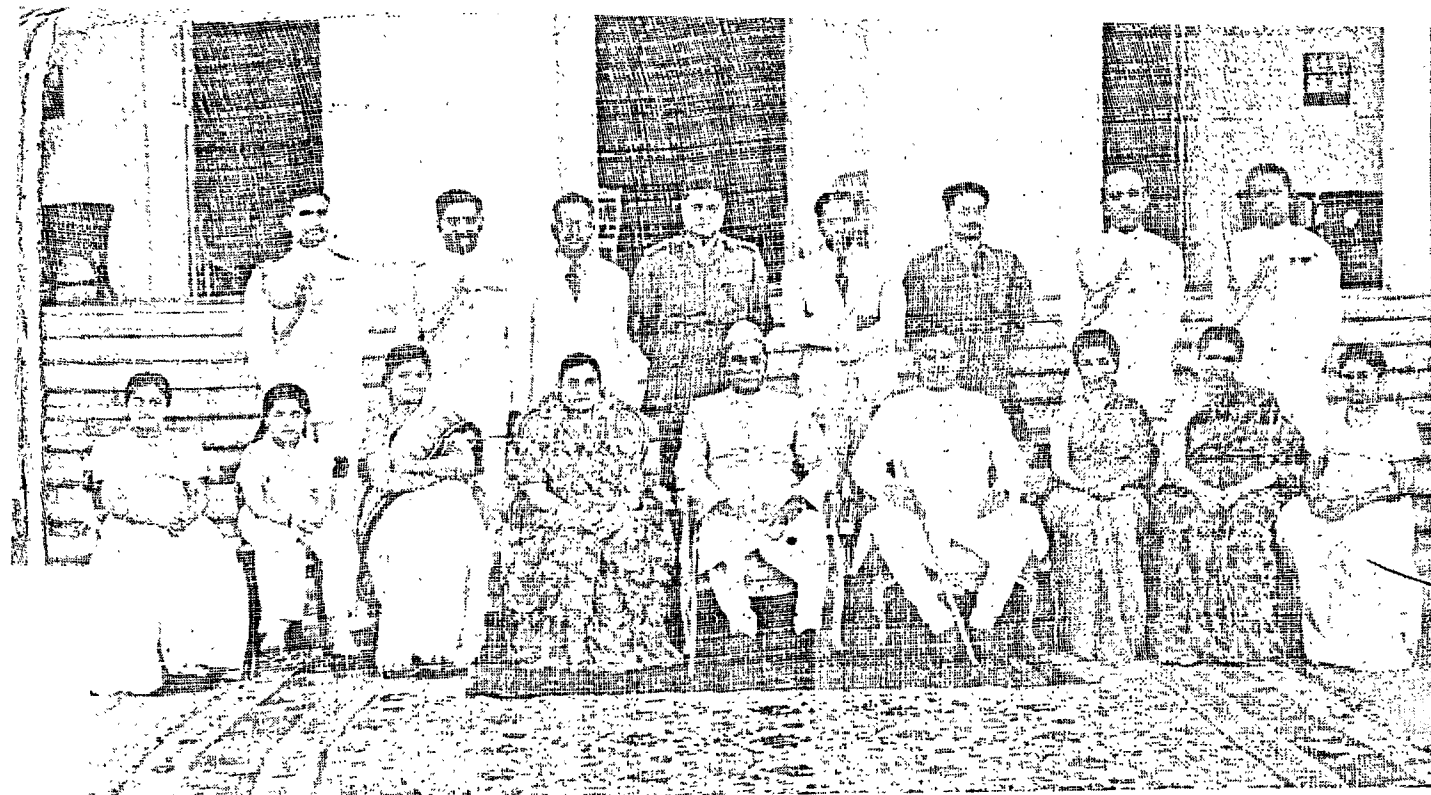
College Lecturers underwent training to equip themselves for teaching illiterate adults in their respective areas. Here Sri A. G. Vilvaroy, Adult Education Officer, demonstrates the technique of using the Laubach Chart.



Torch of Learning: Lecturer-Students are taught the way to assemble a petromax lantern, indispensable equipment for night classes

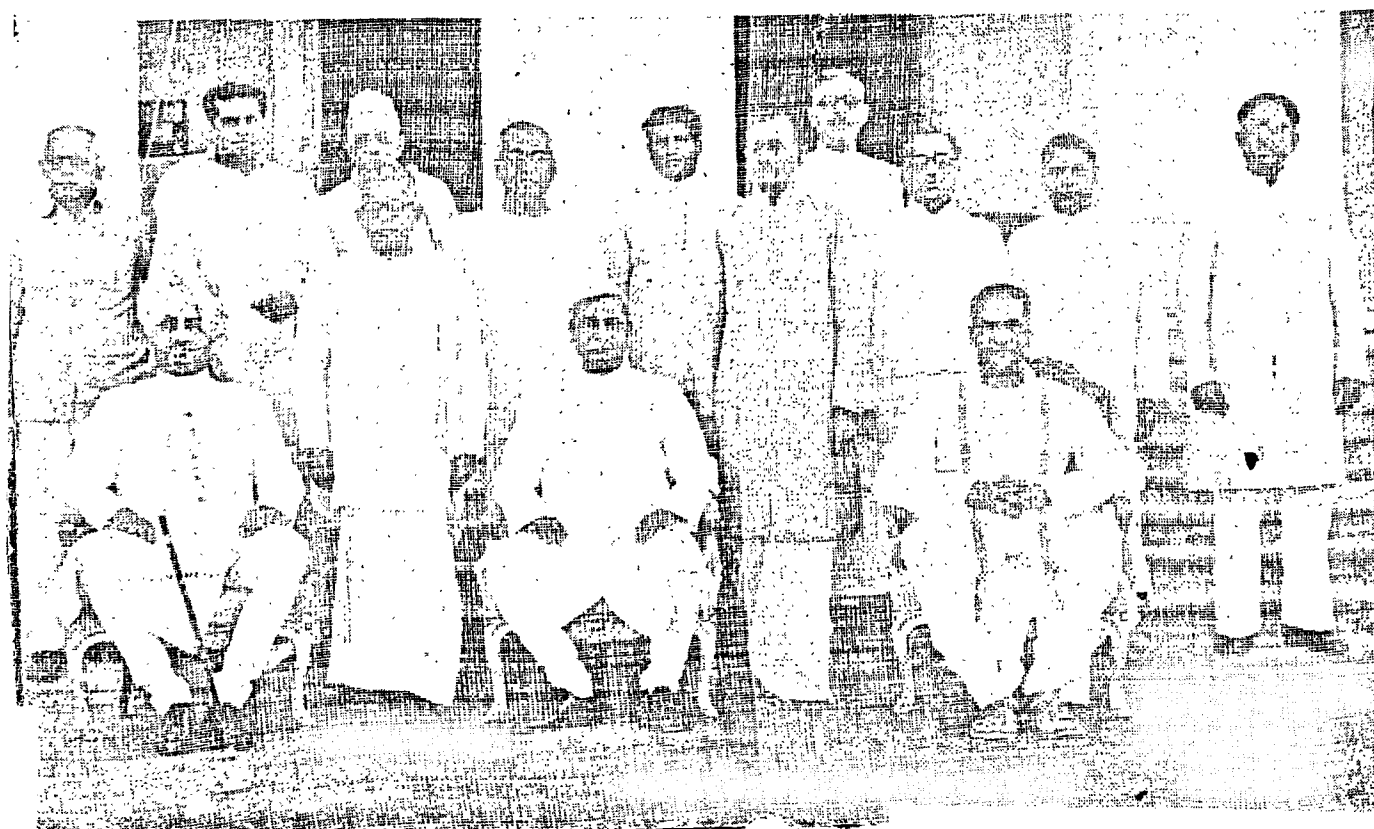


Visual Education is a vital aspect of adult education. The Lecturer-Students are initiated into the methods of repairing and handling Magic Lanterns.



President at Government House : Dr. Rajendra Prasad, President of the Indian Republic, with H.E. the Maharaja of Bhavnagar, Governor of Madras, H.E. the Maharani of Bhavnagar, and members of H.E. the Governor's family and staff, at Government House, Guindy.

With the Madras Cabinet: The President with H.E. the Governor of Madras and members of the Madras Cabinet. (Sitting) H.E. the Maharaja of Bhavnagar, Dr. Rajendra Prasad, Sri P. V. Kumaraswami Raja, Chief Minister of Madras. (Standing) Sri A. B. Shetty (*Agriculture*), Sri B. Gopal Reddi (*Finance*), Sri M. Bhaktavatsalam (*Public Works*), Dr. T. S. S. Rajan (behind Sri M. Bhaktavatsalam) (*Health*), Sri N. Sanjeeva Reddi (*Prohibition*, since resigned), Sri K. Madhava Menon (*Law and Education*), Sri H. Sitarama Reddi (*Land Revenue*), Sri K. Chandramouli (*Local Administration*) and Sri J. L. P. Roche-Victoria (*Food and Fisheries*).



Madras Information

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Fort St. George

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"WE SEEK TO SERVE AND NOT TO COMPETE"

May 1951

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Dawn of New Era in Village Autonomy

By SRI K. CHANDRAMOULI, Minister for Local Administration

From time immemorial, India is a land of villages. Each village acted as an autonomous unit of local administration and social activities. Villages thus became prosperous and cultural. The family has been treated as an individual in the set-up of the village unit. Each family has responded and carried out the functions assigned for the common good of the village. It is, therefore, clear that co-operation is necessary and that some sort of organization which shall control the actions of the individuals so as to secure the greatest measure of safety and happiness for the community as a whole is very essential. If everyone exercises his right to act as he pleases without realizing in what manner he is harming the community, nothing but chaos will result. As things are, all are not good citizens. Therefore, some collective organization within the community is necessary.

Hence in every place has arisen a system of "local government" an organization through which the community makes known its common wishes and puts them into practice. It may be a panchayat or a municipality. These in general have got to provide for the safety, well-being and comfort of the community as a whole and those who benefit by these services have to pay the taxes required to meet the cost of the services. They should also realize that good local government is a matter of co-operation, co-operation between the individuals themselves and between them and the officials of the State. If everyone observes the rules of health, sanitation and social environment, not only the problems of the villages will be substantially solved but also the inhabitants of the villages will be living in more healthy surroundings at less cost to themselves and the administration.

Encouraging Villagers to help Themselves

There are over 27,000 villages in Madras State and if every one of these villages should be provided with the minimum amenities of life and the people should be enabled to live in healthy surroundings, we have to admit that no central organization working from the top could provide these amenities within any measurable time and that the villagers themselves must be encouraged to co-operate and provide the amenities under proper direction, supervision and control. It is in recognition of this principle that the Madras Government have enacted the Madras Village Panchayats Act, 1950, which came into force on 1st April this year. Till 1st April panchayats were governed by the Madras Local Boards Act under which district boards and their presidents and the Inspector of Municipal Councils and Local Boards have dual control and power not only to intervene in the more important matters of administration but also in the day-to-day administration of panchayats. Panchayats had, therefore, no autonomy in any real sense of the term till recently. The levy of taxes under the Local Boards Act was optional and consequently a few panchayats have supplemented the income from land cess by levy of local taxes, with the result that the administration of most of the panchayats has been hampered by lack of funds and primary amenities of life have, therefore, been neglected.

Article 40 of the Constitution of India which deals with the directive principles of State policy, has laid down that the State shall take steps to organize village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government. The Madras Village Panchayats Act, 1950, aims at remedying the defects in the working of the panchayats under the Local Boards Act and making them self-contained and self-governing units of local administration invested with large and practically independent powers in all matters relating to village life and village economy, minimising outside control as far as possible, consistent with efficiency and integrity of administration.

Formation of Panchayats

Under the new Act, every village or hamlet with a population of 500 and above will have a panchayat. Villages with less than 500 will be included within the jurisdiction of an adjoining panchayat or grouped with other contiguous villages which will have a single panchayat for the whole group. The formation of panchayats is compulsory and will not be left to the option of local inhabitants or officials. It is the earnest desire of the Government to constitute panchayats for all the villages at an early date.

Panchayats with jurisdiction over a population of not less than 5,000 and with an estimated annual income of not less than Rs. 10,000 come under Class I Panchayats and the rest under Class II Panchayats. The strength of a panchayat ranges from 5 to 15 according to the strength of the population. All members have to be elected on the basis of the Legislative Assembly Electoral Rolls relating to the area comprised in the panchayat. The president will be elected not from among the members of the panchayat as hitherto but directly by the whole electorate and he will be an ex-officio member. Neither the village headman nor any other servant of Government or local body could seek election as a member or president of a panchayat. There will be a vice-president for each panchayat. The president, the vice-president and members are all honorary and cannot receive any remuneration for holding their office.

Election of Office-bearers

The principle of reservation of seats for Scheduled Castes is recognised in the new Act also but this will continue only for a period of ten years. Seats previously reserved for Muslims and Indian Christians will be treated as general seats under the new Act. For the purpose of election of members, panchayats shall be divided into wards subject to a minimum of two. The election will be by secret ballot. The term of office of members and president will be three years from the date of occurrence of ordinary vacancies.

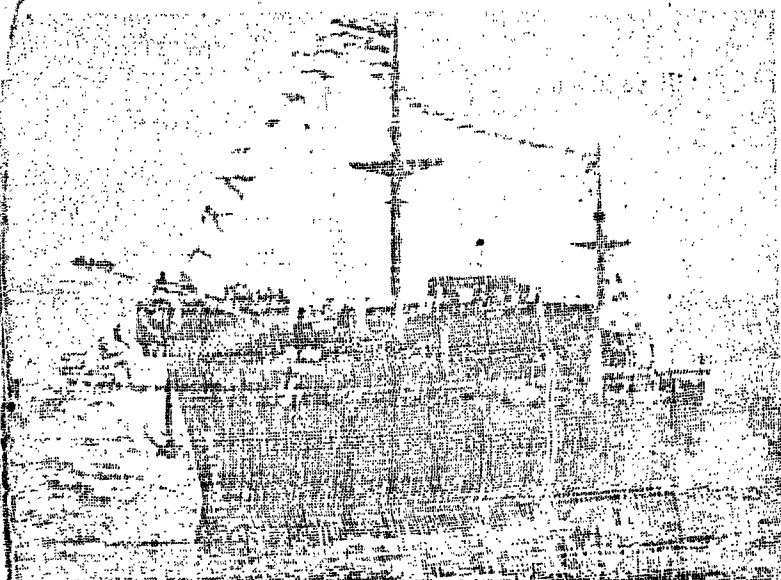
An executive officer will be appointed to some major panchayats. He will carry on the day-to-day administration of the panchayat, put into effect the resolutions passed by it. He will be under the disciplinary control of the Inspector. In the case of panchayats where no executive officer is appointed, the president will function as the executive authority. If the president of a panchayat is of

UNESCO CHIEF IN DELHI



VISIT TO JANATA COLLEGE: Dr. Jaime Torres-Bodet, Director-General of the United Nations Educational, Scientific and Cultural Organization, recently visited the Janata College at Allpur, a village near Delhi. The College imparts training to a group of villagers for village leadership. Villagers are taught tailoring, leather work and other handicrafts. Besides this regular lessons in rural hygiene, veterinary science and new methods of agriculture are given to them.

RECEPTION TO DR. BODET: Rectol of Sernikelly dances was one of the interesting items of the programme of the reception held at Government House, New Delhi, by the Hon'ble Maulana Abul Kalam Azad, Education Minister, in honour Dr. Jaime Torres-Bodet. These dances derive their charm from popular origin and are marked for their variety. Racha and Kirtana are seen in this picture in a dance pose.



FOR INDIAN WATERS: Jag Ganga, the first ship built in Japan for the Great Eastern Shipping Co. Bombay, was recently launched at Kobe, by Sri K. K. Chettur, Head of the Indian Liaison Mission in Japan. The launching took place after a brief ceremony conducted according to Indian rites by Mrs. Chettur, in the dockyards of the Central Japan Heavy Industries (LTD). The M. V. Jag Ganga is a 2,000 ton cargo ship on a draft of 15 ft. The vessel is designed for a trial speed of 12 knots. Accommodation exists for a crew of 33 and a special four berth cabin. The vessel's scheduled coastal run will cover the ports of Bombay, Madras and Calcutta; its outward schedule will include Aden in the West and Singapore in the East.

1951 Census—Provisional Figures with Variation from 1941 Population

Name of district.	1941 Population.	1951 Population.	Actual increase over 1941 population.	Percentage of increase over 1941 population.
(1)	(2)	(3)	(4)	(5)
1 Srikakulam	2,013,698	2,105,847	92,149	4.6
2 Visakhapatnam	1,832,246	2,071,671	239,425	13.1
3 East Godavari	2,076,840	2,406,352	329,512	15.9
4 West Godavari	1,465,111	1,697,892	232,781	15.9
5 Krishna	1,451,509	1,779,760	328,251	22.6
6 Guntur	2,227,233	2,542,244	315,011	14.1
7 Nellore	1,617,026	1,793,774	176,748	10.9
8 Cuddapah	1,056,507	1,161,713	105,206	10.0
9 Kurnool	1,190,842	1,264,154	73,312	6.2
10 Bellary	1,082,617	1,240,988	158,371	14.6
11 Anantapur	1,166,220	1,360,727	194,507	16.7
12 Madras	878,150	1,429,985	551,835	62.8
13 Chingleput	1,723,286	1,839,896	116,610	6.8
14 Chittoor	1,633,396	1,808,725	175,329	10.7
15 North Arcot	2,577,540	2,862,155	284,615	11.0
16 Salem	2,865,950	3,374,234	508,284	17.7
17 Coimbatore	2,809,648	3,294,849	485,201	17.3
18 South Arcot	2,608,753	2,766,463	157,710	6.0
19 Tanjore	2,562,375	2,979,754	417,379	16.3
20 Tiruchirappalli	2,594,136	2,942,225	348,089	13.4
21 Madurai	2,473,609	2,884,994	411,385	16.6
22 Ramanathapuram	1,990,842	2,078,750	87,908	4.4
23 Tirunelveli	2,237,379	2,447,949	210,570	9.4
24 The Nilgiris	209,709	312,172	102,463	48.9
25 Malabar	3,929,815	4,758,886	829,071	21.1
26 South Kanara	1,522,016	1,746,118	224,102	14.7
STATE TOTAL	49,847,508	56,952,332	7,104,824	14.3

Density of Population.

1941	390 persons per square mile.
1951	446 persons per square mile.

opinion that a particular resolution of the panchayat should not be carried out, the president himself if he is the executive authority of the executive officer where there is one, shall refer the matter to Government whose decision shall be final. If any panchayat is not competent to perform or persistently makes default in performing the duties imposed on it by law or exceeds or abuses its powers, it is liable to be dissolved or superseded. During the period of dissolution or supersession the president will exercise the powers and duties of the panchayat and if there is no president, a special officer will be appointed to perform these duties.

Jurisdiction and Functions

Under the new Act, village panchayats will manage all the local institutions and deal with all civic and administrative matters. Their obligatory functions include construction, repair and maintenance of public roads in the village, or connecting it with other villages and of all bridges and culverts on such roads; lighting of public roads and public

places; construction of drains and disposal of drainage water and sullage; sanitation—cleaning of streets, removal of rubbish and provision of public latrines and cleaning of latrines, public or private; opening and maintenance of burial and burning grounds; provision of protected water-supply, sinking and repairing of wells, ponds or tanks; preventive and remedial measures against epidemics.

The work done till now by village courts and panchayat courts has been transferred to panchayats. The civil jurisdiction has been increased to Rs. 100. Executive officers of panchayats, which are not headquarters of registration offices, are invested with powers of a registration officer in respect of documents that are normally exempt from stamp duty and fees and documents of an ephemeral nature. Panchayats may also undertake minor repairs to irrigation sources in the village and levy a fee to meet the expenditure. They can manage all the unreserved forests, grazing grounds, threshing floors, topes, etc., in the village.

1951 Census—Provisional Population according to Sexes

Name of district.	1951 Total population.	Males.		Females.	
		1951 population.	Percentage to total population.	1951 population.	Percentage to total population.
(1)	(2)	(3)	(4)	(5)	(6)
1 Srikakulam	2,105,847	1,026,588	48.8	1,079,259	51.2
2 Visakhapatnam	2,071,671	1,023,153	49.4	1,048,518	50.6
3 East Godavari	2,406,352	1,202,830	50.0	1,203,522	50.0
4 West Godavari	1,697,892	851,012	50.1	846,880	49.9
5 Krishna	1,779,760	904,715	50.8	875,045	49.2
6 Guntur	2,542,244	1,287,424	50.6	1,254,820	49.4
7 Nellore	1,793,774	903,432	50.4	890,342	49.6
8 Cuddapah	1,161,713	594,923	51.2	566,790	48.8
9 Kurnool	1,264,154	641,096	50.7	623,058	49.3
10 Bellary	1,240,988	631,706	50.9	609,282	49.1
11 Anantapur	1,360,727	701,987	51.6	658,740	48.4
12 Madras	1,429,985	747,135	52.2	682,850	47.8
13 Chingleput	1,839,896	933,407	50.7	906,489	49.3
14 Chittoor	1,808,725	924,341	51.1	884,384	48.9
15 North Arcot	2,862,155	1,430,909	50.0	1,431,246	50.0
16 Salem	3,374,284	1,692,639	50.2	1,681,645	49.8
17 Coimbatore	3,294,849	1,656,181	50.3	1,638,668	49.7
18 South Arcot	2,766,463	1,386,477	50.1	1,379,986	49.9
19 Tanjore	2,979,754	1,468,904	49.3	1,510,850	50.7
20 Tiruchirappalli	2,942,225	1,460,734	49.6	1,481,491	50.4
21 Madurai	2,884,994	1,434,022	49.7	1,450,972	50.3
22 Ramanathapuram	2,078,750	996,382	47.9	1,082,368	52.1
23 Tirunelveli	2,447,949	1,189,232	48.6	1,258,717	51.4
24 The Nilgiris	312,172	164,831	52.8	147,341	47.2
25 Malabar	4,758,886	2,319,051	48.7	2,439,835	51.3
26 South Kanara	1,746,118	840,540	48.1	905,578	51.9
STATE TOTAL	56,952,332	28,413,661	49.9	28,538,671	50.1

Sex Ratio.

In Madras State as a whole, for every 1,000 males there are 1,004 females.

Panchayats may plant and grow trees on roads and streets in the village, open and maintain markets, control fairs and festivals, cart-stands, cattle-sheds and slaughter houses. They have power to improve agriculture and agricultural stock and hold agricultural shows. They may promote and encourage cottage industries; they may open elementary schools, reading rooms and libraries; they may set up and maintain wireless receiving sets, playgrounds and centres of physical culture; they may also open and maintain dispensaries and maternity and child-welfare centres; they may do any other thing of public utility calculated to promote the safety, health, comfort or convenience of the inhabitants of the village.

Income by Tax Levy and Grant

Panchayats are thus given jurisdiction over practically everything that concerns the village life and they could

do a lot to improve the present condition in villages provided they work wholeheartedly placing the common good of the people over everything else. Of course funds are required in order to enable the panchayats to discharge their obligations. They get their share of land-revenue realised in the village and also the duty levied on transfers of property. This income, however, will not be sufficient to enable the panchayats to provide all the essential amenities. The Act has, therefore, made it compulsory for every panchayat to levy a tax on houses excepting huts, a tax on all vehicles and a tax on professions. They have also the option to levy, subject to approval by the Inspector, a tax on agricultural land for a specific purpose, and also fees on commercial crops brought and sold in the village. Government will continue to make ex-gratia grants to panchayats and in addition set apart one-eighth of the land revenue of the State for distribution as grants

RURAL RECONSTRUCTION

to Class II panchayats on the basis of population. Panchayats are thus given a suitable income in the new set-up.

Government will exercise supervision and control over village panchayats through the Inspector of Municipal Councils and Local Boards who will be assisted by Regional Inspectors and District and Deputy Panchayat Officers. District Boards have no longer any control or supervision over village panchayats. District Collectors have no control over the administration of panchayats except in an emergency concerning the safety of life and property.

First Principle of Citizenship

I have now indicated briefly the constitution, jurisdiction, powers and functions as also finance of panchayats under the new Act. If only people realise the truth of the proverb "No man liveth unto himself" and that everything they do, every word they say has a two-fold reaction, firstly upon themselves and secondly upon those around them, they will put into action the first and most important principle of citizenship, namely that the individual is ultimately responsible for the well-being of the community. As good citizens they should be tolerant, and appreciate that others have the same right as themselves to exist, to work and to attend to their spiritual and material needs. If they recognise that the essence of civic progress lies in small scale effort indefinitely multiplied, I have no doubt that the new Panchayat Act will give them sufficient opportunities to make the villages healthy, habitable and sweet. The sooner the villagers recognise that it is no good depending upon outside help for everything that could be achieved by themselves, the better.

Unless every one puts his shoulders to the wheel of progress, contributes his mite to the welfare of himself and others in the village, no Act, however good a piece of legislation it may be, whatever powers and functions it may confer upon the villagers, can be a success to the extent of removing insanitary conditions in the village, building cottage industries as a subsidiary occupation for the villagers, or developing agriculture on scientific lines in order to bring more prosperity to the village. The educated and the enlightened in the village have a special responsibility on them. It is they that should give a lead to the village in the matter of giving utmost co-operation for the successful working of the new Act. I appeal to them to sink their differences, forget factions, adapt themselves to the changing conditions, sacrifice a little and create conditions which are favourable for the successful working of the panchayats. If people work in this spirit, I have no doubt that the inauguration of the new Panchayat Act in our State will mark the dawn of a new era in village autonomy.

(By courtesy, A.I.R., Madras).

Price of Brown Sugar

The Commissioner of Civil Supplies has notified that no person shall sell brown sugar in any area or market at a price exceeding Rs. 3 per standard maund above the ceiling price fixed for gur for that area or market. Brown sugar, for this purpose, as distinguished from *Bura*, *Aska*, *Khandasari* sugar or country sugar, shall mean highly purified refined sugar, non-crystalline, powdery and brownish in colour.

1951 Census—Population of Certain Towns

Name of the City. (1)	Provisional totals.		
	Total. (2)	Males. (3)	Females (4)
1 Madras City ..	1,429,985	747,135	682,850
2 Madurai ..	361,954	183,498	178,456
3 Dindigul ..	78,654	39,900	38,754
4 Tiruchirappalli ..	218,565	111,901	106,664
5 Pudukottai ..	44,565	22,616	21,949
6 Coimbatore ..	194,555	101,912	92,643
7 Salem ..	202,312	102,513	99,799
8 Kozhikode ..	158,020	79,608	78,412
9 Palghat ..	69,495	34,577	34,918
10 Vijayawada ..	160,831	82,472	78,359
11 Masulipatnam ..	78,021	39,736	38,285
12 Guntur ..	123,829	62,272	61,557
13 Mangalore ..	117,095	58,898	58,197
14 Tuticorin ..	98,391	49,456	48,935
15 Tirunelveli ..	73,500	36,311	37,189
16 Palayamcottai ..	39,911	20,119	19,792
17 Kakinada ..	100,054	49,994	50,060
18 Rajahmundry ..	105,300	52,083	53,217
19 Kancheepuram ..	85,043	42,134	42,909
20 Vellore ..	106,603	53,653	52,950
21 Visakhapatnam ..	107,815	54,531	53,284
22 Vizianagaram ..	67,156	33,355	33,801
23 Tanjore ..	100,787	50,167	50,620
24 Kumbakonam ..	91,586	45,332	46,254
25 Nagapattinam ..	57,973	27,782	30,191
26 Eluru ..	87,060	42,601	44,459
27 Cuddalore ..	68,456	34,129	34,327
28 Nellore ..	81,467	41,501	39,966
29 Bellary ..	70,764	37,239	33,525
30 Tenali ..	57,980	29,089	28,891
31 Kurnool ..	60,110	30,500	29,610
32 Adoni ..	53,508	27,034	26,474
33 Erode ..	57,527	29,374	28,153
34 Tiruppur ..	52,597	27,016	25,581
35 Rajapalayam ..	60,917	30,535	30,382
36 Ootacamund ..	41,414	21,961	19,453

Registration of Village Vaidyas

The Government have directed that the practitioners of indigenous medicine who have obtained the certificate of 'Village Vaidya' awarded by the Commissioner for Government Examinations, should be registered under a separate class as "Village Vaidyas" under the rules for the registration of practitioners of indigenous medicine. A separate part of the register called the "Register of Village Vaidyas" will be maintained.

The practitioners of indigenous medicine who have already been registered in Class B under the rules for the registration of practitioners of indigenous medicine and who subsequently obtain the certificate of "Village Vaidya" will be automatically brought on to the register of Village Vaidya without payment of fresh registration fee.

Movement of Foodgrains

The Government have imposed a ban on the movement of foodgrains to Kasargod Taluk, South Kanara District, from other taluks in the district.

AGRICULTURE

Concerted Plans for Growing More Food

By Sri A. B. SHETTY, Minister for Agriculture

In addition to this amount of Rs. 2,89,02,400 under Demand XVIII—Agriculture allotted for the normal work of the Department, a sum of Rs. 332.5 lakhs has been provided under other heads in the Budget as shown below:—

	Rupees in lakhs.
1 Tank improvement schemes ..	150
2 Irrigation schemes having Grow More Food value.	70
3 Grant for sinking wells for Grow More Food schemes.	111
4 State Trading Schemes in the Agricultural Department.	1.5
Total ..	332.5

Thus the total provision for agricultural purposes in the Budget Estimates under several Demands (exclusive of major irrigation schemes) amounts to Rs. 621.5 lakhs as against Rs. 446 lakhs in 1950-51.

The problem of feeding our growing population at an adequate level of nutrition towers above all the other domestic problems facing the country today. Agriculture must be raised to the highest standard of productive efficiency. More land must be brought under food crops. The recent census figures have brought prominently before the public eye the rapid growth in our population. Population is increasing beyond the means of subsistence. Government will soon have to take up an integrated food and population policy.

Revised Policy for 1951-52

The Grow More Food Campaign was started about eight years ago. The Three-Year Food Plan has been working since 1949-50. The Central as well as the State Governments are spending crores of rupees on this work. Intensive efforts are being made to raise production by providing additional water facilities, increased supplies of fertilisers and manures, more extensive use of improved seeds and better control of pests and diseases. There is a lot of public criticism on the ground that the results achieved so far have not been commensurate with the money and labour spent on such work. The enquiry recently conducted in a few places in the Bombay State by the Rural Economics Division of the Reserve Bank of India and the Agricultural Economics Section of the University School of Economics and Sociology, Bombay, has shown some of the causes for the failure of the Grow More Food work. They have made certain suggestions for the reorganization of the Campaign.

The Government of India propose to revise their policy in regard to financial assistance for Food Production schemes in 1951-52 by restricting it to selected areas of not less than 5,000 acres with assured irrigation facilities.

From the speech by Sri A. B. Shetty, Minister for Agriculture, in moving Demand XVIII—Agriculture in the Madras Legislative Assembly for Rs. 2,89,02,400.

The new schemes should be in such intensive cultivation areas. As regards the schemes in other areas, the State Government will have to finance them from their own funds, and help from the Centre cannot be expected unless they have surplus money after meeting the requirements of the intensive cultivation areas.

Food Crops and Commercial Crops

In 1949-50 the total area cultivated in Madras State was 36.34 million acres of which the area under food crops was 27.56 million acres and the area under non-food crops was 8.78 million acres. Thus food crops took a share of about 60 per cent of the total area under crops and commercial crops about 20 per cent. The area under cultivation fluctuates according to seasonal conditions. During the last two decades, there has been a slight decrease in the area under food crops while the area under non-food crops has increased slightly. The shift is of the order of 9,000 acres on the average. The marked increase in the acreage under commercial crops like sugarcane, groundnut and tobacco since 1945-46 seems to be mainly due to the relatively more attractive prices which they are able to secure.

There is disparity in agricultural prosperity between the growers of foodgrains and the growers of commercial crops. Those who cultivate food crops have been hit hard on account of the fall in production due to the successive failure of monsoons and the comparatively lower prices they get for their produce. The prosperity of the cultivator of commercial crops has increased to a considerable extent on account of the highly remunerative prices for crops like sugarcane, groundnut and tobacco. This disparity in the prosperity of the growers of food and commercial crops may have serious repercussions on the progress of the Grow More Food effort. There is no price control over commercial crops except in the case of sugar and cotton. Government will have to take up a comprehensive price control policy so that we may have an equitable price structure for all agricultural produce, food as well as commercial crops. Regulation of agricultural prices should be correlated to a system of rational crop planning to bring about a proper adjustment of our productive resources as between foodgrains and commercial crops.

Development of Irrigation

The successive bad seasons we have had during these four years are mainly responsible for hampering our efforts to increase food production. The area irrigated in our State is only about one-third of the total area under cultivation. Rainfall is generally deficient over most parts of the State and it is not evenly distributed throughout the year. The extension of irrigation facilities will change the entire agricultural pattern of large parts of the State and bring about a permanent improvement in our food position. In the Madras State, the Godavari and the Krishna which are mainly fed by the south-west monsoon; are the only two big rivers whose waters have not been utilised to any appreciable extent for irrigation purposes. Eighty-five to 90 per cent of the Cauvery River waters have been

harnessed. The rest of the South Indian rivers which are practically dependent on the north-east monsoon rains will not guarantee an assured supply even in three out of five years. It is, therefore, considered by our engineers that storage reservoirs across the Godavari and the Krishna or their tributaries are the best solution for wiping out our food deficit from the irrigation point of view.

The Central Government have rightly given high priority to irrigation and connected power projects. A Fifteen-Year Plan for the development of Irrigation and Power in this State has been forwarded to the Planning Commission. We have our own limitations in regard to financial, administrative and technical resources. The Government of India will have to subscribe a substantial amount to the Ways and Means Fund which we will be able to keep by every year. In order to achieve quick results, projects which would enable a second crop to be raised on areas already under irrigation should have priority over projects which propose to develop uncultivated areas.

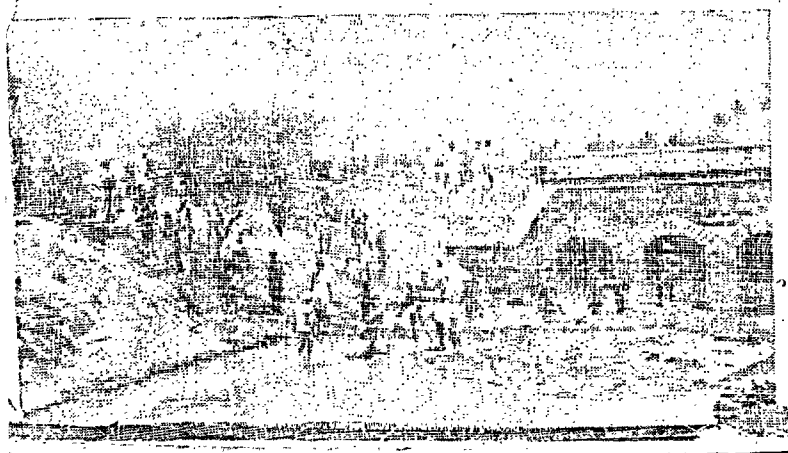
Apart from the Tank Improvement and Well Subsidy schemes, the Government have sanctioned the construction before the end of 1951, of 101 artesian wells in the South Arcot District in addition to the 20 wells sanctioned earlier. These wells will be maintained as Government sources of irrigation.

Power Lift Irrigation

Power lift irrigation has been becoming a regular feature since 1946. The drought conditions during the last four years have increased the need for it. Petrol, oil engine and electric motor pumpsets so far made available to the cultivators are as shown below:—

	On hire.	Hire purchase.	Sold by the Department.	Arranged to be supplied on outright cash purchase basis.
1 Petrol pumpsets ..	147	..	436	..
2 Oil engine pumpsets ..	398	818	207	2,866
3 Electric motor pumpsets ..	..	178	..	7,587
Total ..	545	996	643	10,453

SLOW PROCESS: Silt clearance of irrigational channel by manual labour is a slow and costly process. Bulldozer can do the job quicker, cheaper and better.



Qualified engineering Supervisors and mechanics are kept in each district to maintain the oil engines in proper working order. The demand for oil engines of low H.P. (10 H.P. and below) has increased during the current year on account of the lowering of the water table in our wells. The Government of India have just granted import licences for 1,000 more oil engines and we expect to get shortly another quota of engines and also a further allotment of pipes which are now far short of requirements. This may help us to work an emergency programme of raising short-term crops during the coming summer months. A few river pumping installations are proposed to be set up shortly in Chingleput, Malabar and South Kanara Districts.

Fertilisers and Compost

An intensive fertiliser distribution scheme was launched in ten deltaic districts in July 1950. Rs. 61 lakhs have been disbursed as manure loans free of interest for the first crop. Rs. 12 lakhs have been sanctioned for the second crop in West and East Godavari Districts. Approximately 90,000 tons of ammonium sulphate and 14,000 tons of superphosphate have been sold to the ryots in delta and non-delta districts from January 1950 to the end of January 1951. It has been estimated that an extra yield of over 20 per cent will be realised as a result of the application of these fertilisers to paddy crops. There is a general demand now for continuing this scheme in the coming year also for maximising paddy production to the fullest possible extent. The Government of India have allotted separate quotas of fertilisers for commercial crops and manure mixing farms.

The use of compost was started on a planned basis from 1946. We are now having a Compost Development Officer and a Compost Development Committee. A subsidy of Re. 1 per ton is given for encouraging ryots to make compost in rural areas. The Compost Week that was celebrated during the Gandhi Jayanthi time in October last has served to further popularise and spread the use of compost manure. Ninety-one out of 95 municipalities and 140 notified panchayats out of 383 have taken to the manufacture of compost and the compost scheme is sure to make further progress.

There has unfortunately been a setback in the procurement and distribution of paddy, millet and green manure seeds in spite of the creation of a special staff for seed development work. Adverse seasonal conditions continuing from year to year have become a serious handicap in this work in addition to the other usual difficulties. Steps are being taken to procure as much seed as possible from the surplus districts.

Agricultural Research

The Expert Committee that reviewed the progress of agricultural research in this State in 1949 has stated that our research is on the right lines, but more facilities are needed in several directions. Visitors from foreign countries have at different times made also appreciative comments on our research contributions. During the last five years nearly a score of new and superior paddy strains have been released. Two paddy strains resistant to blast Co. 25 and Co. 26 have already spread over about 50,000 acres. In the same period a very valuable Cambodia Cotton strain—Uganda 1—has been popularised and it has become already an asset to most parts of our southern districts. Some superior Sea Island cotton varieties for the West Coast, to be grown as inter crops in coconut

plantations, are being popularised. Improved strains have also been evolved and released in several other crops, such as groundnut, gingelly and castor. In millets very appreciable increases in yields have been found possible through exploitation of hybrid vigour.

There is thus a fairly continuous flow of superior crop strains from the experimental fields of our Crop Specialists to the ryots' fields. Compared with the normal area, the area that has come under improved strains is 95 per cent in the case of sugarcane, 75 per cent in potato, 50 per cent in paddy and 35 per cent in cotton.

Recently it has been proved that as much as 8,000 lb. of paddy per acre and about 100 tons of sugarcane can be obtained in certain areas by adopting departmental strains and careful production methods. The larger use of improved strains will appreciably augment our crop yields and crop qualities and contribute to the State's crop wealth.

Agricultural Chemistry, Entomology and Mycology Sections of the Department have in the same period played their part in making equally effective contributions to the cause of Agriculture. Research on manuring of crops and in other aspects of crop husbandry, including reclamation of soils, has considerably advanced our knowledge and capacity to make the best use of our soils.

Fruits and Orchards

In fruits and orchard crops our work has received highly commendatory references from such authorities as the Fruit Development Adviser to the Government of India and Prof. Hayes, an American horticulturist who is now at the Agricultural Institute, Allahabad. For the first time, the Department has been able to release a number of very promising mango hybrids evolved at our Fruit Research Station, Kodur. Budded plantations of *sathugudi*, orange, lime and lemons are spreading in many parts of the State, and over 50 private fruit nurseries producing budded citrus plants have sprung up in Kodur area alone as a result of the direct stimulus received from the Department's work on fruits. The Horticultural Diploma course started in 1948 is producing year after year a number of Agricultural and Botany graduates who will be able to do better work for the development of fruit cultivation in our State.

The Government have been eager to foster and step up research and towards this end a large number of research schemes have been sanctioned during the past five years either by the State Government themselves or with the aid of the Indian Council of Agricultural Research and Commodity Committees. An Agricultural Meteorology Section has been created at Coimbatore; a Central Banana Research Station has been established at Aduthurai; a Central Cashewnut Research Station is proposed to be established shortly at Mangalore; five model Orchard-Nursery stations are being established in the typical fruit-growing regions of the State; ginger, cardamom, pepper, sweet potato, chillies and pulses research have all been newly started or research on these extended and intensified; a number of schemes to tackle special problems in cotton, coconut, arcanut, paddy, millets, oil seeds, sugarcane, plant physiology, chemical aspects of agriculture, etc., have been sanctioned. Today it is possible to look back with satisfaction on our Agricultural Research Organization in the State, as unexcelled either

in the scope and range of its activities or in the record of its achievements, in the Indian Union.

Mechanised Agriculture

Great advance has been made in the West in the application of machinery to agricultural development. The use of tractors and modern implements can play a large part in the planned expansion of agriculture in our country also. With the setting up of Agricultural Engineering Service in this State in 1946, tractors have come into use and there is a gradual progress in the outturn of their work. They are being used for reclaiming waste and weed infested lands, closing breaches of tanks, clearing sand-cast areas and spring channels and ploughing work. The Department has at present 237 tractors, 60 of which have bulldozing and bullgrading attachments. Thirty-four new tractors with bulldozer attachments have just arrived. The recent demonstrations employing tractors for puddling operations and showing the practicability of applying power to paddy cultivation is a notable advance made in this State. The area tackled by departmental tractors since the inception of the scheme was 1.37 lakhs acres up to the end of December 1950. There is now a great demand for tractors from all districts on account of the high cost of labour and draught cattle. Several ryots have purchased small size tractors.

From a short survey carried out in some taluks of Bellary District, it is seen that nearly 18,000 acres of cultivable waste lands on which both cereals and cotton could normally be grown are lying fallow on account of thick "Hari-ali" infestation. A scheme prepared for intensive reclamation of this area with the help of heavy tractors has been sent to the Indian Central Cotton Committee for approval. The two tractor workshops started at Coimbatore and Bapatla in 1949-50 are doing useful work in the maintenance and repairs of the tractors. Further equipment is being added to enhance their utility and effect speedy repairs and renewals. Regional Assistant Agricultural Engineers are carrying out a check over the working of these machines, in their jurisdiction. Personnel for operating these machines are being trained at the tractor workshops. The higher grade staff required for supervision are sent for further training to the Central Tractor Organization, New Delhi.

FOR STORING WATER: Efficient work on tank excavation is done with bulldozers to store more water for foodcrops.





REPLACING BULL-POWER: The tractor is used not only for ploughing and carrying paddy, but also for such a variety of uses that it has effectively replaced bulls on the modern farm. Here the tractor is being used for threshing paddy.

Regulated Marketing

A plan to produce an additional quantity of about one lakh bales of cotton in 1950-51 to meet part of the country's deficit in cotton was launched in June 1950 with the appointment of a special staff for this purpose. This has not proved successful in spite of the several concessions given for the expansion of cultivation and production. The unprecedented drought experienced in almost the entire cotton growing area has been the principal cause for defeating the efforts made this year. Better results are expected next year if monsoon conditions are favourable.

The establishment of regulated markets forms an essential part of any ordered plan of agricultural development. In order to extend the benefits of regulated markets to more crops and areas, the Madras Commercial Crops Market Act has been extended to cotton and groundnut in Anantapur District, coconut and arecanut in Malabar and South Kanara and coconut and tobacco in East Godavari District. The notified area under the Tiruppur Cotton Market Committee has been extended to the whole of Coimbatore District; the Adoni Cotton Market Committee to the whole of Bellary District; the Vijayavada Tobacco and Groundnut Market Committee to the whole of Krishna District. Auction system of tobacco sales has been initiated by the Tobacco Market Committee at Guntur in January 1951. The regulated marketing system will help the growers to obtain a fair price for their produce and to have a square deal from the traders.

Soil Conservation

Since the first World War there has been a gradual realization that soil fertility is running down in many parts of the world owing to soil erosion. Soil erosion has become a great menace to agriculture in this country also, particularly in areas of heavy rainfall, in slopes of undulating lands and in certain dry tracts where the top soil

easily wears down owing to the action of wind and water in motion. Soil erosion is accelerated when forests are cleared and the protective cover of vegetation is removed for the purpose of cultivation. The disastrous consequences of such man-made erosion have recently been brought to public attention in a striking manner by what has happened in the potato cultivation plots on the hill slopes in Ootacamund and Coonoor. Contour-bunding is one of the important measures for preventing erosion and also for conserving moisture in areas of precarious rainfall like the Ceded Districts.

Twelve of our officers have been trained in the erosion control methods adopted in Bombay. Topographic survey has been done in Hagari, Alur and Gantakal. The work of putting up contour-bunding will be taken up shortly in these places and the scheme is proposed to be extended in due course to Visakhapatnam, Tirunelveli and the Nilgiris. A State Soil Conservation Board has been constituted this year. Soil conservation is a new activity which the Department is undertaking and it promises fruitful results.

About 20 per cent of our agricultural production is said to be destroyed annually by various pests and diseases. This State has taken a forward step in appointing a special staff for plant protection work in 1949. They have been able to achieve notable results in controlling large-scale incidence of pests and diseases. The new chemicals like D.D.T. and Gammaxane which are war-time discoveries have been found very effective in saving our crops. During the year 1949-50, six lakhs of acres of food crops and five lakhs of acres of other crops were saved from the ravages of pests and diseases. The Expert Committee on Research has expressed high appreciation of the work done. Plant protection service has become popular with the ryots and it bids fair to assume great importance in the future work of the Department.

Agricultural Extension Work

We have a vast area of agricultural land. The size of our agricultural population is predominantly large. Agriculture occupies the most important place in our national economy considering its actual contributions to our country's wealth and the potentialities for its further development. Our expenditure for the normal activities of the Department has no doubt risen from Rs. 80 lakhs in 1945-46 to Rs. 229 lakhs in the Budget Estimates. But this amount works out only to about 4.8 per cent of our total expenditure under the Revenue Account. Agriculture must in future have much larger funds allotted for the expansion of its activities. The Point Four Aid American Mission which visited Madras last year has expressed the view that the weakest link in the activity of the Agriculture Department is the propaganda and publicity side. Our aim some years back was to have one demonstrator for each taluk. We have more than achieved that object.

A large number of our taluks are having two demonstrators now. During the last five years the number of demonstrators has increased from 410 to 600 and that of fieldmen from 651 to 858. We have now 1,051 demonstration maistris. The Planning Commission has expressed concern at the inadequacy and ineffectiveness of the field organization in most States which it regards as a major impediment to the improvement of agriculture in India. Provision has been made in the Budget for employing 55 more fieldmen and 114 more demonstration maistris. Our aim should be to make a revenue fiska as the unit and have there one demonstrator with fieldmen and maistris under him so as

Paddy Varieties In South Kanara

With nearly six lakhs of acres under rice annually yielding in normal seasons 2.6 lakhs of tons of rice, South Kanara is eighth in rank among the rice-producing districts of the State. The special features of the district is the dominance of rice among its crops occupying 80 per cent of the cultivated area under diverse conditions, showing the importance of rice culture to the economic well-being of the South Kanara cultivator. Though the district enjoys a heavy rainfall varying from 130 to 200 inches, its distribution is an important factor deciding rice yields.

As a part of the comprehensive programme of rice improvement in the State, a research station, 25 acres in extent, was opened at Kankansady, Mangalore, in 1944 with the following main objects:—

- (1) improvement of the local paddy varieties by modern methods of breeding;
- (2) introduction of high yielding strains from other methods and when found suitable to increase their seed supply for primary seed farm areas;
- (3) agronomic, cultural and manurial experiments; and
- (4) trial of subsidiary food crops in rotation with paddy.

During the seven seasons the station has been at work on breeding work in the more important local variations grown in the different areas. It is gratifying to note that certain cultures in the important varieties, e.g., Co. 3 for the second crop, PTB. 9 and PTB. 14 for the main crop and PTB. 10 for the third crop are found to be popular and have covered nearly 15 per cent of the total area. Pure seed to the extent of 30,000 lb. to cover above 600 acres of primary seed farms could only be supplied from the station.

Besides breeding, work has already been put on hand with the following objects:—

- (1) Selection work in other popular varieties.
- (2) Evolution of suitable types for different 'palla' areas to withstand different water depths and fixing up varieties useful for growing in these areas in the first crop also.
- (3) Producing of a non-lodging kayama type.
- (4) Evolution of Co. 3 type of strain which does not deteriorate in germination in storage (Co. 3 is a popular strain during the second crop season).
- (5) Evolution of Mascally type for 'betty' areas.

Trials on green manure crops to fit into rice seasons have shown the feasibility of raising wild indigo on the single crop areas and sunnhemp and daincha in the double crop areas.

The cultivation of the tract has certain peculiarities. Work has just been started to study (1) the system of broadcasting common in the second crop areas, (2) the efficiency of early and late nurseries for the first crop, (3) broadcasting in the betty when the season is late. Work on the manurial aspects of the tract with its heavy rainfall resulting in denudation of soil on different types of paddy cultivation has to be taken up.

to facilitate closer touch between the Department and the cultivator.

Exhibitions and Propaganda

The monthly Grow More Food journals which the Department is publishing in the four regional languages have a circulation of 164,000 copies. Agricultural exhibitions are being held in different places and radio talks are given. The further steps taken this year for the development of agricultural extension work are the creation of the post of a Special Propaganda Officer, the appointment of Honorary Propagandists in eight districts, the introduction of a scheme of village co-operatives in seven districts and the sanction given for opening registered model farms, one in each taluk, on the holdings of the ryots selected for this purpose. The great bulk of our ryots are poor and illiterate. Their holdings are small and uneconomic. It is no easy matter to suggest improvements to them and enable them to carry them out. A sum of Rs. 89 lakhs has been provided in the Budget for loans under the Land Improvement and Agricultural Loans Act. There is also an allotment of Rs. 2,61,300 for loans to be given for purchase of agricultural implements and pumping installations.

Problems regarding certain essential agrarian reforms, stabilisation of prices for agricultural commodities and introduction of a crop insurance scheme, are awaiting to be tackled. The satisfactory solution of these questions is most necessary for the progress and prosperity of agriculture. The success of any Extension Service in our country will have to rest ultimately upon the co-operation of the village people. When each village has its own panchayat under the new Act and a network of multipurpose co-operative societies spreads over the whole State, it will help the farmers to organise their business better, to live better and to meet the country's requirements in regard to food and raw materials for its essential industries.

Kumari Cultivation in South Kanara

The Government have extended for a period of two years from Fasli 1351, the concessions granted to the Kumari cultivation in certain villages of Puttur, Coondapur and Kasargod Taluks of the South Kanara District.

Committee Constituted to look into Complaints of Detenus

The Government have approved the constitution of a committee consisting of two non-officials, one of them being its Chairman, to look into the complaints of prisoners detained under the Preventive Detention Act. Sri K. Venkataramaraju, Advocate, and Sri K. Champakesa Aiyangar, Advocate, have been appointed as members of the newly constituted committee and the former will act as the Chairman.

This separate committee has been constituted as the Government are anxious that the detenus should receive liberal treatment in jails. The functions of this committee will be advisory in character. The committee will examine complaints made by detenus in regard to their general treatment in jails, and also all other matters concerning their treatment in the jails which are not specifically susceptible of being cured by judicial remedies. The committee will also consider requests of general nature which may be made by the detenus and submit their recommendations to the Government.

Agricultural Research Stations

Research is an important branch of work in the Agricultural Department in the Madras State. Thirty-five Research Stations are today carrying on research on crop breeding, improvements of foodgrains, soil erosion and manures. These research institutions have turned out useful work and have educated the ryots in improved methods of cultivation.

In the field of crop breeding, which in the past had been one of the most effective lines of crop improvement, advances were recorded in all the crops. Rice and millets which are the staple food of the people all over the State received considerable attention at the Research Institutions and many improved strains were evolved. Work on oilseeds also registered a considerable advance.

An account of the work done by some of the Agricultural Research Stations in the State is given below:

Rice Research Station, Buchireddipalem.—Started 14 years ago, the Research Station at Buchireddipalem has grown in size and usefulness, particularly to the Nellore District. The main work of the station was the improvement of local paddy molakolukulu and other varieties and the introduction of high yielding strains that might suit the different paddy seasons in the district and the neighbouring districts where the conditions are identical. The Research Station studied the peculiar practices prevalent in the district and suggested ways of displacing or improving them.

Agricultural Research Station, Siruguppu.—The Siruguppu Agricultural Research Station was an offshoot of the Tungabhadra Project. The Research Station was established in the year 1937 with the object of finding the suitability of the black soils to irrigation by Tungabhadra waters. Side by side with the many agronomic experiments conducted at the Research Station, varietal studies were also made for the improvement of crops like cotton, jowar and wheat. Breeding of important crops like cotton and jowar have been started to evolve suitable strains for the project area.

Agricultural Research Station, Hagari.—The Agricultural Research Station, Hagari, studied the water requirements of crops grown on the black soils of Tungabhadra Project area. Side by side with experiments carried out Cambodia cotton, sorghum, ragi, onion, tomatoes and vegetables were also grown in the garden lands for multiplication of seeds and distribution to ryots. The rate of erosion of soil and the effect of different crops on checking erosion formed a part of study.

Agricultural Research Station, Pillicode (Nileshwar-I).—The Research Station, Pillicode, had been started in the year 1916, to find out in detail the managerial, cultural, and other aspects of coconut cultivation in the particular type of soil around the Research Station—laterite gravel. From the trials made at this station it was observed that there was very good growth in the young palm after the application of cattle manure. The study of world varieties was one of the most important items of work done at this station. The object of study was to fix up economically important varieties which could be utilised for seed multiplication and also for breeding work.

Agricultural Research Station, Nileshwar-III.—The Nileshwar Research Station also carried on investigation

into the practicability of growing the coconut in the littoral sandy area of the West Coast. The barren sandy soil was found ideal for raising coconut seedlings and therefore production of seedlings for distribution was undertaken on an extensive scale. The very important contribution to agriculture by this research station was the nut developed from a female flower artificially pollinated by using male flower of another tree.

Agricultural Research Station, Nandyal.—From the year 1906, the Research Station, Nandyal, carried on research for the improvement of jowar and cotton, the major crops of the Kurnool District. Experiments conducted at this station disclosed that the raising of mixed crops was more paying, specially in dry lands under rainfed conditions.

Agricultural Research Station, Maruteru.—The Research Station was opened in July 1925 to serve the needs of Godavari and Krishna Deltas. Research was mostly concentrated on paddy, the all important crop of the deltas. The paddy strains released are very popular with the farmers.

Agricultural Research Station, Samalkot.—The Samalkot Agricultural Research Station were originally started with a view to discover healthy and red-rot resistant varieties of canes and distribute them among the ryots of the Godavari District. It was discovered later that the red-rot disease was caused by a fungus. The Research Station also carried on experiments in paddy, sugarcane and plantains.

Agricultural Research Station, Anakapalli.—The major crops that were dealt with at this Research Station were sugarcane, millets and paddy; systematic work on fruits was also started in August 1933. Of the fruit types under trial, mangoes, guavas, sapota, cashew, jack, pineapple, papaya, rose apples, were found to do well, while the performance of citrus, grapes, figs, and pomegranates was not quite satisfactory under Anakapalli conditions where the soil was comparatively rich and the land was subject to the evil effects of the water table rising very high during rainy months.

Agricultural Research Station, Tindivanam.—The Agricultural Research Station, Tindivanam, carried on work on the three principal oilseeds crops of the State, viz., groundnut, gingelly and castor. As a result of intensive crop improvement work, number of improved strains in groundnut and other oilseeds have been evolved; spacing, harvesting, defoliation studies were made at the station.

Agricultural Research Station, Pattukkottai.—The Agricultural Research Station, carried on experiments on paddy and mixed crops.

Sugarcane Research Station, Gudiyattam.—The problems of sugarcane cultivation, peculiar to the central districts which grow sugarcane in large tracts were studied. Since the inception of this station, there has been a phenomenal improvement in the general level of cultivation and yield in the surrounding districts. Except sugarcane on which intensive research was being carried on, other crops like paddy, ragi, cholam, groundnut and gingelly were grown on a large-scale in rotation with sugarcane. Experiments on improved cultural practices were conducted. Besides these, vegetables and fruits were also grown in the station to study their suitability for the tract.

Food Offences and Punishments Awarded

Seventy-two persons were sent to jail and 305 persons were fined in the Madras State during the first fortnight of January 1951 in respect of food offences. In all 416 prosecutions were launched in courts and 37 cases ended in acquittal; two were withdrawn during the period under review. Of those who were heavily fined may be cited Annamalai Mudaliar of South Arcot District who for having transported paddy illicitly was fined Rs. 250, Sri Vadasachala Chetty of Chingleput was sentenced to pay a fine of Rs. 500 for the same offence. For unauthorised possession and sale of paddy Sri K. Venkanna was awarded rigorous imprisonment for six months.

Other departmental punishments such as warnings, fines, forfeiture and enhancement of security deposits, cancellation and suspension of wholesale or retail licences, were also awarded to persons dealing in foodgrains, one each in Guntur, Krishna, Nilgiris, Nellore and Tanjore Districts, two each in South Arcot, East Godavari and Tirunelveli Districts, three in West Godavari District, four in Salem District, five each in Coimbatore and Malabar Districts, seven in South Kanara District, eight in Madurai District, thirteen in Ramanathapuram District, 15 in North Arcot District, 23 in Madras City, 73 in Guntur District and nil in other districts.

Eight hundred and eighty cases of prosecution for food offences were disposed of in the Madras State during the second fortnight of January 1951. Seventy-five cases resulted in acquittal, three cases were withdrawn and the rest were sentenced to pay fines ranging from Re. 1 to Rs. 1,000 and to imprisonments ranging from a month to six months. K. V. Krishnamurthy, Narasayapalem, was one of those who were heavily punished during the fortnight. He was fined Rs. 1,000 in default to four months' simple imprisonment for possession of excess double polished rice. For refusing to sell surplus paddy to the Government authorised agent, V. C. Velayudham, Kozhukkethar Amsam, Malabar District, was fined Rs. 600. For hulling paddy without licence, Reddiranthu Nageswara Rao, Chakrayapalem, B. Veeraraghavaiah, V. Appadurai, Shaik Dastagir, all of Guntur District, were each sentenced to pay a fine of Rs. 200. For selling 36 bags of rice in the black-market and for failure to enter sale transactions in mill accounts, Nutalapati Venkateswara Rao, Perakalapudi, Guntur District, was fined Rs. 200. T. S. Radhakrishna Chettiyar, R. Govindarajan and R. Jayagopalan, all of Tanjore District, were each sentenced to pay a fine of Rs. 200 for conducting retail business in rice at a place not included in the licence.

Muthu Reddi of Salem District was fined Rs. 200 for unauthorised purchase of foodgrains. Kadappa Goundan, Appan Udayar, Kuppuswamy Goundan, Palanivel Goundan, Varadhappa Goundan, Athiruppan and Periana Goundan, all of Tiruchirappalli District, were convicted and sentenced to pay a fine of Rs. 200 each for illicit import of foodgrains. Guntala Venkateswarlu and Jonnalagadda Koteswara Rao of Guntur, Guntur District, were convicted and sentenced to pay a fine of Rs. 200 each for hulling paddy without making any entries in the daily register.

Meda Ramulu of Guntur District was fined Rs. 250 for hulling paddy without permit. Besides the punishments awarded in court, other punishments in 162 cases, such as warnings, fines, forfeiture and enhancement of security deposit, cancellation of retail and wholesale licences were also awarded to persons who were dealing in foodgrains.

Some Subsidiary Foods

At present the tuber tapioca is grown on an extensive scale in the United States of Travancore and Cochin and parts of Malabar. Tapioca has great scope and can be raised successfully in poor soils under rainfed conditions. But with adequate irrigation and good soil fertility, higher yields can be obtained. The average yields per acre ranges between four to six tons. With proper manuring and better irrigation, the yield could be increased to ten tons per acre. Assuming 33 per cent of the tapioca is edible, it is possible to get an yield of two tons per acre from tapioca, which is much higher than that of any foodgrain.

The planting of crop is done by means of cutting and ordinarily it is possible to obtain ten cuttings per plant. The normal planting season is between August-September. As in the case of sweet potatoes, it is possible to mix a

small percentage of flour made from dried tapioca chips to stretch our wheat or rice supplies.

Bananas and papayas are suitably substituted which can be cultivated on a large scale to supplement the food and overcome the shortage of cereals. In view of their quick growth and their high nutritive value, these two fruits may be encouraged. Both are easy to propagate and produce fruits in about a year's time. On an average the papaya tree yields 27 fruits per year, weighing a little over 2 lb. each; in well-kept plantations, the banana has given an annual yield of 60,000 lb. per acre.

The nutritive standard can be calculated with some precision, but appetite remains incalculable, a matter of individual habit.

Therefore, it will be a commendable act for each one of us to change our food habits rightly and take substitutes for cereals to some extent.

Athur Farm is run on Modern Lines

Athur farm is situated about half a mile to the north-east of Reddipalayam station of the South Indian Railway (Chingleput-Arkonam branch). It is a private farm consisting of about 130 acres of wet and 70 acres of dry lands, all irrigated mainly by wells installed by motor and oil-engine pumps. The farm is run by educated men who, though accustomed to town life, have found so much interest in farming that they stay on the land and directly attend to agricultural operations with the zeal and zest of a traditional farmer.

There is work in the farm throughout the year. About 100 men and women are employed in the farm permanently right through the year. The servants are all paid in kind (paddy). The farm, however, does not stock any large amount of grain for the purpose. By following a system of cultivation it is able to meet the demands of the servants every day in kind. By adopting the various strains advocated and recommended by the Agricultural Department they have evolved a monthly calendar of transplantation with the result that a paddy crop is harvested every month on sufficient acreage to meet the daily needs of the servants.

Efficiency has been built up in the farm by diverse methods. Mechanical aids are provided wherever possible to lessen the manual labour and to increase the output. Monotony in farm life is broken up by group activities like listening to the community radio, spinning and discussion as to the best farming methods, etc. Further, the labourers and the farmers round about are educated by classes held every evening where they are taught good, efficient and regular farming methods. And those classes are very popular. Contacts with the several work centres are established through a private telephone system which covers the entire farm area. The chief farmer has got mapped out before him the entire activity of the farm and can assess from his place the work done at any particular centre at any time of the day.

Targets of production are fixed and adhered to, based on an average yield of 2,500 lb. per acre, though greater yields reaching up to 4,500 lb. have been obtained with some of the strains like ADT 3 and SLO 16.

The farm is mainly a paddy farm and as many as 18 different varieties of paddy are grown, and definite details as to their age, season, yield and susceptibility are gathered and recorded regularly with reference to each variety. Other crops such as plantains, vegetables, oilseeds, pulses, millets, cotton, chillies, etc., are also grown on a similar scale in proper seasons to meet the demand of the owners as well as labourers. It is gratifying to note that the farm attracts the attention of many a villager and not a day passes without one visitor or other stepping in for guidance and advice. After the advent of this farm in the area, the neighbouring ryots have copied the methods and caught the enthusiasm and have set up their own farmsteads and are harvesting plenty on lands which formerly were mere waste lands.

An instance in point is the great influence of this farm on the use of pumpsets in area round about. The number of pumpsets in these areas has gone up from about a half-a-dozen to about 100 since the establishment of this farm.

Deaths of two Weavers in Kalahasti Taluk Were due Entirely to Natural Causes

The attention of the Government has been drawn to the report which appeared in the *Indian Express*, dated 27th February 1951, alleging deaths due to starvation of two weavers in Kalahasti Taluk by name Sadhu Munuswami of Salipeta village and Giriki Munuswami of Kothapeta village on 20th February. Enquiries made in respect of the allegations show that Giriki Pedda Munuswami (published as Giriki Munuswami), aged 70, was suffering from severe cough for seven days prior to his death and was not taking any medical treatment. He was living only on milk and kanji due to his bad physical condition and he passed away on February 21st 1951, at 7.30 a.m. Though the deceased's family is poor, it is reported that the members of the family were not in such a state as to starve.

The other weaver reported to have died on account of starvation was 30 years old and not 25 as reported. The deceased was suffering from severe hernia. He developed severe pain and fever three days prior to his death and died on account of it on February 15th, 1951. It is also understood that he also did not take any treatment from any of the doctors at Kalahasti. His survivors testify to his death being due to natural causes. It will thus be seen that the two deaths were due entirely to natural causes and not on account of starvation.

Fish Poisoning Caused Death of Family

The Government's attention has been drawn to a report under the caption "Famine conditions in Ramnad" appearing in the *Mail* of February 3rd, 1951. It is alleged that the abolition of rural rationing in Ramanathapuram has caused acute distress among villagers and consequently driven the poor to eat strange things. The alleged death of a family at Athankarai on January 29th as a result of eating strange things is cited to support this contention.

The Government desire to state that an enquiry was made into the allegations contained in the report. It is gathered that the six persons referred to in the report belonged to a Muslim family whose main occupation was fishing. On the day of the incident, the members of the family collected some livers, lungs and eggs of some fish mistaking them for pure fish and cooked them with drumstick leaves. The poison contained in the collections ended their lives. It would therefore be wrong to contend that they were driven to eating strange things on account of high prices of foodgrains consequent on the abolition of rural rationing. Enquiry has proved that the death of the members of the family is due to the poisoned livers, lungs and eggs of the particular variety of fish called "Nachupethai" which they had cooked earlier.

Betting on Horse Races

The Madras City Police and Gaming (Amendment) Act, 1949 (Madras Act VII of 1949), provides for prohibition of betting on horse races on and from a date to be notified by the Government. It was announced in February 1950 that the Government had decided to give effect to these provisions from 1st April 1951. The Government have since reconsidered the matter and have decided to enforce the provisions from 1st April 1953 instead of 1st April 1951.

Projects, Policy and Programmes

By SRI M. BHAKTAVATSALAM, Minister for Public Works.

It is now nearly five years since the popular Government assumed power in May 1946 and this is a long enough period for assessing the work done by any Government in a field such as irrigation. When we assumed power in May 1946, what exactly was our legacy? A long war lasting six years had only just ended. All effort during these six years was sought to be diverted to the war. The Irrigation Department confined itself to the maintenance of existing works and a small Grow More Food programme costing a little over Rs. 50 lakhs during the whole period. A few minor works may have been executed here and there, but no more. We had, therefore a considerable leeway to make up. We had to satisfy a demand held back for a period of six years. This demand assumed even greater proportions than it would have done in the ordinary course, because a popular Ministry had come to power after a long period of frustration. From all parts of the State came demands for schemes which had been cherished for years and years by the people of those parts.

To put it very briefly, we have embarked on an irrigation programme which, on the capital side alone, will cost us about Rs. 40 crores in the period of seven years from 1946-47 to 1952-53. By the end of this year we would have already spent Rs. 20 crores in this programme, and we hope to find the remaining Rs. 20 crores in the next two years at the rate of about Rs. 10 crores each year. A better idea of the present Government's initiative and response to the public demand can be had with the comparative figures for the previous five-years periods. They are:—

1936-37	to	1940-41	..	Rs. 3.36 crores.
1941-42	to	1945-46	..	Rs. 4.88 crores.
1946-47	to	1950-51	..	Rs. 28.62 crores.

Productivity Test Set Aside

One factor which persistently stayed the hands of previous Governments whenever they wanted to sanction an irrigation scheme was the productivity test. A project could be taken up only if it was productive, and it was productive only if the percentage of direct return from it by way of additional land revenue and water-rate was equal to the borrowing rate of the Government in that year. We submitted this policy to a careful examination. We found that all the more productive and cheaper schemes had already been executed and that only the more expensive ones remained. If therefore we continued to apply this test, very few schemes could be taken up for sanction. We felt that there was little justification for not taking into account the indirect benefits from the scheme which would be reflected by way of increases in various other taxes.

From the speech of Sri M. Bhaktavatsalam, Minister for Public Works, in the Madras Legislative Assembly, made when moving that the Government be granted a sum not exceeding Rs. 2,22,20,900 under Demand VIII—Irrigation.

Even if all this did not make a project productive or attractive, there was a case for subsidising irrigation so as to make full use of the waters that would otherwise be going to waste. We thus decided that the productivity test should no longer be the paramount consideration. We also decided that tracts which had been neglected in the past and tracts which were susceptible to famine should receive the first consideration.

Choice of Projects

Then again there was the question as to what sort of projects we should take up. To have taken up too many large projects would have meant locking up our money for a long time without any return, which, at a time of such acute food shortage as this, would have meant disappointment and frustration. It would also have meant investing our money in a few areas, at a time when there was so much demand from every part of the State. To have spent our money exclusively on a large number of small schemes all over the State would have meant ignoring the fact that large volumes of much needed water were going to waste into the sea and the only way of harnessing them would be by taking up large projects on the main rivers. We had therefore to avoid these two extremes and to devote attention to both the short-term and the long-term aspects of the problem. In addition to this we have also evolved a mid-term programme. All these three kinds of irrigation schemes had to be taken up together with a view to secure not only self-sufficiency in food but also necessary agricultural development.

Short-term Programme

In the short-term programme we took up for consideration about 300 small irrigation schemes, at an aggregate cost of about Rs. 6 to Rs. 7 crores, to be executed in a period of five years from 1947-48. Last year 184 such schemes had been sanctioned at a cost of Rs. 2½ crores for the benefit of 1½ lakhs of acres. Since then we have sanctioned another 112 schemes at a cost of about Rs. 144 lakhs for the benefit of about one lakh of acres.

The following statement will give an indication of how the 296 schemes so far sanctioned have been distributed in the various parts of the State:—

	Number of schemes.	Cost in lakhs of rupees.
Circars	132	159
Rayalaseema ..	31	60
Tamilnad	91	149
Malabar	32	13
South Kanara ..	10	12

In 1950-51 we would have spent Rs. 35 lakhs in the Circars, Rs. 9 lakhs in Rayalaseema, Rs. 21 lakhs in Tamilnad, Rs. 3.7 lakhs in Malabar and Rs. 2.6 lakhs in South Kanara on these schemes and in 1951-52 we propose to spend about Rs. 36 lakhs in the Circars, Rs. 20 lakhs in Rayalaseema, Rs. 22 lakhs in Tamilnad, Rs. 3 lakhs in Malabar and Rs. 2.8 lakhs in South Kanara. Adequate

provision has been made in the Budget for completing these works within the target date, i.e., by the end of 1951-52.

Whatever schemes are sanctioned in the course of the year can be taken up under the lump sum provision of Rs. 70 lakhs made for them in the Budget. A list of the possible schemes has been printed at pages 492-497 of the detailed Budget Estimate, but this list is by no means exhaustive and can be added to or altered as new schemes come up for consideration. Though expenditure on these schemes is unremunerative, there is every likelihood of our continuing it even after the five-year period, because it is only a small portion of our irrigation outlay. For the present we are getting a subsidy from the Government of India on all these works.

Tank Improvement Scheme

Another aspect of our short-term programme is the Tank Improvement Scheme which was started in the middle of 1949. This aims at restoring the lost capacity of the thousands of irrigation tanks which lie scattered all over the country. The Minor Irrigation works and all works in zamindari and inamdari areas are attended to by a special staff of one Superintending Engineer and seven Executive Engineers who operate in all but five districts of the State, the work in those five districts being attended to by the regular staff. On the Public Works Department side, special staff are operating in three districts, the remaining districts being looked after by the regular staff.

So far 1,528 schemes have been sanctioned in this programme at a cost of Rs. 139 lakhs. They are distributed in the various parts of the State as follows :—

	Number of schemes.	Cost in lakhs of rupees.
Circars	436	56
Rayalaseema	204	17
Tamilnad	763	63
West Coast	125	3

In 1950-51 we would have spent a sum of Rs. 81 lakhs on these works and next year we plan to spend Rs. 150 lakhs under the same programme. These figures exclude a sum of Rs. 16 lakhs spent by the Public Works Department under the same scheme in 1950-51 and a proposed expenditure of Rs. 30 lakhs in the next year.

The figures given above ought to dispel the feeling that seems to exist in some quarters that our short-term programme which really is also our Grow More Food programme, has not achieved anything substantial. If the results are not as good some would like them to be, it is not because of lack of effort on our part, but because of the successive failures of the monsoon for four years together. The way we should look at that is, but for this programme, the food position would have been much worse.

Mid-term Programme

This short-term programme or programme of small works can hardly be a satisfactory remedy for our deficiency in food. It is only a temporary expedient to meet local demand and an immediate need. We have to harness much larger volumes of water, if we desire to have any

substantial relief in this matter. This is where our mid-term programme comes in. It consists of about 25 medium-sized projects including important drainage schemes for our deltas. We have already sanctioned nine of these at a cost of Rs. 13.94 crores and works are well in progress on them.

The biggest of them is the Malampuzha Project for Malabar sanctioned in 1949 at a cost of Rs. 380 lakhs for the benefit of 40,000 acres in Palghat Taluk. Work is going ahead on the project. An expenditure of Rs. 76.36 lakhs has so far been incurred of which Rs. 57.97 lakhs was spent this year. A sum of Rs. 1 crore is expected to be spent on it in 1951-52 and we hope to complete it by 1953. Next in importance is the Mettur Canals Project sanctioned in 1949 at an estimated cost of Rs. 245 lakhs for the benefit of 45,000 acres in Salem and Coimbatore Districts. An expenditure of Rs. 24.46 lakhs has been incurred on it so far and Rs. 50.8 lakhs have been provided for next year. The Rallapad Reservoir Project for Nellore District sanctioned in 1948 at a cost of Rs. 53 lakhs had been held up for certain technical reasons. While only an expenditure of Rs. 9.4 lakhs has been incurred so far, a provision of Rs. 10.25 lakhs has been made in the Budget for next year. Two major drainage schemes are in progress, one in Krishna Delta at a cost of Rs. 116 lakhs and the other in the Cauvery Delta at a cost of Rs. 35 lakhs. We have so far spent Rs. 56.7 lakhs and Rs. 32.5 lakhs on these two schemes and provided Rs. 21.85 lakhs and Rs. 1.3 lakhs for them in next year's Budget.

The Upper Pennar Project costing Rs. 89 lakhs is for the benefit of 8,000 acres in Anantapur District. It had been held up for want of an agreement with Mysore, in whose territory a small extent will be submerged by the reservoir. As we have now been able to arrive at a satisfactory arrangement with Mysore, work on this project will go ahead and a provision of Rs. 8 lakhs has been made in the Budget for it. The Bhairavanitippa Project is for the benefit of 8,000 acres in Bellary and Anantapur Districts and is expected to cost Rs. 93.1 lakhs. We have completed the investigation of the project, and as soon as the concurrence of Mysore regarding submersion of some areas is got, work on it will be started. During the last year we sanctioned the Manimuthar Project in Tirunelveli District at a cost of Rs. 398 lakhs for the benefit of 80,000 acres of Tambaraparni irrigation and about 20,000 acres of tank-fed lands.

Ryots Can Help to Finance Schemes

We have already received detailed estimates or are expecting them in the near future from the Chief Engineer in respect of the Amaravathi for Coimbatore, the Vaigai for Madurai, the Sathanur for North and South Arcots, the Krishnagiri for Salem and the Kanhirapuzha for Malabar. In connection with certain other proposals of ours, we have given an undertaking to the Government of India that we would obtain their concurrence to any scheme involving a capital expenditure of one crore or more. As all these schemes cost more than one crore each, the approval of the Government of India will have to be obtained before they can be sanctioned. While every effort will be made to obtain this sanction, it would be of great assistance to the Government if the ryots concerned could arrange to contribute a portion of the cost of the project, which apart from being of help to this Government in its ways and means position will help this

Government in securing sanction to these projects from the Government of India.

In the case of the Amara vathi project, which is expected to bring under irrigation a new area of 15,000 acres in Coimbatore District and is estimated to cost Rs. 272 lakhs, we have accepted the offer of the ryots to contribute at the rate of Rs. 100 per acre towards the cost of the project. So far a sum of Rs. 5 lakhs has been contributed and I have no doubt that they will come forward with the rest of the amount in the near future. I for my part assure them, that as soon as this contribution is made, the project will be taken up for sanction. I now make an appeal to the ryots concerned with the other projects to come forward with their contributions, and then we shall see that they get their projects.

Apart from the schemes costing more than Rs. 1 crore referred to above, there are other schemes for which detailed proposals have been received from the Chief Engineer, or are expected shortly by the Government. They cost less than a crore and do not require the prior approval of the Government of India. They are the Coringa Island and Yeluru Schemes for East Godavari District, the Erracalva for West Godavari District, the Budameru and Upputuru for the Krishna and West Godavari Districts, the Peddanandipad for Guntur District, the Atleru Scheme for Nellore District, the Walayar and Mangalam Schemes for Malabar District, the Araniar Scheme for Chingleput District and the Manimuktanadi Scheme for the South Arcot District. The question of availability of water for the Kattalai and Pullambadi Schemes for Tiruchirappalli District is under examination by Government. Government hope to take final decisions on these schemes at an early date. We are also expecting to receive in the near future the estimates for the Gandikotta Project which is expected to cost about Rs. 9 crores and will benefit about 150,000 acres in Cuddapah District.

Long-term Programme

Now I come to the last and final phase, viz., the long-term programme. This consists of the multi-purpose projects for the development of the Godavari, Krishna and Cauvery river valleys, viz., the Lower Bhavani, the Tungabhadra Project, the Krishna-Pennar Project and the Ramapadasagar. The first two are already under execution and the latter two are under consideration.

The Lower Bhavani Project was sanctioned at the end of 1947. It is estimated to cost Rs. 821 lakhs, and will benefit about 207,000 acres in Gobichettipalayam, Bhavani, Erode and Dharapuram Taluks of Coimbatore District. So far we have incurred an expenditure of Rs. 419.1 lakhs on it, the expenditure this year being Rs. 257 lakhs. A provision of Rs. 249.2 lakhs has been made in the Budget for next year. Work on the project is according to programme and it is expected to finish in 1952-53, but the first benefits of the project will be available at the end of this year in the form of a second-crop irrigation of about 10,000 acres under the Bhavani and other channels.

Next comes the Tungabhadra Project. This is a joint endeavour with Hyderabad. Out of a total estimated expenditure of Rs. 17 crores for our portion of the dam, we have so far incurred an expenditure of Rs. 512 lakhs, the amount spent this year being Rs. 270 lakhs. A provision of Rs. 363.5 lakhs has been made in this year's Budget for this scheme. Work is according to programme



AIR FORCE OCCASION : Eighteenth anniversary of the Indian Air Force was celebrated with great enthusiasm at the IAF Station, Racecourse Camp, in New Delhi, on April 1. The celebrations included the inspection of an IAF Guard of Honour by the President, a thrilling one-hour air display by frontline aircraft of the IAF Operational Command, and an airmen's combined lunch.

Photo shows a Dakota of the I.A.F. giving a demonstration of parachute dropping.

on both sides and we hope to finish the scheme by 1952-53. Government are assuming full responsibility for the rehabilitation of the 25,000 people who will be displaced by the project and the cost of rehabilitation will be debited to the project. The displaced persons will be given land free for resuming their cultivation, and free house sites for putting up new houses. Two colonies are proposed to be developed, one at Bhairadevanahalli and the other at Tamrahalli. Engineers of international repute visited this dam site at the end of January last, and left very encouraging remarks about our achievements there.

Now I come to the remaining two schemes which have so far only been investigated and the execution of which presents various difficulties which it will not be possible for this Government to tackle without outside aid. The Ramapadasagar Project is expected to cost Rs. 106.50 crores even if the estimate is revised as is being done, and will benefit 2.75 million acres and produce 227,000 K.W. of Power. The question of provision of the design of the reservoir has been taken up so as to reduce the estimated cost. Similarly, the Krishna-Pennar Project is another multi-purpose project for the ultimate irrigation of 4.2 million acres and the development of 250,000 K.W. of Power, for which also we shall require considerable assistance from the Government of India. We shall do all in our power to make the Government of India realise the urgent need for them, firstly for wiping out the food deficit in this State and secondly as the cheapest method of raising the standard of living in the State.

Preliminary Investigation

I should now like to refer to a matter which will bear repetition because it is only if that point is fully understood by the people at large they will appreciate why it is necessary to spend some time before we sanction a project or take it up. Before an irrigation project can be

Schemes Sanctioned

The Government in the Food and Agriculture (Food Production) Department, have sanctioned the following four Grow More Food Irrigation Schemes:

(1) *Guntur District*.—An estimate amounting to Rs. 5,44,400 for works or Rs. 7,14,585 inclusive of direct and indirect charges, for the formation of a tank across the Nallavagu in Konednad village in Narasaraopet Taluk. An additional extent of 500 acres, including 200 acres of poramboke land, will be brought under cultivation with a possible extension of irrigation at a later date, yielding a total additional production of 250 tons of rice.

(2) *Nellore District*.—An estimate for Rs. 74,000 for works or Rs. 96,280 inclusive of direct and indirect charges, for the construction of an anicut across the Chippaleru in Tallapalem village in Kavali Taluk with a view to improving supplies to Tallapalem and Musunur tanks. An additional extent of 120 acres under both the tanks besides the existing ayacut of 3,300 acres will be benefited by the scheme with an estimated additional yield of 225 tons of rice per annum.

(3) *Krishna District*.—An estimate for Rs. 3,00,000 for works or Rs. 3,93,472 inclusive of direct and indirect charges for the provision of irrigation facilities to a dry block of 3,081 acres in Kodali, Tadapalli, Kothapalli, Ghantasala and Deverakota villages in Divi Taluk. The additional yield anticipated as a result of the execution of the scheme is 1,540 tons.

(4) *Coimbatore District*.—An estimate for Rs. 50,000 for works or Rs. 65,054 inclusive of direct and indirect charges, for the work of extension of irrigation under the Punjathalayar Branch Channel of the Nanjathalayar channel in Dharapuram Taluk. The scheme will benefit net additional extent of 125 acres in the first instance with a possible extension to 200 acres at a later date besides the existing ayacut. The additional yield of foodgrains anticipated as a result of the scheme is estimate at 134 tons.

Admissions to Veterinary College

The Government have issued orders to the effect that 80 students inclusive of war service candidates and outsiders may be admitted to the B. V. Sc. Degree course and 50 students to the Veterinary and Livestock Inspector course, during 1951-52 at the Madras Veterinary College.

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The Value of Documents in Private Hands

By REV. FATHER T. N. SIQUIERA, S.J., Professor of English, St. Joseph's College, Tiruchirappalli

One of the first tasks of scholars in Independent India should be to take stock of her wealth. On the side of mineral and floral wealth the Central Government has undertaken a survey whose results will appear in a series of books (the first volumes have already appeared) called *The Wealth of India*. But trees and stones are not the only form of wealth. There is human wealth in the rich past of our country which is probably more immediately useful towards an understanding of its problems with a view to their solution. The history and tradition of a people, written or engraved or painted or silently lived, is no less necessary or precious than their material resources to make them advance.

So far not much attention was paid to this aspect of our national development. The British Government (and, before it, the French, the Dutch, the Portuguese) kept good archives both in India and in their Home offices; we owe to these sources most of the scanty knowledge we have of our recent past. For the more distant past, we have to rely almost entirely on scattered firmans and Sanads and other official documents which happen to have survived the various vicissitudes of Delhi and Calcutta, and on the solidly rock-cut inscriptions and coins and pillars of Hindu and Buddhist times.

Public and Private Records

There are therefore many lacunae in our knowledge of our history which must be filled up before an authentic and reliable History of India can be undertaken. The Government of India has appointed an Historical Records Commission for the whole of India whose task is to study and collate mostly Government documents throughout the country. The Provincial Governments, too, have appointed regional survey committees to do similar work within a smaller area. The Madras Committee, recently constituted, has taken up the immense programme of finding out and studying not only the records in Government hands, like the previous collection in the Madras Records Office, and private collections which are now semi-public, like the valuable one of Colonel Colin Mackenzie, but also (and chiefly) those which are still in private libraries or archives, perhaps even unknown to their possessors or at any rate unappreciated by them at their true worth.

It is the value of such records that the public have not yet begun to realise. Temples and mosques and churches, matts and devasthanams, libraries and store-rooms in private houses, clubs and associations—all these are the silent and perhaps unwitting depositories of rich and valuable information on the visits of foreigners, the grants of lands and jewels and money for pious and charitable purposes, the contracts entered into by individuals and societies, the feasts and funerals celebrated, the taxes paid and revenues collected. Such material, detailed and accurate, is the very warp and woof of history and the only way of understanding the biography of innumerable individuals which, according to Carlyle, is the history of a country.

In the Visitors' Books of temples, matts, orphanages, and schools there are important dates and events which will serve to fill in the gaps of many a history. If these books are made accessible to historians, many hitherto unknown facts may be brought to light. A single stray remark, a mere signature, may be of great value to a trained mind on the scent of an important clue.

Even the ordinary day-to-day account-books of institutions may throw light on the prices then prevailing, on the wages and incomes of various classes of the population, on the relations between employers and employed. And in many private families and institutions there are old coins, images, pictures, seals which may tell a whole story to one who can read it but mean nothing to those who possess them.

In the interest of the common good of India, therefore, private owners should offer whatever may be considered a record of the past as treasures to be studied or copied by experts who know their value for India's progress as a free country. This is done willingly in all the countries of Europe and in America. In many of these countries the laws empower the State to take over and preserve whatever it considers should in the national interest be more universally looked after. In India, we do not mean to do more than examine and perhaps copy or reproduce what is of real value to the country.

There may, among these records, be some that are private and ought not to be made public, either because they are not fully reliable or because to publish them might damage the reputation of an individual group. Such material should obviously be used with the caution it deserves, and the unwillingness of its possessors to publish it should be respected. But there may be in it a portion which is not confidential and whose study and use would be of great value.

Vanamahotsava Drama Awards

The Standing Committee on Tree-Planting has adjudged the following drama scripts as the best of those that were entered for the competition in Drama scripts about Tree-planting:—

Tamil.—*Vedanai Kural* by Sri B. Solaiyappa, Special Agricultural Demonstrator.

Telugu.—*Mali* by Sri G. Satyanarayana, Journal Assistant of the Office of the Director of Agriculture.

Kannada.—*Vana Mahotsava Nataka* by Sri K. S. Bhat of South Kanara.

A sum of Rs. 100 will be awarded as prize for each of these three scripts.

As only one Malayalam script was received, it has been decided to invite entries afresh.

Administration of Districts

By SRI H. SITARAMA REDDI, Minister for Land Revenue

The Demand, "District Administration and Miscellaneous", covers a vast variety of topics and in fact contains a cross-section of Government's progressive activities. On the static side it is concerned with the day-to-day district administration namely, the maintenance of the vast army of officials who man the district, both the gazetted and the non-gazetted branches. To this vast army of officials must be added the still vaster number of village officers, the headmen, the karnams and the village menials on whom the entire system of land revenue collection and administration in this State rests. In addition to this static side of the demand are various aspects of nation-building activities, such as the schemes for colonisation of military personnel and for landless poor, the expenditure from funds for village reconstruction and for supervision of food production schemes, the responsibility for the development of the so-called Backward tracts, namely, the Agency areas in the East and West Godavari Districts and Visakhapatnam, as also the administration of the Amindivi and Laccadive Islands.

Under the head 'Miscellaneous' the demand is also concerned with State Broadcasting, with provision of the Accommodation Controller and his establishment for controlling rents and for regulating and leasing of houses, and the provision of a Village Responsibility Scheme for guarding Railways in those areas where Railways are vulnerable to attack.

Great Reform of Land Revenue

Whether on the static or on the progressive side, this Government can look back with satisfaction on a record of achievement not merely in the last year but in the last four or five years which any State may well be proud to have sponsored. In addition to the main line of activities described above, this State has gone all out for a great reform of land revenue by the replacement of the obsolete Zamindari system by a new alignment with the Ryotwari system. This great reform which was effected by legislation in 1947 and 1948 and completed by executive action in 1949 and 1950 and the full fruits of which will be realised only in the next two decades, has been the signal landmark of achievement in this direction.

The first Act of Rent Reduction was intended to give immediate relief and provide for the reduction of the rents paid by tenants in the Zamindari Estates to the level of the rates obtaining in the adjacent ryotwari villages. A Special Officer was appointed, whose duty it was to make comparison of the 22,000 odd villages affected by the Act with similar villages in the ryotwari tract adjacent and to work out the correct ratio of reduction that was applicable to the Zamindari rents. The actual reduction was made effective by a further provision that once the rents had been notified in the official Gazettes, it was only the Government and not the landholder who should be

able to collect the reduced rents. Retaining a small percentage for the cost of collection, the Government paid the balance after deducting any dues owing to them, such as peshkash, to the landholder. This great reform gave immediate relief to one-third of the ryots in the State and the extent of the relief was a 45.1 per cent reduction of the total rental paid by them, amounting to about Rs. 1.62 crores.

Zamindari Abolition

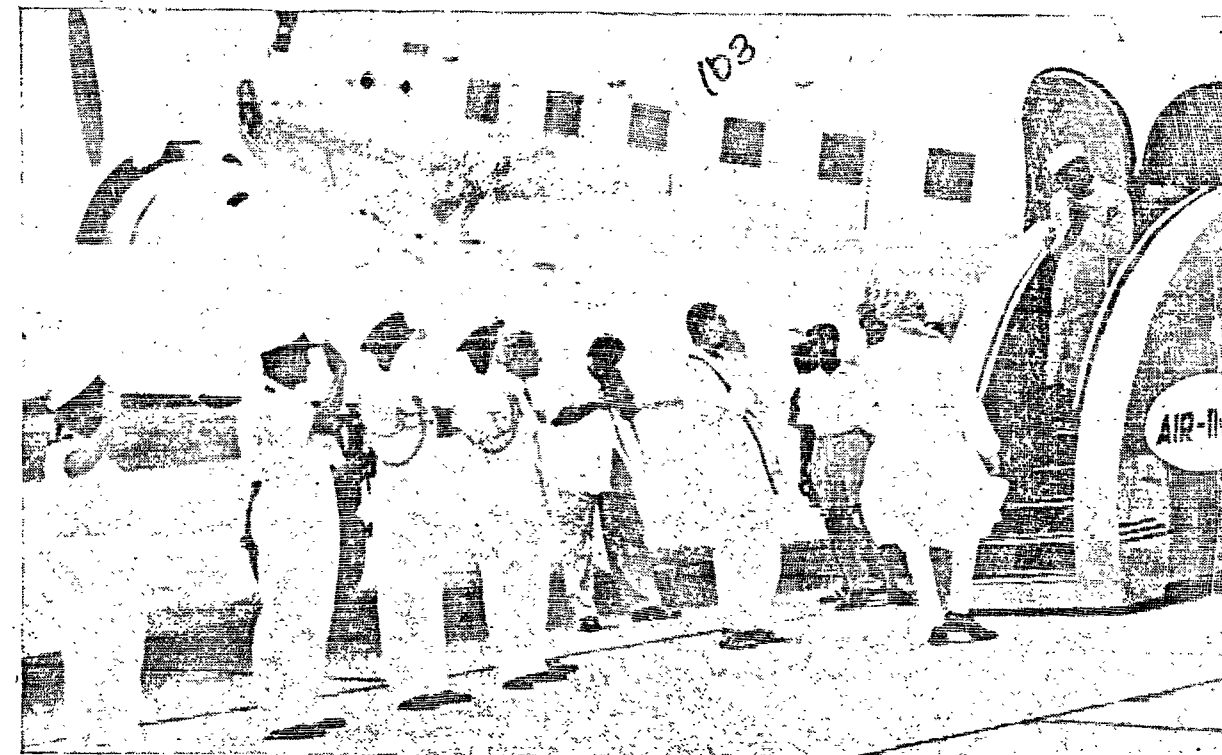
The measure was naturally not very popular with the landlords who have taken out writs in the High Court questioning the validity of the Act and of the reduction in their income effected thereunder. This was followed up by the Zamindari Abolition Act which provided for Government taking over the Estates and for an elaborate machinery to assess the compensation payable to the Zamindar for the loss of his rights. This Act also provided for the establishment of a Director of Settlements and his staff, who would be concerned with the survey and settlement on ryotwari lines of the land comprised in the Estates taken over. This process is expected to take anything from six to ten years, but it will mean that at the end of the process the Zamindari tenant will have not only an accurate record of his patta holding but fixity of tenure under the ryotwari system. The greatness of this boon to a tenant who had been paying exorbitant rents to a capricious and exacting landholder cannot be over-estimated.

Madras State has the unique distinction of being the first State to complete this reform promised by the party that now is in power throughout India. The process of taking over these estates in three batches for convenience has just been completed in January 1951. Only the Inam Estates remain and are proposed to be taken over in March-April of this year leaving for the present the so-called 1936 whole-inam villages to the last. (These are at present excluded from the scope of the Abolition Act.) Such of the staff already working in the Estates, as are suitable, have been absorbed in the staff administering these areas under Government and their pay and pensionary privileges are being refixed. In this connection it may also be mentioned that the absorption of the displaced staff consequent on the merger of Banganapalle, Pudukkottai and Sandur States in the State of Madras has been attended to and those unsuitable are either retired, or discharged from service on pension or compensation for loss of career. Though the assurance given by this Government to the Government of India related to the absorption of permanent employees only, cases of temporary servants with long service were also considered sympathetically.

Separation of the Judiciary

I may now deal with another topic which this Government views with some satisfaction: that is the scheme for the Separation of the Judiciary from the Executive. This scheme was introduced in Chingleput and North Arcot Districts with effect from 1st October 1949, in Anantapur, Chittoor, Bellary, and Tirunelveli with effect from 1st

From the speech made by Sri H. Sitarama Reddi, Minister for Land Revenue, moving the Demand "District Administration and Miscellaneous" (Demand XI) in the Madras Legislative Assembly.



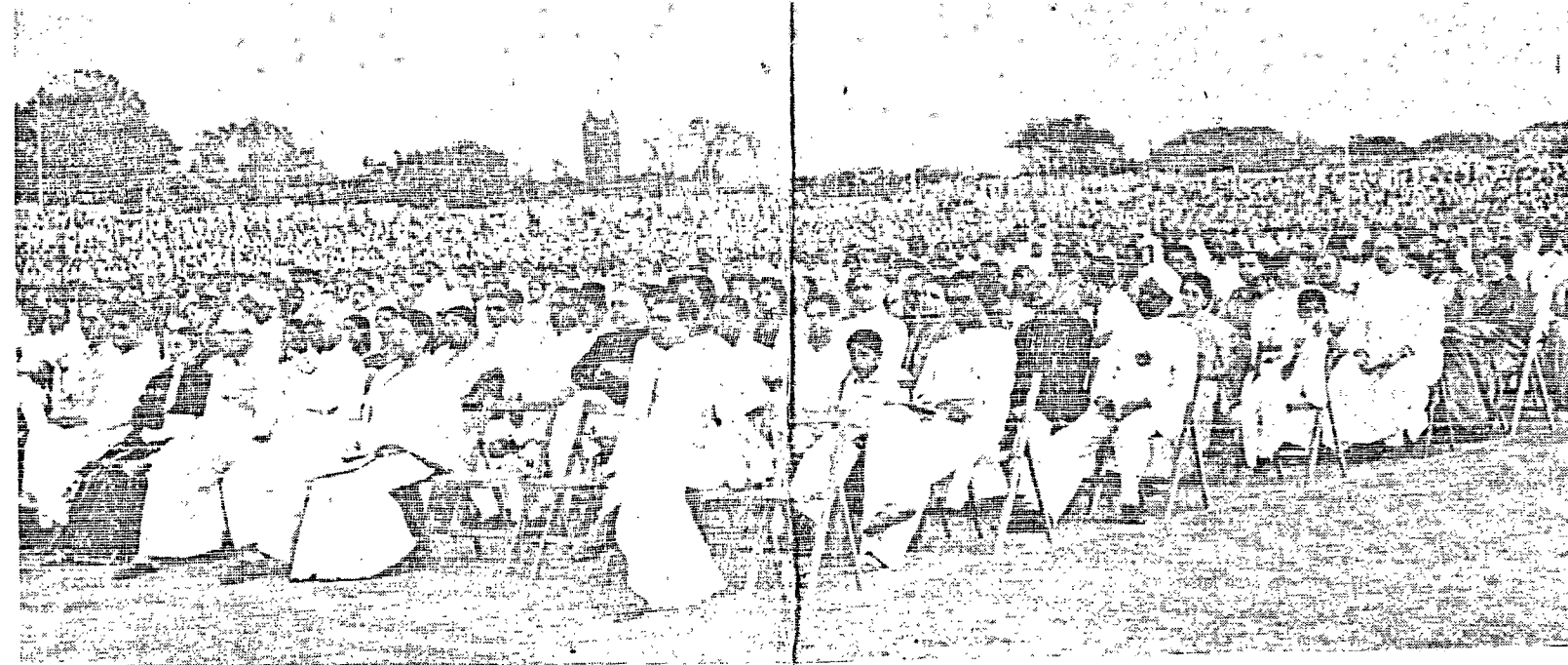
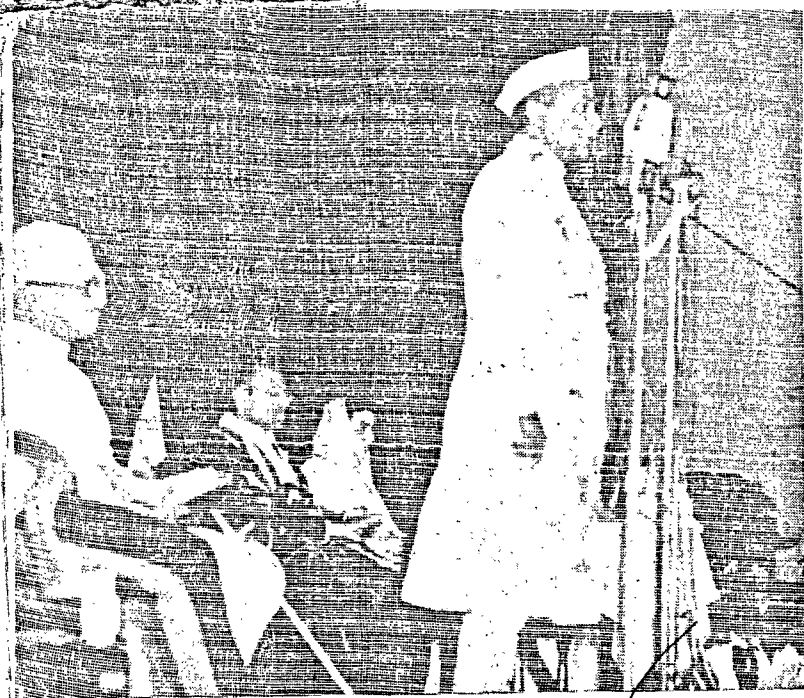
H.E. The Governor of Madras and Sri P. S. Kumaraswami Raja, greet Dr. Rajendra Prasad, President of the Indian Republic, as he alights from the plane.

THE PRESIDENT ARRIVES

The Chief Minister introduces officials of the Madras Government to the President.

The President inspects a Guard of Honour furnished by a detachment of an army unit at the airfield.





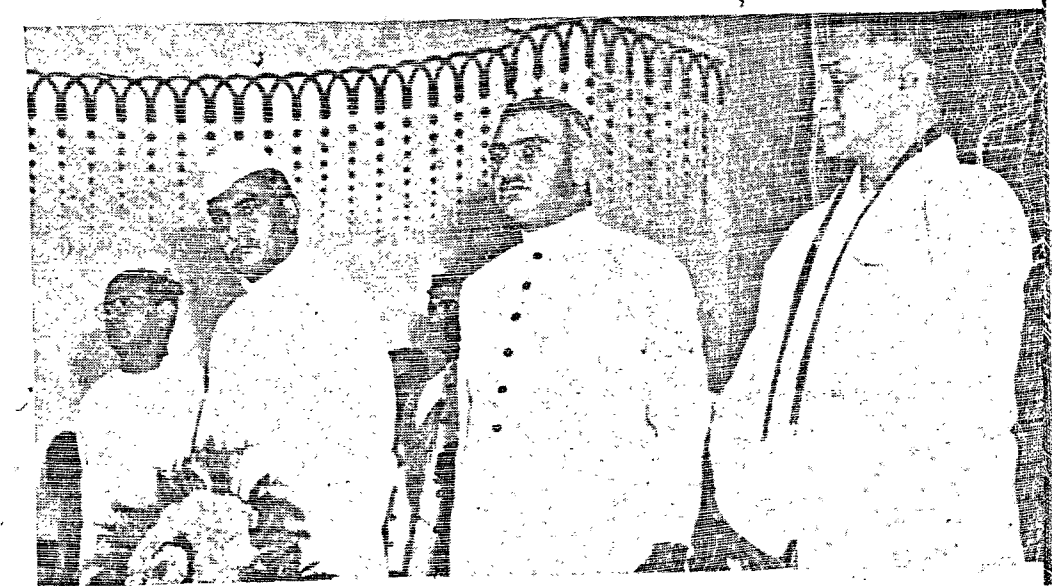
Civic Reception: At the Civic Reception held at the Corporation Stadium, the President received an address of welcome to which he replied (*top left*). A few of the vast crowd that assembled to see the President (*top centre*). Sri R. Ramanathan Chettiar, Mayor of Madras, introduced City fathers to the President (*top right*).

THE PRESIDENT IN THE CITY

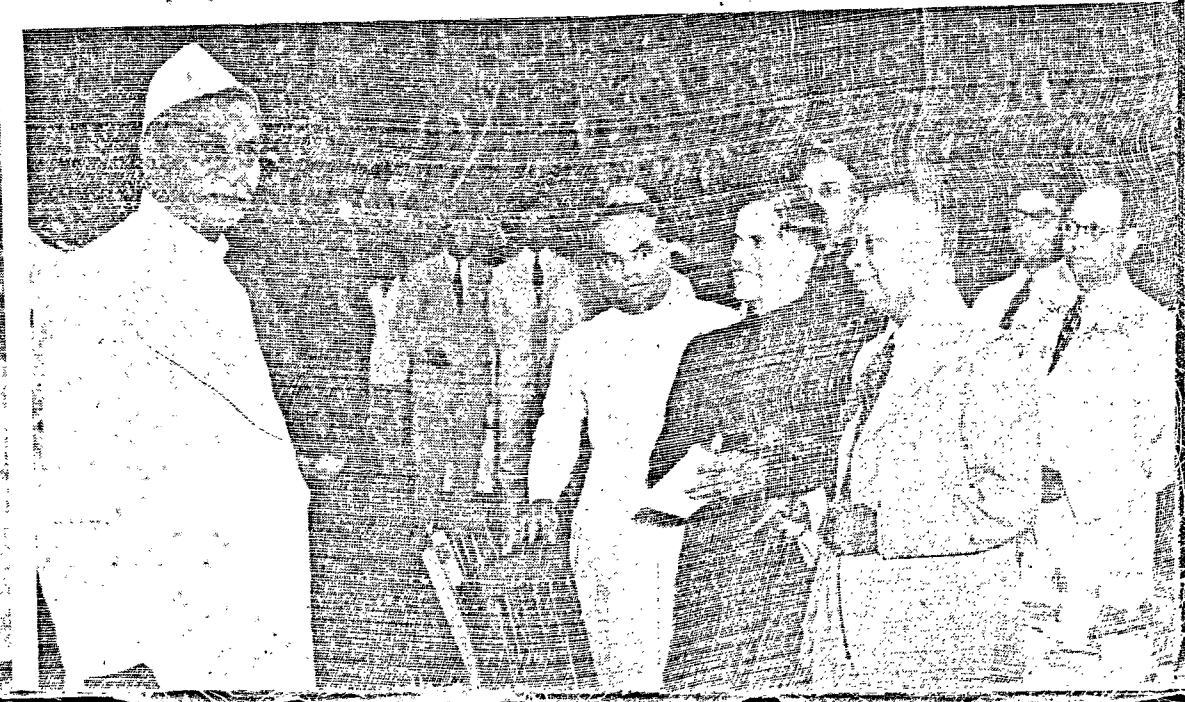
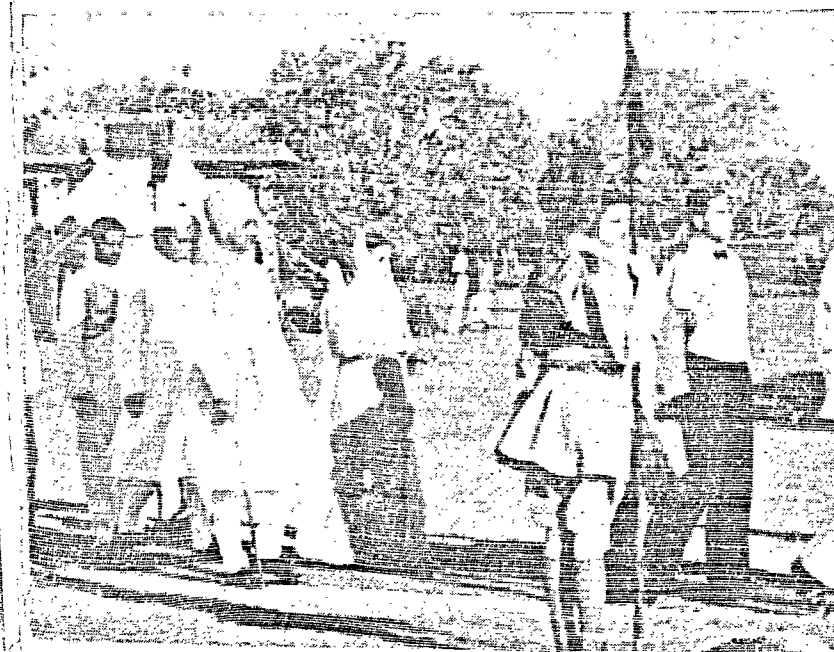


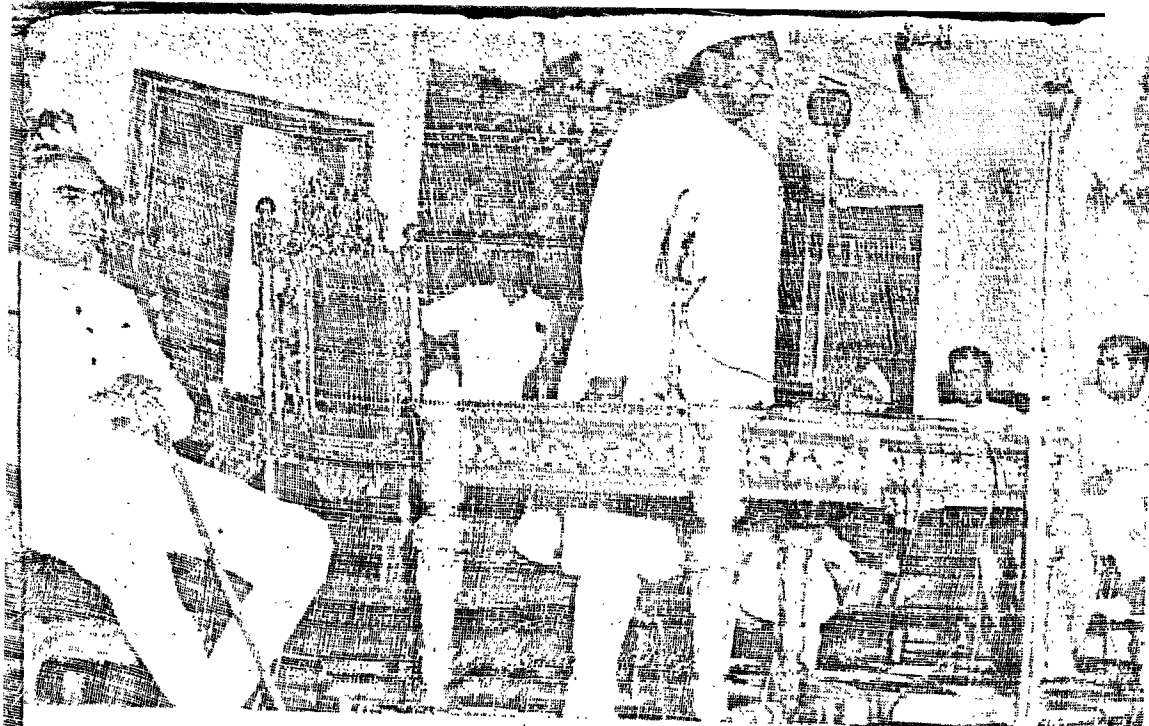
Tribal Uplift: Representatives of Adivasi tribes in Madras State had an audience with the President who gave them a sympathetic and patient listening. The tribes presented bows and arrows, handwoven Khadi and the skin of a forest squirrel to the President.

Thirukkural Research: The President with Sri T. S. Avinashilingam Chettiar, at the inauguration of the Thirukkural Research Publication, undertaken by Sri Ramakrishna Mission Vidyalaya, Coimbatore, in co-operation with the Tamil Academy.



Garden Party: The President arrives for the garden party at Government House, Guindy (*bottom left*). Distinguished guests at the President's table (*bottom centre*). Dr. Rajendra Prasad exchanges a few remarks with some senior officers of the Madras Government (*bottom right*).

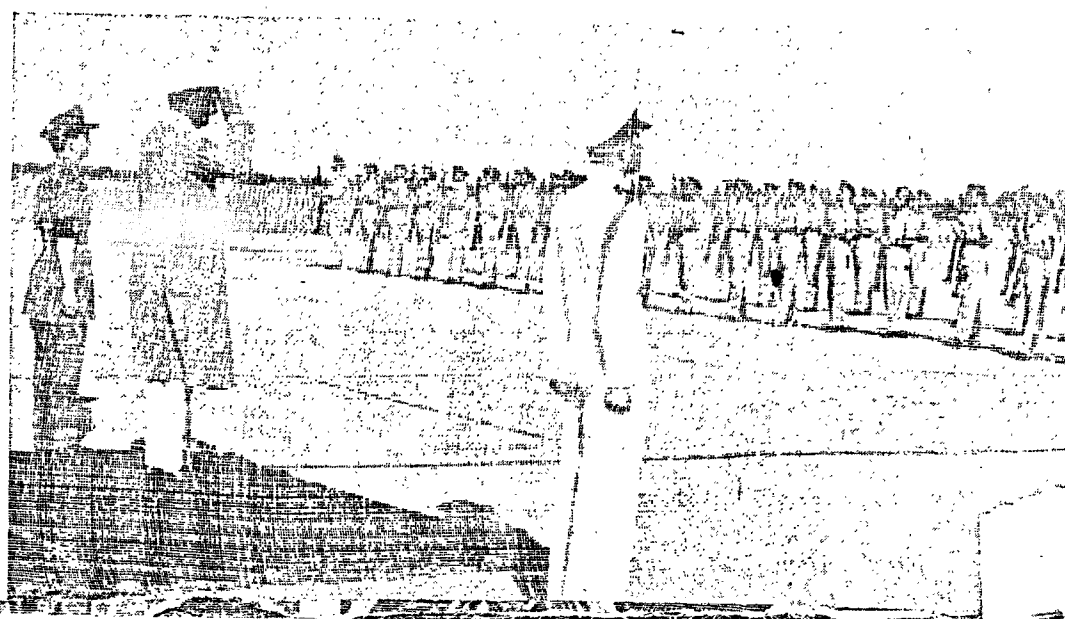




Nehru's Portrait Unveiled: After unveiling the portrait of Pandit Jawaharlal Nehru at the Rajaji Hall, the President extolled the Prime Minister's services to the Nation, describing him as "a leader in the best sense of the term".

Message to Madras: At the end of his visit the President asked pressmen to convey the following message to Madras: "My best wishes to Madras State. We hope we shall be able to get over the food crisis. Much depends on the monsoon. So far as the Government are concerned, we are trying to do our best. People should be prepared to face the crisis; they alone can do it successfully; everybody must co-operate, that goes without saying."

Adieu: The President takes the farewell salute before emplaning for Mysore.



LAND REVENUE

21

MADRAS INFORMATION

January 1950 and in South Arcot, Cuddapah, Kurnool, Srikakulam, Ramanathapuram and Visakhapatnam with effect from 15th August 1950. In these districts, the District Magistrate (Judicial) has direct control over the Subdivisional Magistrates who replace the former Subdivisional Magistrates, who were all Deputy Collectors. The District Collector becomes the Executive Additional District Magistrate.

The main problem arising therefrom has been the fact that in the 12 districts where the Scheme has been introduced, 13 posts of Revenue Divisional Officers, 24 posts of Additional First-class Magistrates, ten posts of Deputy Tahsildars and 93 posts of Stationary Sub-Magistrates have to be retrenched. If the scheme is introduced in the entire State, the total reduction would involve 30 Revenue Divisional Officers, 38 Deputy Tahsildars and 192 Stationary Sub-Magistrates and also consequentially several posts in the lower staff; various measures have been concerted to try and absorb the men thus thrown out of their present offices, the most important being the amendment to the Commercial Taxes Subordinate Service Rules to provide for recruitment by transfer of men from the Revenue Department as Assistant Commercial Tax Officers and Deputy Commercial Tax Officers. Another method suggested by the Board of Revenue has been to revert all inefficient men from the Rationing Department to their parent departments and appoint only regular Tahsildars and Deputy Tahsildars who have been affected by the Scheme of Separation. It is hoped that some of the displaced men will be absorbed as Assistant Inspectors of Labour. This Scheme, the benefits of which are too well known to need reiteration at this juncture, is one of the landmarks in the administration of this State during the last two years.

Retrenchment and Reorganisation

Side by side with this has been the attempt to effect retrenchment as a result of the recommendations of the Retrenchment and Reorganisation Committee. The Board of Revenue, which was instructed to effect a reduction of at least eight to ten per cent in expenditure on staff, was able to effect a net savings of Rs. 7,869 per annum in its own office but considered that effecting similar petty economies in the district establishment staff would result in an over-all loss of efficiency. This proposal was therefore not pressed by Government. The Government have at more than one time considered the question of abolishing the Board of Revenue as a measure of retrenchment. But on a close examination of the various functions attended to by the Board, the Government have come to the conclusion that it was not possible to administer efficiently the whole of the manifold activities of the Revenue Department by a single Head of a Department such as the Inspector-General of Police or the Director of Public Instruction and that, though the four Commissioners of the Board worked independently in respect of their particular portfolios, they had collective responsibility as a Board for various matters which were full Board subjects; and there was no greater expense to the State by their being designated as a Board, rather than as individual Commissioners for Land Revenue, Commercial Taxes, Civil Supplies or Settlement of Estates.

It was also felt that the Board was a proper medium for the formulation of policy in respect of District administration on the revenue side and that this valuable function

would be lost to Government if the Board was abolished. However, this question of its abolition has been included in the terms of reference to the Land Revenue Reforms Committee constituted by the Government in May 1950. However, it may be of interest to state that Madhya Bharat has already introduced a Board of Revenue instead of Commissioners, and that Uttar Pradesh is examining the question of starting one.

Permanent Assignment of Land

In the matter of land assignment, in 1949 the Government lifted the ban on permanent assignment of lands and issued general instructions regarding the policy of the Government in regard to assignment. The main features were that land under the disposal of the Government should be assigned in the following order of priority:—

- (i) political sufferers;
- (ii) ex-servicemen of World War II who do not possess more than five acres of wet or ten acres of dry land;
- (iii) landless poor persons (this includes Harijans and Backward Classes).

Special concessions were shown to political sufferers and landless poor, and certain restrictions were imposed on the alienation of the land thus assigned. Land tax also was not to be collected for the first three years in respect of lands which were virgin soil. Water rate was, however, to be charged for such lands. Each political sufferer is eligible for five acres of wet or ten acres of dry, irrespective of other lands owned by him.

As a result of the generosity of these terms, a large number of applications were received and Government have been doing their best to dispose of these applications. Certain special difficulties were experienced. These were mainly the tendency to choose communal poramboke land in preference to unassessed wastes, the delay in obtaining certificates from District Congress Committees about the applicant's political status and the fact that land applied for by a political sufferer was very often under *sivaijama* of either a landless poor person or an ex-serviceman. Very often lands were chosen in the foreshore of tanks to which the P.W.D. had technical objection. Despite these and many other similar difficulties, Collectors have been dealing with these applications with sympathy and expedition. Already nearly 9,000 political sufferers have been assigned lands, out of 21,000 applications received, and 4,000 cases have been rejected. Very often there have been conflicts between the political sufferer who has been assigned land and a *sivaijamadar* not entitled to the same who refused to vacate. In several cases, suits have been filed.

On the whole, the policy of helping the landless to secure lands has been consistently adhered to. In this connexion may be mentioned the attempt to put up large-scale colonization schemes where there are compact blocks of land on a co-operative basis, intended for ex-servicemen and landless poor who have an agricultural bias. They are admitted as members of Land Colonisation Co-operative Societies. Ten such societies are now functioning with a paid-up share capital of Rs. 5.74 lakhs. The provision of Rs. 53,600 made in the Budget Estimate, 1951-52, represents the amount proposed to be spent on land reclamation, sinking of wells, construction of temporary houses, free grant for purchase of bulls, etc.

Corruption Among Government Servants

During the month of November 1950, corruption among Government servants was brought to notice against 341 persons including those against whom proceedings were pending at the end of the previous month. Of these, 19 persons were let off as charges against them were not proved and proceedings against 305 were pending at the end of the month. Corruption was successfully detected in the case of the remaining 17 persons and they were suitably punished. Of these, three persons were awarded minor punishments. The names and designations of the 14 persons who were awarded severe punishments are as follows :—

K. Ramaswamy Ayyar, Manager, Regional Transport Officer's Office, Tiruchirappalli; P. Balasubramania Pillai, Upper Division Clerk, Regional Transport Officer's Office, Tiruchirappalli; Sivagurunathan, Karuppiah and Subramanian, Constables, Madurai Rural District; M. Muniappa, Clerk, District Police Office, Salem (Dismissed from service); E. K. Menon, Assistant Engineer (Electricity); and A. V. S. Sarma, Deputy Inspector of Schools, Vinukonda Range (Removed from service); B. Thippiah, Sub-Inspector of Police, Bellary District; K. R. Loganathan, Lower Division Checking Inspector, City Rationing Office, Madras; K. L. Narasimha Rao, Fieldman, Guntur District; P. Imam Saheb, Forest Watcher, Anantapur Division; Muthuveeran, temporary peon, Revenue Department, Tiruchirappalli District; and Rangaswamy, peon, Firka Supply Office, Kilvidhi, Arkonam Taluk (Discharged from service).

Uplift of Hill Tribes

While on this subject it is convenient to refer to the steps taken by Government for the implementation of a ten-year Plan for the amelioration of the condition of Hill Tribes in the Agency tracts of East Godavari, West Godavari, Visakhapatnam and Srikakulam districts. Government have appointed a Special Agency Development Officer of the grade of a Collector with a team of experts from the various departments to help draw up a comprehensive plan for their amelioration. This comprehensive plan is expected shortly. Similar in character to these schemes are the Wynaad and Araku Valley Colonization Schemes.

In the Wynaad Colonization Scheme where the attempt is being made to overcome the disinclination to cultivate lands which are sparsely cultivated owing to the prevalence of malaria and black-water fever, the initial work done has been the carrying out of necessary anti-malarial operations. A dispensary has been opened at Ambalavoyal and since been converted into a regular hospital and an agricultural farm has been set up to investigate the best variety of crops suitable for the area. The offices and staff have been accommodated in temporary buildings and in

16 nissen huts. From February 1948 onwards, 2,176 colonists including ex-servicemen, existing pattadars, *sivajamadars* and aboriginal tribes were settled, up to December 1950. Advances of various kind have been granted to them for land reclamation, hut building, agricultural operations and for wells and septic latrines. The Post-war Services Reconstruction Fund has placed at the disposal of the Collectors the sum of Rs. 11 lakhs odd for settling 750 ex-servicemen in this scheme. Ultimately, it is expected to work up to 3,000 colonists producing 11,000 tons of foodgrains.

The Araku Valley Scheme relates to the reclamation and colonization of an area of 5,000 acres in the Araku Valley in the Visakhapatnam Agency. Apart from departmental cultivation of 625 acres and the construction of an experimental farm on 100 acres, surplus land is being allotted to hillmen on temporary lease of five acres each. Experimental cultivation of cinchona, pyrethrum and new strains suitable for the locality are carried on by the Agricultural Department. Malaria has been controlled and an irrigation scheme called the Jilda Vagu Scheme has been completed. A protected water-supply from the Jilda Vagu Waterfalls is being projected. The lands have been returned to previous owners subject to the condition that they should cultivate the entire area each year.

Another matter in which we can legitimately lay claim to a large measure of success is Rural Broadcasting. The Government have taken special steps to provide increased facilities to the rural areas. As the broadcasting facilities in this State were inadequate to meet the growing requirements of the various language areas, Vijayawada Station in the Telugu area and another station at Kozhikode for the benefit of the Malayalam-speaking people were opened. A scheme of research for the assembling of cheap sets capable of receiving all the medium and short-wave stations was sanctioned in order to increase listening facilities for the people in the rural areas. As this proved a success, the Government have so far launched two schemes for assembling community sets departmentally. Thus it will be seen that this State is markedly ahead of several States in this matter.

Efficiency of Administration

The Government have therefore taken energetic action to push through reforms which are calculated to benefit the ryot, improve his economic status and contribute to his happiness. On the other hand, the Government have, through the Revenue Department, maintained district administration at an efficient level and kept up the tradition of the efficient collection of land revenue. In a democratic era, it has impressed on all its officers the necessity to keep in close touch with the leaders of public opinion and to be courteous and considerate in their dealings with the general public. It is perhaps unfortunate that there has been a considerable amount of bribery and corruption among the subordinate grades of the revenue staff. This is the direct result of the introduction of various forms of control, as well as the grant of different kinds of subsidy and loans. Both these give ample scope for the corrupt official to feather his nest.

But Government has established a Tribunal for Disciplinary Proceedings, which enquires into all grave cases of corruption by officers drawing above Rs. 150 salary, and is according deterrent punishments such as dismissal or compulsory retirement in proved cases of corruption. It

has continued the tradition of co-ordinating all departmental activities through the various heads of departments in the District under the supervision of the Collector.

Revenue Remission and Cash Doles

The Government are also alive to the necessity for introducing reforms into the present system of land revenue administration and for this purpose have appointed the Land Revenue Reforms Committee, the first report of which relating to land tenures and connected problems has already been submitted to Government. The final report, is expected in April and Government will carefully consider the several recommendations and evolve a uniform land policy for the entire State and make some attempt to produce a Land Revenue Code. Finally, the Government has been keenly alive to the unfortunate consequences of the failure for the fourth year of the North-East Monsoon and the hardships that have resulted thereby. Government are about to issue a comprehensive set of instructions for land revenue remission both for wet and dry crops. They have also well in hand measures for meeting any shortage of fodder. They have also taken steps to meet a situation that may arise due to the scarcity of water in several districts.

Lastly in a related matter, namely, the hardship caused to weavers by the scarcity of yarn, Government have also taken steps to provide cash doles limited for two weeks to the indigent, sick and destitute among the weavers and to refer the able-bodied among them to *ad hoc* relief works opened in the vicinity, which should provide them with the means of earning their livelihood.

Vigilant Action of a Villager

On one night in August last, the house of one Kollepara Chinna Venkateswarlu of Jallikakinada in Ganapavaram Police Station limits in West Godavari District was burgled and gold jewels worth Rs. 12,000 were stolen. At about 3 a.m. the same night, one Pala Venkanna of the village, while going out on a private errand, noticed a person Pamula George running through a by-lane and accosted him. The other person did not reply, fell down accidentally, scrambled to his feet and ran away, leaving a small bundle containing four jewels. Venkanna immediately reported the matter to Sri Indumuri Nelladhiraju, a Village Vigilance Committee member of the place, and handed over the bundle to him.

The next morning, the Village Vigilance Committee member went to the house where the burglary was committed and showed the bundle to the inmates. Fully convinced that the offence was committed by Pamula George, he then proceeded to the suspect's house and had him arrested before he could escape. The accused stated that the rest of the stolen property had been secreted with one Yosefu of Bhimavaram, but this statement was found to be false on verification. On further persuasion, the accused confessed that he had hidden the jewels in a rubbish heap in the village. Most of the jewels were subsequently recovered from this place. A gold voddianam was taken from the bund of a tank. All jewels were recovered and identified by the owners.

The culprit, an ex-serviceman, wore gloves when committing the offence in order to avoid leaving his fingerprints. This offence would not have come to light but for the initiative and prompt action taken by the two villagers. The accused was put up before Stationary Sub-Magistrate, Tadepalligudem, and convicted.

Land Revenue Remissions

The Government have sanctioned the grant of wet and dry remissions for Fasli 1360 on a liberal scale in the areas affected by adverse seasonal conditions in the districts of Srikakulam, Visakhapatnam, Guntur, Kurnool, Nellore, Cuddapah, Anantapur, Bellary, Chittoor, Chingleput, North Arcot, South Arcot, Tiruchirappalli, Madhurai, Ramanathapuram, Tirunelveli, Coimbatore and Salem. The following are the remissions granted :

(1) *Wet lands*.—Full remission on wet lands with an outturn of four annas and below; no remission for wet lands with outturn above four annas.

(2) *Dry lands*.—(a) *Food crops*.—Full remission for food crops with an outturn of four annas and below; half remission for food crop with an outturn of above 4 annas and below 8 annas.

NOTE.—Food crops for the purpose of this order consist of cereals and pulses.

(b) *Other crops*.—(Crops other than cereals and pulses)—Full remission for crops with an outturn below four annas; no remission for crops with an outturn of four annas and above.

Grant of remission to dry lands is subject to the condition that no other successful crops should have been harvested, a successful crop being treated as one which would not qualify for remission under these orders.

Wet lands left waste owing to lack of supply in the irrigation sources are eligible for full remission, except for mamul wastes, in reckoning which, however, the three previous faslis should be excluded.

The concessions granted will also apply to those Estates taken over by the Government, which are now in the affected areas.

Conviction Set Aside

Under the heading 'Food Offences and Punishments Awarded', the following item appeared in the January 1951 issue of the *Madras Information* :

"GUNTUR: (i) Gudibanda Venkataramireddi, cultivator, Kollipora, Tenali taluk, was convicted and sentenced to pay a fine of Rs. 200 with two months' rigorous imprisonment in default, for working of huller without licence and without permits."

This sentence was awarded by the Additional First-class Magistrate, Tenali. On an appeal by Sri Gudibanda Venkataramireddi, the Court of Sessions, Guntur, set aside the conviction and acquitted the accused and directed that the fine of Rs. 200 should be refunded to him.

Improved Methods in Palm Gur Manufacture

By SRI VISHWANATH KHANOLKAR

(1) THE USE OF INDICATOR PAPER

With the introduction of improved methods in the manufacture of Palm Gur or Palm Sugar from Palm juices, or in the preparation and preservation of Neera, it has become very necessary to view every operation in the light of science. This results in a scientific control of the various operations involved.

The introduction of "Indicator Papers" in the manufacture of Palm Sugar or Gur is one of the earliest steps taken towards exercising a scientific control on the acidity or alkalinity of the juices. It is common experience that acid juices ferment very soon and alkaline juices develop bad flavour and colour.

In earlier times, manufacturers found acidity or alkalinity of Palm juices merely by taste and controlled it accordingly. It was, however, a crude and unreliable method. To effect the same control we now use coloured papers called the "Indicator Papers". These indicator papers are made in laboratories by dipping neat and clean filter papers in the respective indicator solutions, and drying off the papers in a neutral atmosphere. There are different indicators for different range of pH as shown in the following table :—

Indicator.	pH Range.	Colour change.
Brown Phenol blue ..	3.1—4.1	Yellow to purple.
Brown Cresol green ..	3.8—5.4	Yellow to blue.
Brown Phenol red ..	5.2—6.8	Yellow to red.
Brown Thymol blue ..	0.1—7.7	Yellow to blue.
Phenol red ..	7.0—8.6	Yellow to red.
Cresol red ..	7.4—9.0	Yellow to red.

Ready made indicator papers are available in the market at cheap rates and the Palm Gur manufacturer finds it handy to use these papers in controlling the acidity of his juices.

The change of pH is shown by the following chart :—
1.0 acidic. pH 7 neutral. 14 alkalines.

Any pH value more than 7 is alkaline and less than 7 is acid. Palm Gur manufacturers will want to keep the pH of the juice as near the neutral points as possible by the addition of lime to acid juices and by adding superphosphate to alkaline juices.

Care to be taken while handling indicator papers :

- (1) Indicator papers should always be kept in air tight glass bottles. These bottles should not be exposed to the sunlight.
- (2) Never handle these papers with naked hands. Use of forceps should be made while testing samples.
- (3) A paper, once used, should be thrown away.
- (4) The sample to be tested should be thoroughly stirred before testing.
- (5) Indicator papers should not be used in hot juices. Testing at atmospheric temperatures is desirable.

(2) THE USE OF HYDROMETERS

Palm juices or Palm syrups consist of two main ingredients, namely, water and dissolved solids. It is very important for the Palm sugar manufacturer to know the amount of total dissolved solids in the juice or syrup. These dissolved solids include sugars also. For the indigenous Palm sugar manufacturer, it is very difficult to know the amount of dissolved solids or in other words the density of thin juices. As for the thick juices—boiled juices—he has evolved the "thumb method" of knowing the concentration of the syrups. The "thumb method" is in general vogue. This consists of taking a sample of the boiled juice between the fingers and then drawing out threads. By counting the threads drawn and the feel of the sample, the manufacturer can tell whether a particular boiled sample is fit for sugar or gur manufacture.

Instruments known as "Hydrometers" are now being introduced in Palm Gur manufacture. The Hydrometer, also called Brix Spindle, is a simple glass float weighted at the bottom so that it will float upright, with a narrow glass stem at the top. The thinner the stem the more sensitive is the instrument. The stem is graduated, and each graduation is called a Brix degree. Brix degree is a word used to denote "Total dissolved solids". The level at which the stem floats is read off and the reading gives us an idea of the total dissolved solids. This reading is always in percentages, so that by deducting this reading from 100, we can know the water content of the juice or syrup. Let the Brix reading be 20, then the water content is 100 — 20 = 80 per cent.

In the market these spindles are generally found of the following ranges :—(1) 1 to 10. (2) 10 to 20. (3) 20 to 40. (4) 30 to 60, and so on. The spindles can read up to a concentration of 75° Brix. To find out the concentration of thicker syrups, we have to dilute these syrups and then find out the brix reading. This reading can be multiplied with the extent of dilution and the original brix found. Brix spindles have a thermometer attached at the floating expanded end. While reading the stem reading it is very necessary to read the temperature; corrections can be made by the use of temperature correction tables.

Points to note while using a Brix Spindle :

- (1) The spindle should be dry.
- (2) Take the sample of the juice or syrup in measuring cylinder. Fill it to the brim.
- (3) Slowly lower down the spindle and leave it when it starts floating.
- (4) Take the reading after one or two minutes.
- (5) While taking readings care is to be taken to see that the spindle is in the centre of the liquid. It should not touch the sides.
- (6) When reading the spindle, keep your eyes at right angles to the level. Read correctly allowing for the meniscus which is just below the juice level.
- (7) After use, clean the spindle, and keep it safely in its case.

Enforcement and Amelioration

The following is the report on the working of Prohibition in the State for the month of December 1950 :—

Cases.—During the month 7,199 cases were detected as against 6,893 in the previous month. There was a large increase in the number of offences detected in Visakhapatnam as the ex-tappers continued to commit tapping offences in defiance of law. In Salem, effective raids were made resulting in the detection of a large number of cases. In the Madras City, patrol was intensified over suspected black spots and there was a record number of cases reported.

Illicit Distillation and Kindred Offences.—Of the total number of cases reported, 2,702 related to Illicit Distillation and kindred offences as against 2,948 in the previous month. Of these, 1,027 related to Illicit Distillation and the rest to possession and sale of Illicit Distillation spirits. Sixteen out of 26 districts showed a fall in figures under this head.

Illicit tapping.—Eight hundred and forty-three cases were reported as against 377 in the previous month. Of these, 775 related to tapping for fermented toddy, eight to permitting sweet toddy to ferment and the rest to tapping for sweet toddy without licences. The abnormal increase under this head is due to the offences committed by the ex-tappers in Visakhapatnam and in some areas of East Godavari District in defiance of prohibition law on the plea of unemployment.

Smuggling of Liquor.—One hundred and twenty-three cases were reported as against 113 in the previous month. Of these 111 related to bringing in of liquor from other States and 12 to smuggling from district to district. Twelve cases of smuggling were reported on the Karaikal border and 35 cases on Pondicherry border. A case of smuggling from Hyderabad State was detected in Krishna District.

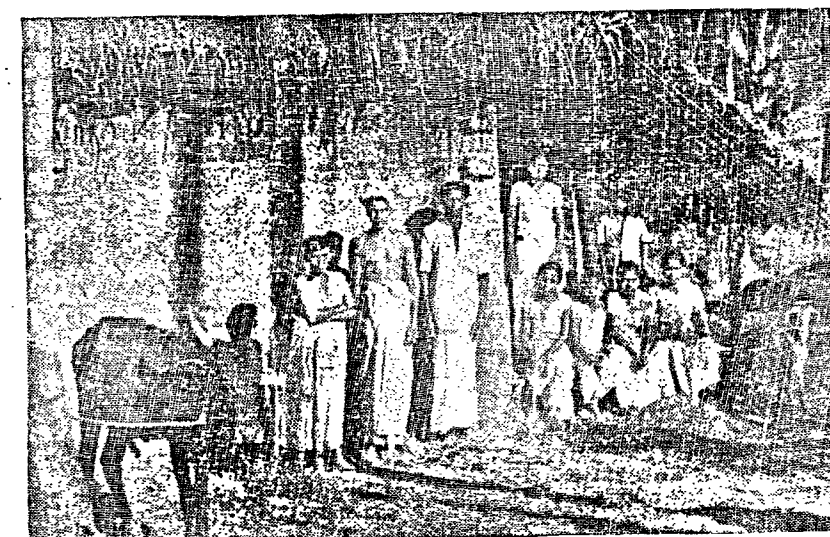
Intoxicating Drugs.—One hundred and thirty-three cases were reported as against 151 in the previous month. Of these, one related to cultivation of hemp plants, 13 to bringing in of drugs from other States and one to sale and the rest to possession of drugs.

Denatured Spirits.—The total consumption for the State (except Nellore and the Nilgiris for which figures have not yet been received) was 20,910 gallons as against 16,836 gallons in the previous month. Sixteen cases of rendering denatured spirits potable were reported.

Border problems.—Border patrols and vehicular checks continued to be adequate and effective.

PROVISION OF EMPLOYMENT TO EX-TAPPERS

Jaggery Manufacturing Societies.—Up to the end of December 1950, 1,882 jaggery manufacturing societies have been registered with a membership of 1.47 lakhs. During the month of December 1950 alone, 18 societies were organised in the districts. They produced 1.64 lakhs maunds of jaggery valued at Rs. 9.25 lakhs during the month. The Government have extended the concession of tapping coconut trees for sweet juice for the manufacture of jaggery on co-operative basis to the Avanashi and Pollachi Taluks and the Pulampattai firka in the Gobichettipalayam Taluk in the Coimbatore District.

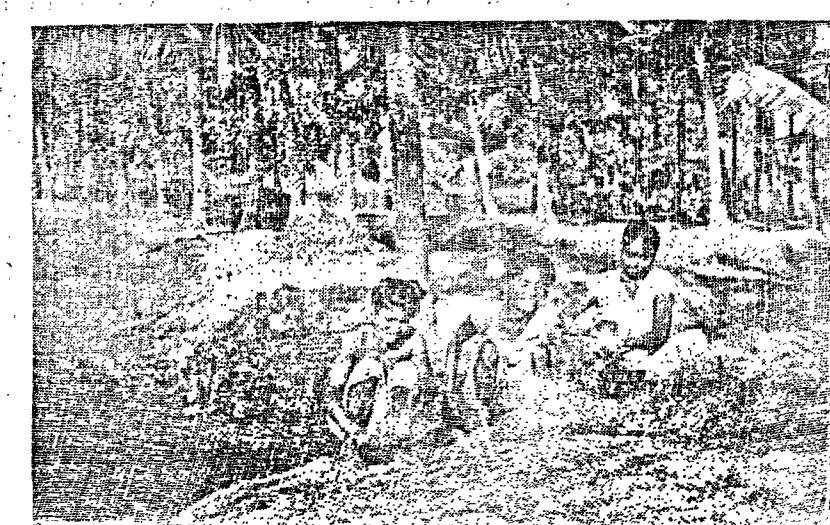


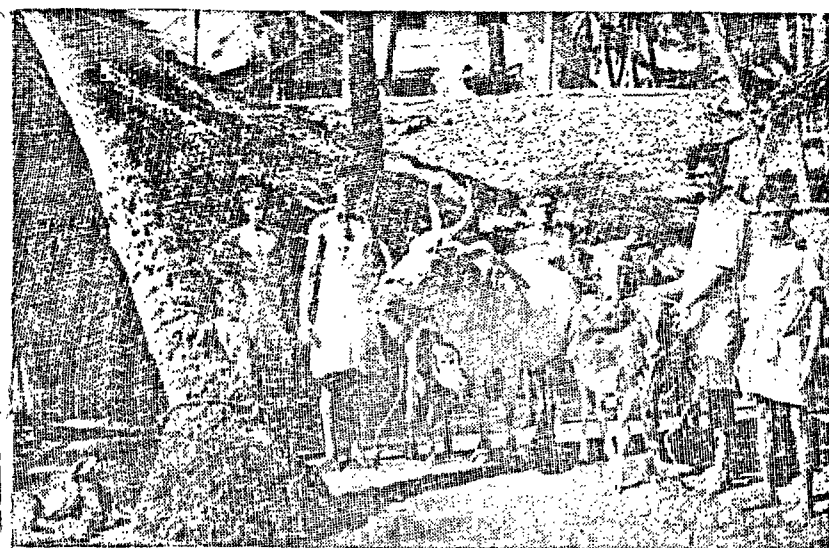
ON THE ROAD TO PROSPERITY : Before the introduction of Prohibition, the typical tapper, dependent solely on the toddy trade, could scarcely make both ends. But now, this happy family of an ex-tapper from Kozhikode finds life easier. Every member of the family is engaged in a number of profitable occupations, like agriculture, coir manufacture, and so on. Note the new house with brick walls, the neat surroundings, the decent dress of the family.

Palm Gur Development Scheme.—As a result of the training imparted and the demonstration conducted by the Palm Gur Development staff during the month, the trainees produced 13,348 lb. of refined jaggery while the improved jaggery produced by the ex-tappers other than trainees was 2.03 lakhs lb. The Palm Gur Section participated in the Madras Park Fair Exhibition held at the South Indian Athletic Association grounds, Madras, from 20th December 1950, and in the Industrial Exhibition held at Tenali in the Guntur District.

The ex-tappers were also absorbed in milk supply societies and tenants and field labourers co-operative

PROFITABLE OCCUPATION : The family of an ex-tapper engaged in the manufacture of coir yarn, one of the main cottage industries along the Malabar coast. Generally women take to this popular occupation, making coir yarn out of fibre by hand or with rattas. After the introduction of Prohibition, women are taking greater interest in subsidiary occupations.





DRUNKARD RECLAIMED: This prosperous milkman with his cattle wealth and man-servants, was once a drunkard with only one cow, which could scarcely help to maintain his family. But Prohibition came, and he stopped squandering money on drink. With his new wealth he became a proud member of the Co-operative Milk Supply Union and he now faces the future with confidence, owning eleven cows and three she-buffaloes.

Societies. Through the efforts of the ameliorative staff they were also provided with work as agricultural labourers; as gang coolies, peons and watchmen; and as unskilled workers in the industrial and commercial concerns.

Besides, milk supply societies, land colonization societies, fishermen societies, agricultural improvement societies, tape weavers' societies, etc., were also organised for the benefit of the general public including the ex-addicts.

Rural Credit Societies and Grama Sangams.—During the month 12 grama sangams were formed in the districts bringing the total of such sangams so far organised to 13,753. Three thousand eight hundred and ninety-five of

them were active during the month turning out various kinds of work such as the provision of counter-attractions to drink and the improvement of the economic and social conditions of the villagers, particularly in the direction of public health, sanitation, communications, education, agricultural improvements and the welfare and uplift of women.

During the month 421 rural credit societies amended their bye-laws for undertaking social and recreational activities, bringing the total number of such societies at the end of the month to 7,613. They continued to do good work opening libraries, installing radio, etc.

Twenty thousand five hundred and sixty-one villages were served by rural credit societies covering a population of 71.49 lakhs, the percentage of villages and the population served being 64.58 and 17.07 respectively. Up to the end of December 1950, 8,977 societies have undertaken multipurpose activities and the volume of transactions effected by them amounted to Rs. 395.84 lakhs.

Substitute to drink.—Coffee and tea stalls opened by private individuals continued to be popular.

Thrift.—A sum of Rs. 38,191 was saved through hundi boxes during the month.

Propaganda.—Propaganda in favour of Intensive Food Production Scheme, compost manure, etc., was carried on by the Ameliorative staff with the aid of the propaganda vans, films, magic lantern slides and gramophone records.

Levy at Dowlaiswaram Anicut

The Government have approved a levy of a fee of annas eight on each motor cycle passing over the Godavari Anicut at Dowlaiswaram. Orders have also been issued to permit all push cycles free of charge. No tyred carts will be allowed to pass over the Anicut.

Offences under Drugs Control Act

The Government have authorised the Assistant Taluk Supply Officers to investigate offences under the Madras Drugs Control Act, 1949, within their respective jurisdictions.

Palm Jaggery is Delicious

There are four varieties of sugar yielding palms in India; Palmyra, date, coconut and sago palm. Palm Jaggery is manufactured from the fresh and sweet juice of these four varieties of Palms. This juice is called Neera. Neera when fermented becomes toddy. Palm Gur or Tad Gud is prepared from sweet and fresh Neera and not from toddy; so, it is improper to call Tad Gud, Toddy Gud. Palm Gur is only prepared from fresh and sweet Neera which is not a forbidden article.

Thousands of tons of Palm Gur are manufactured in the States of Madras and Bengal and sold in local market. Recently all other palm growing States in India have taken up Palm Gur Development work. Palm Gur is delicious, and it can be easily used as a sweetening agent in place of cane gur. Lime is added in a small quantity to arrest fermentation in Neera, and superphosphate is used to take out the lime from Neera before it is converted into jaggery.

India has five crores of palm trees and many more can be easily grown. Palm trees flourish on waste-lands, hillocks and bunds of fields. They require neither irrigation nor manure. The use of Palm Gur would release lakhs of acres of fertile land, now locked up in sugarcane plantation, for growing cereals. So, Palm Gur help, "Grow More Food." Is it too much to expect every right-minded person to make use of this natural wealth and lead Bharat on the road to prosperity?

New Orientation to suit Changed Times

By SRI K. MADHAVA MENON, Minister for Education

As part of the post-war development programme drawn up in 1944, the Government sanctioned a scheme of compulsory elementary education for all children of school-age in selected villages in each district. The scheme was introduced in 1945-46 and was extended during the years 1946-47 and 1947-48. Further extension of the scheme was suspended as the Government wanted to review the progress till then achieved and also as they wanted to spread basic education. It is the policy of the Government to introduce basic education throughout the State as early as possible. With this end in view, the existing training schools are being converted into basic training schools, and new basic training schools are being opened every year. At present there are 48 basic training schools and they are imparting training to about 4,240 pupil teachers. Provision has been made in the Budget for converting ten ordinary training schools into basic training schools and for opening five new schools. The number of basic elementary schools in the State is 348 and more elementary schools will be converted into the basic type when the teachers undergoing training complete their training course.

Under Article 45 of the Constitution, the State shall endeavour to provide free and compulsory education for children up to the age of 14 within a period of ten years. The question as to how the provision in the Constitution can be implemented is under consideration. The problem is a stupendous one and involves heavy recurring expenditure. It is the intention of Government to open as many new elementary schools as possible in order to make education compulsory. A provision of Rs. 5 lakhs has been included in the next year's Budget for the extension of compulsory elementary education and the Director has already been asked to prepare his plans for the utilisation of this amount in anticipation of the sanction of the Legislature.

The improvement of the conditions of teachers, especially elementary school teachers, is a matter which has always been engaging the attention of Government. Recently the Government sanctioned an increase in the salaries of teachers in aided elementary schools by Rs. 2. Though the increase in individual cases is small, the commitment involved is to the tune of several lakhs. It is hoped that a time may come when we have a more contented set of workers in the educational field.

Secondary Education

So far the system of secondary education is concerned, it has repeatedly been attacked on the ground that it was formal and bookish, and that it was intellectual in the narrow sense of the term. The future of the holder of S.S.L.C. was often a problem for the parent. The University course was expensive. Further, apart from the question of cost, the admissions to the University courses were restricted; and S.S.L.C. ordinarily did not help to make one fit to take up a job outside the limited clerical

(From the speech delivered by Sri K. Madhava Menon, Minister for Education, moving the Education Demand in the Madras Legislative Assembly.)

sphere. To meet this situation, the secondary school course has been suitably revised. In the reorganised course there is provision for learning some useful crafts which would enable the pupil to earn a living, in cases where the pupil cannot pursue higher studies.

Another difficulty about the old system of secondary education was that the pupil had to learn through the medium of foreign language. Teaching through the English medium has therefore been abandoned, and all the schools are now required to teach through the regional language. English is given the second place. Provision has also been made for the teaching of Hindi to all the pupils who would like to learn it.

The pressure for admissions into the secondary schools became great in the recent years. Realising this fact, the Government have been providing increased allotments for the payment of grant for the construction of buildings for secondary schools. Consequent on these measures, the number of schools in the State has gone up from 599 schools for boys and 146 for girls in 1945 to about double the number today, the number of schools now existing being 1,130 for boys and 224 for girls.

Collegiate Education

In the field of collegiate education, it is the policy of the Government that there should be at least one college in every district. In pursuance of this policy, and to cope with the great demand for increasing provision for collegiate education, private managements were encouraged to open new colleges, and as many as 17 new colleges, 12 for men and five for women were opened by private managements in the last five years. In a place like Cuddapah where a college under private management could not be opened, Government have themselves opened a college. Provision has been made in the next year's Budget for raising this college to the first-grade. There is also provision in the next year's Budget for the opening of a second-grade college in Srikakulam District. The only district which has no college at present is the Nilgiris. It is hoped that it may be possible to open a college in that district also in course of time.

The Budget also contains provision for affiliation in B.A. Hindi in the Government Arts College, Anantapur, starting of Honours courses in Kannada and Malayalam in the Presidency College, Madras, provision of Sanskrit and Telugu as optional subjects for the B.A. course in the Queen Mary's College, Madras, provision of Kannada as an optional subject in the Intermediate course in the Government Arts College, Mangalore, for the affiliation in B.A. Physics and Chemistry in the Government Victoria College, Palghat.

Adult Education

Another important matter to which I wish to refer is Adult Education. This branch of education was left to voluntary effort in the past. In 1948-49 the Government drew up a scheme for the education of adults. The scheme comprised the following main items:

- (1) Opening of literacy schools.
- (2) Training of teachers in adult literacy work.

Rules for Conduct of Examinations in Indigenous Medicine Revised

The Government have revised the rules for the G.C.I.M. and H.P.I.M. examinations of the College of Indigenous Medicine. They have directed that 20 per cent of the marks in practical examination of the G.C.I.M. course in Anatomy, Physiology, Pharmacology, Hygiene and Pathology be allotted to the practical work done in the classes and that these marks be taken into account at the time of the Government Examinations. The marks will be awarded by the Government Examiners to whom the class notes should be submitted for scrutiny.

The Government have approved the proposal of the Board of Examiners in Indigenous Medicine for the revision of rules regarding the conduct of examination for the diploma of High Proficiency in Indian Medicine (H.P.I.M.). Candidates who have already appeared under the existing regulations and have failed in either of the groups will continue to be governed by old regulations, while candidates who have failed in both groups under the old regulations will appear for the examination under the revised curriculum with effect from April 1951.

- (3) Opening of rural colleges for adults.
- (4) Imparting citizenship training through various methods including visual education.

The scheme was continued during 1949-50 on the same lines as in 1948-49. The movement to eradicate illiteracy has gained momentum this year, and it is hoped that a time will soon come when it can be said that the vast majority of our people, if not all, are literate.

To help the movement the Government of India first sanctioned a grant of Rs. 1.57 lakhs in 1949. Subsequently they placed an additional allotment of Rs. 6.86 lakhs at the disposal of this Government for extension of adult education on condition that this Government contribute an equal amount. In view of the great importance of this scheme, this Government agreed to the condition, despite the financial stringency. The Central grant and this Government's contribution have to be spent before the end of 1952-53. To derive the maximum benefit out of the allotment, this Government have recently sanctioned a comprehensive scheme of adult education. There are at present 1,166 adult schools working with a strength of about 24,000 pupils. There are ten rural colleges of which three are for women and seven for men. Their strength is 286 (men 229 and women 57). A provision of Rs. 12,00,000 has been included in the Budget under this item.

The National Cadet Corps

Another noteworthy achievement is the establishment of the National Cadet Corps on a sound basis. This has a Senior Division for college students with a strength of 1,959, and a Junior Division with a strength of 4,050 for school students. The training given is excellent,

and lays the foundation for true citizenship; it provides a splendid opportunity for our youths to develop character, self-discipline and comradeship; and above all, to serve our country in times of danger. I may also mention the fact that, for the recent Republic Day parade at Delhi, a small contingent of 20 boys from Madras were deputed. They won special recognition all round.

At present 16 colleges and 69 schools have National Cadet Corps Units. Requests from certain institutions for the formation of units of their own are pending, but in view of the fact that the Government of India have decided that there will be no expansion this year, these requests could not be complied with. The formation of an Air Wing at Madras which will include students from the various colleges in the city is under consideration.

Provision made for New Schemes

The provision in the Budget Estimates for 1950-51 for Education is Rs. 9,95,08,000, that in the Revised Estimates for 1950-51 is Rs. 10,31,54,000 and that in the Budget Estimates for 1951-52 is Rs. 11,40,00,000. Apart from the provision made for the routine expansion in the activities of the Department, a provision of about Rs. 63 lakhs has been made for new schemes. I have already mentioned some of these schemes. The more important of the new schemes for which provision has been made are:—

	RS.
(1) Expansion of elementary education.	5,00,000
(2) Conversion of the ten Government training schools into Basic training schools and opening of five new Basic training schools.	2,45,000
(3) Deputation of teachers for retraining in Basic Education	98,000
(4) Payment of grants for construction of buildings to Basic schools	2,00,000
(5) Supply of equipment to Basic training schools	1,00,000
(6) Introduction of bifurcated courses in selected secondary schools	1,02,100
(7) Provision for taking under Government management ten secondary schools from local bodies in 1951-52	3,11,000
(8) Lump sum provision for playgrounds	1,00,000
(9) Grants to the University of Madras for the opening of Departments of Applied Physics, Geology and Geo-Physics	2,12,700
(10) Additional grant to Andhra University for Science Department	1,50,000
(11) Additional grant for post-graduate courses in Geology (to the Andhra University)	1,05,900
(12) Affiliation in new subjects in certain colleges	60,000
(13) Opening of a second grade college in Srikakulam	Token provision.
(14) Acquisition of land for Brennen College, Tellicherry	1,00,100
(15) Increase of the recurring grant to the Annamalai University	50,000

The keynote of the Education Department in the recent years has been one of progress. There has also been a reorganisation in the Department; and a new orientation has been given to the educational system, quite in keeping with the needs of the changed times and exacting requirements of an independent country.

Towards A Social Revolution

By SRI B. PARAMESWARAN, Minister for Rural Development

The total demand of Rs. 71,50,000 is made up of Rs. 64 lakhs for Harijan Uplift and of Rs. 7.5 lakhs for the Backward Classes. Besides this, a sum of Rs. 46,47,000 is also provided for expenditure on Harijan Uplift from the One Crore Harijan Fund. On the whole, a provision for expenditure of Rs. 1,10,47,000 for Harijan Uplift is made for the year. It is common knowledge to all of us that the Madras Government have long been alive to the fact that the pitiable plight of the "untouchables", whom the Father of our Nation lovingly renamed as "Harijans", was a national disgrace and an evil of great magnitude, crying for immediate relief. Over three decades back the Madras Government initiated schemes designed to benefit the Harijans; and they concentrated in the early stages on helping the educational advancement of these communities, as they realised that education is the lever by which the economic condition of the community can be raised.

Although for the last 30 years or more the Madras Government have been tackling the problems of the Harijans, it was given only to the Congress Government to increase and intensify the ameliorative measures carried out for the benefit of the Harijans. Against the small expenditure of a few lakhs of rupees incurred for the cause of Harijans in the early years, the Congress Government are spending several times the amount. During the current year, I expect the expenditure to cross the One Crore limit and in the Budget Estimate for 1951-52, a provision of Rs. 110.5 lakhs has been made.

Educational Advancement

Great emphasis continues to be laid on the educational advancement of the community and a large sum of over Rs. 85 lakhs relates to expenditure on educational activities of the Harijan Welfare Department. This includes a sum of Rs. 21 lakhs for payment of Boarding Grants to Hostels, Rs. 20.5 lakhs towards pay and allowances of teachers and other staff employed in the Harijan Welfare Schools, Rs. 17 lakhs for mid-day meals, Rs. 10 lakhs for compensation payable to schools for admitting Harijans free of fees in the Elementary and Secondary Schools, another Rs. 10 lakhs for scholarships and Rs. 2 lakhs for the maintenance of 21 hostels run by the Government themselves, and the remaining for other miscellaneous items of expenditure.

In this connexion, I must refer to some adverse, shall I say, uncharitable criticism levelled against the Government that they have withheld or taken away some of the concessions hitherto enjoyed in the field of education by members of the Scheduled Castes who have been converted to Christianity. The criticism is based on a misapprehension. Prior to 1948, the Harijans and the converts to Christianity from that community were in receipt of only half-fee concessions in the Elementary and Secondary

From the speech of Sri B. Parameswaran, Minister for Rural Development, moving Demand XXIII—Harijan Uplift in the Madras Legislative Assembly for Rs. 71,50,000.

Schools. An additional concession was granted to Harijans in 1948. From that year, the Harijans were granted full-fee concessions in the Elementary and Secondary Schools, the cost involved in the grant of this concession being met from the Harijan Welfare Fund of One Crore Rupees, a fund specially constituted for the exclusive benefit of Harijans. Converts to Christianity from the Harijan community could not, therefore, have this benefit from the Harijan Welfare Fund which is specially intended for the sole benefit of Harijans.

Such converts, however, continue to enjoy the half-fee concessions in the Elementary and Secondary Schools hitherto enjoyed by them; and they have not been denied any concessions which they were enjoying previously. Again, while all these converts are entitled to the half-fee concession in the Elementary and Secondary Schools, the Harijan Welfare Department grants to many of them scholarships, to meet the other half of the fee. In effect, therefore, the converts are not really put to the need to pay any fees in the Elementary and Secondary Schools, when they get the scholarships.

Schools and Scholarships

The policy of the Government has been to endeavour, as far as possible, to get the pupils belonging to eligible communities admitted into the schools already existing in the locality and to open separate schools for them only in places where, either owing to caste prejudices or other causes, the need for such schools is actually felt. A number of separate schools are run by the Government and mid-day meals are given to all eligible pupils. There were 1,290 schools in 1949-50 and the number of teachers was 2,834. The number of children receiving education in the schools was nearly a lakh or, to be more precise, 98,744.

Besides running separate schools, a number of scholarships and stipends to pupils belonging to eligible communities are sanctioned. These scholarships are also given for professional, commercial and industrial courses. The total number of scholarships granted during 1949-50 rose to 13,969 from 7,697 in 1948-49. The expenditure on the scholarships has also correspondingly increased from Rs. 3 lakhs in 1948-49 to Rs. 5.5 lakhs in 1949-50.

Grants for Boarding Homes

In the beginning the Government were awarding grants towards the cost of maintenance of boarding homes as an item of amelioration intended for the education of the Depressed Classes. In addition to these grants to boarding homes, individual boarding grants were also sanctioned for the first time in 1923-24 for the children of Koravas of Ramanathapuram District. This scheme of individual boarding grants was subsequently extended to the pupils of the Depressed Classes. The scheme of individual boarding grants was instituted to enable the Hindu pupils of the eligible communities studying in the various schools to secure admission in the boarding homes run by missionaries and in the boarding homes attached to other institutions.

But as large numbers of Harijan hostels have subsequently sprung up in all districts, the Government abolished the system of individual boarding grants; and in lieu of it sanctioned lump-sum boarding grants from the year 1948-49. During that year the amount spent on the payment of lump-sum boarding grants was Rs. 6.6 lakhs. This expenditure increased to Rs. 10 lakhs in 1949-50 and is expected to reach the figure of Rs. 16.6 lakhs in 1950-51. For 1951-52 the provision is as much as Rs. 21 lakhs. From the facts and figures given by me it will be very clear that there has been a phenomenal increase in the amount spent towards the payment of subsidy to privately managed hostels; and it is difficult for Government in the present financial stringency, to provide much larger sums. As against 327 hostels subsidised during 1948-49 for 6,753 pupils, the number has increased to 356 in 1949-50 for 8,580 pupils and to 451 in 1950-51, for about 11,000 pupils.

Even in regard to hostels maintained by Government there has been a gradual increase in the number. We had only 14 hostels in 1949-50; and we took over four more during the current year; and in 1951-52 we will further take over three more hostels, making the total number of hostels run by Government 21. In addition to the Government themselves running hostels and to their subsidising private ones, the Government are also making grants towards half the cost of constructing buildings for hostels which have been in existence for five years and more. It is proposed to give during 1951-52 grants on the above basis for the construction of seven hostels. The Government will consider the case of other hostels in subsequent years.

Recognition of Hostels

The Government have thus been making every effort to see that with a view to provide shelter and to supply good food to the Harijan students, hostel amenities are made available in all places where educational facilities are available, and this is amply borne out by the statistics given by me.

In the matter of recognition and grant of Government subsidy to hostels run for the benefit of pupils of eligible and backward communities, there has been some misconception; and the Government issued two Press Notes, one on 25th April 1950 and the other on 6th February 1951 explaining the policy of the Government in the matter. They made it very clear that no hostel will be admitted to Government grants, unless it is recognised by the Director of Harijan Welfare and that for the purpose of recognition, the management of a hostel should submit an application in the prescribed form to the Director of Harijan Welfare. These hostels subsidised by Government having in recent years grown very rapidly both in number and strength, the Government are anxious to see that those grants are made only to hostels run on proper and sound lines.

Provision of House Sites

The other important question is that of providing living accommodation by the provision of house-sites. House-sites are provided by assignment of waste or poramboke lands at the disposal of the Government free of cost to needy persons among the eligible communities. During the year 1949-50, 191 house-sites covering an extent of 8.72 acres of Government land were provided in the

various districts. The total number of house-sites thus provided since the commencement of the operations up to the end of 1949-50 was 49,203.

When suitable Government lands are not available, private lands are acquired for the purpose of providing house-sites. During 1949-50, 576 house-sites covering an extent of 41.5 acres were provided by acquisition of private lands; and the total number of house-sites provided by this method up to the end of 1949-50 was 46,001. In order to speed up the acquisition of land on behalf of the eligible communities and to watch the progress of the work done, the Government have directed the Collectors of districts to submit quarterly progress reports to the Board of Revenue on the work done; and these reports are reviewed by the Board of Revenue.

The Government were in the beginning meeting only half the cost of acquisition of private sites subject to certain maximum limits, the balance on the cost being recovered from the Harijans either in instalments or in one lump sum. The pecuniary conditions of the Harijans were so bad that they were unable to meet even half the cost of the land and the result was that there was no appreciable progress in the matter of acquisition of house-sites. Considering the deplorable condition in which the Harijans were housed, the Government have liberalised their policy and enlarged this concession. They have undertaken with effect from 12th November 1949 to meet from provincial funds the entire cost of acquisition of house-sites in the case of those who cannot afford to pay the cost. Thus while the poor Harijans had to pay till 12th November 1949 half the cost of the house-sites acquired for them, they are now granted sites free of cost.

Present Policy of Free Sites

The present policy of granting house-sites free of cost to those who cannot afford to meet their cost in lieu of the old system of recovering half the cost of acquisition, has been well received. It has helped to provide more and more of house-sites. As against an expenditure of Rs. 12,000 in 1948-49 and Rs. 15,000 in 1949-50, the Government expect to incur an expenditure of about Rs. 2 lakhs during the current year, in districts other than Tanjore. In Tanjore, where the situation has been very peculiar in that the Harijans and the agricultural labourers were in constant danger of being evicted from the manaikkats of the Mirasdars, it was found necessary to make a separate special provision of Rs. 5 lakhs for the acquisition of house-sites.

Special staff was employed to speed up land acquisition proceedings. It is expected that under this special arrangement a sum of Rs. 2.4 lakhs will be spent in Tanjore alone in the current year. This large expenditure of over Rs. 4 lakhs during the current year, as against a few thousands only in the two previous years, is an eloquent proof of the good and speedy work turned out in the matter of acquisition of house-sites, particularly because of the tedious and laborious process involved under the Land Acquisition Act. In special cases, the aid of the urgency provisions of the Land Acquisition Act has been invoked to expedite the Land Acquisition proceedings.

The Housing Problem

The housing problem of Harijans is, no doubt, an important one. The Government have been examining how

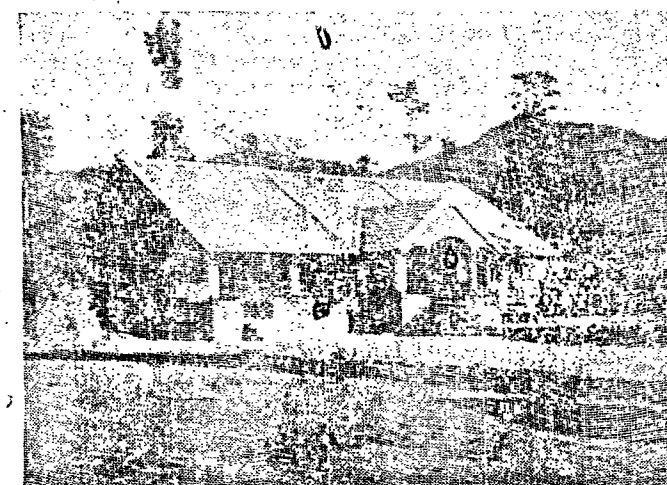
best to tackle this problem. The Harijan Welfare Committee proposed that a plan of a building might be got prepared by the Engineering Department at a cost of Rs. 1,000 per house and that 50 per cent of the cost should be met by the Government, the other half being given as loan recoverable in easy instalments spread over a period of 20 years. The Government accordingly got two designs, one at a cost of Rs. 1,000 for a building of a plinth area of 269 square feet and another at a cost of Rs. 980 for a house of 224 square feet. These buildings proposed by the Chief Engineer at such high cost are, however, only semi-permanent structures. Further, the cost involved in providing such houses to all houseless Harijans will be stupendous.

The Government had, therefore, eventually to drop the proposal in view of the enormous cost involved in the proposal. They are now examining why certain facilities should not be afforded to the Harijans to help them to build their own houses, by making a free gift of building materials such as timber, stone, etc., and by the grant of permits for the quarrying of stone and earth required for the buildings, if need be, even beyond the limits of the villages. The question, whether, if some philanthropic gentlemen come forward to pay a considerable portion of the cost of constructing a Harijan colony or a set of houses, the Government may not avail themselves of such offers by meeting an equal cost from State funds, the balance, if any, being borne by the Harijans themselves, is also being examined in consultation with the Heads of Departments. It is hoped that the Government would be able to tackle the problem in some measure, although the problem is certainly very vast considering the colossal funds that would be required to deal with the problem satisfactorily.

The welfare schemes calculated to improve the conditions of Harijans carried out through the Harijan Welfare Department in the matter of housing are at present limited to those in rural areas. The Municipal areas and the Corporation of Madras are excluded at present from these benefits, for the reason that the Municipalities and the Corporation are responsible for attending to the needs of the Harijans and other poor employees in their areas. The Government are, however, aware that the present position in regard to the housing of Harijans and other poor labourers in Municipal towns is also far from satisfactory. The local bodies who are primarily responsible to attend to these needs of the Harijans have been requested to take early steps to provide houses for their labourers to the extent to which their finances permit and the Government have promised to consider on merits the grant of financial assistance subject to availability of funds, these local bodies for schemes undertaken by them for the construction of houses for their labourers.

Clearance of Slums

In this connection I am glad to be able to announce that at my instance, the Mayor of Madras has actively taken up a scheme for the clearance of slums in the City of Madras. The Corporation of Madras has floated a public loan of 15 lakhs of rupees for the clearance of slums. It has already been over-subscribed, the subscriptions having amounted to Rs. 31.25 lakhs. The Corporation has already spent during the current year Rs. 2½ lakhs out of its normal revenues for the clearance of seven slums. It proposes to spend Rs. 15 lakhs out of the loan amount during



CO-OPERATIVE SOCIETY: This neat building, which houses the Pambethadi Multipurpose Co-operative Society in Kanhadka, South Kanara, was constructed with the aid of Rural Development grant

1951-52 for the clearance of 23 slums and to provide them as well as the localities in which the new houses will be built, with water supply, underground drainage, flush-out latrines, electric lighting and asphalt roads. Each house will also be provided with access to the public road.

As usual, necessary funds have been made available for the construction and repair of wells, pathways, etc., and the provision of other sanitary amenities.

Extension of Activities

The following are a few of the further extension of the activities of the Harijan Welfare Department during the current year. Residential scholarships were granted till recently only to pupils reading in IV Form and above; and from the current year, the residential scholarships are granted to pupils reading in Forms I to III also, at the rate of Rs. 150 per pupil per annum. The question of providing legal assistance to the Harijans who are generally too poor to bear the legal expenses which have to be incurred whether in defending themselves in legal proceedings launched against them by Caste Hindus or in conducting the cases launched by them against Caste Hindus was examined. It was held that ordinarily no State aid need be given to Harijans in legal proceedings, except to the extent specified in Rule 157 of the Criminal Rules of Practice. The Collectors have, however, been asked to bring to the notice of Government cases specially deserving of aid in the interests of justice with details of the facts of the case, explaining also the need for the grant of State legal aid. On the Government approving the proposals, the Collectors can arrange the necessary legal assistance.

Mid-day meals were supplied to the various Harijan Welfare Schools by contractors at different rates varying from Re. 0-1-6 to Re. 0-1-9 per meal. In view of the rise in prices of foodstuffs, the Government have enhanced with effect from 8th August 1950, the rate to Re. 0-2-6 per meal uniformly in all the districts. This small increase in the rate alone costs Government Rs. 5 lakhs per annum.

On the recommendation of the State Harijan Welfare Committee, the Government have directed that, in future, ten per cent of the seats in all Government Harijan hostels should be reserved for Hindu Backward class pupils, who are getting Boarding Grants from the Harijan Welfare Department. This will help to bring together the Harijans and Caste Hindus, and thus pave the way for their fusion.

The One Crore Fund

There has been a strong feeling amongst the Harijans that the One Crore Harijan Uplift Fund is not being utilised exclusively for Harijans, but that it is also diverted for the benefit of the Christian converts and other eligible communities. In addition to Rs. 64 lakhs spent since 1949-50, every year from the general funds towards the amelioration of the conditions of the Harijans and other eligible communities, a sum of Rs. 18 lakhs was diverted in 1949-50, Rs. 42 lakhs in 1950-51 and another sum of Rs. 46 lakhs is proposed to be diverted during 1951-52 from the One Crore Fund. In addition to the amounts diverted from the One Crore Harijan Uplift Fund, a good portion of the provision of Rs. 64 lakhs made from the general revenues has been, and will continue to be, utilised for the benefit of Harijans alone.

In the Budget, however, there are no separate details of expenditure incurred on Harijans and that on converts to Christianity from the Harijans, except in respect of two small items relating to scholarships and schooling charges and clothing of boys. I shall have it examined whether in respect of other items, provision cannot be made separately for Harijans and the Christian converts from Harijans.

Harijan Welfare Department

The Department of Harijan Welfare charged with the duty of carrying out the ameliorative measures for the Harijans and other Backward Classes, came into existence only a couple of years back. The Labour Department which was in charge of the work connected with Harijan Welfare was relieved of this work from 1st April 1949, as that Department had, of late, to devote increasing attention to industrial labour problems; and a separate Department called the Harijan Welfare Department was formed only with effect from 1st April 1949 with Sri V. Bhashyam Ayyangar, a retired Judge of the High Court of Judicature, Madras, and a tried worker in the cause of Harijans, as Honorary Director of the Department. He is assisted by two Deputy Directors drawn from the cadre of Deputy Collectors of the Madras State Civil Service. A District Welfare Officer of the grade of Deputy Collector is working in each of the eight districts where the work is heavy and a senior Tahsildar in each of the remaining districts, with necessary staff to assist them in carrying out the work of the Department.

The large expenditure incurred through this Department itself constitutes a proper index of the useful service rendered by this Department. During the two years of its life, the Department has been responsible for spending sums of greater magnitude than in the previous years and I am sure that with the experience so far gained, the Department will be able to achieve substantial and abiding results in the years to come. I will be failing in my duty, if I do not, in this connexion, make a special mention of the very valuable services so readily and willingly rendered to the Department by Sri V. Bhashyam Ayyangar, as the Honorary Director of the Department.

Dramatic Performances Exempted from Entertainments Tax Act

The Government of Madras have decided to exempt all dramatic performances (other than dance dramas, from liability to entertainment tax for a period of two years from April 1, 1951. Variety entertainments will not, however, be exempted from this tax.

The criterion for distinguishing drama from a dance drama will be that a drama is one which demands a representation on the stage by which interest is focussed on the inter-action of emotion on character and in which spoken dialogue and facial expressions are employed to reveal the impact of circumstances on the various dramatic personae, whereas in a dance drama the interest is focussed more on the dances than on the emotional situation, and the conflict is sought to be revealed not by dialogue but by dance-movements and gestures.

The inclusion in a regular drama of one or two dance portrayals which are not organically related to the central theme of the drama and which do not affect the course of the development of the plot will not vitiate its character as a drama. The *Kathakali* for this purpose will be regarded as a dance-drama.

Fusion of Harijans with Caste Hindus

There has been an agitation in a section of the public that by the various special ameliorative measures carried out to benefit the Harijans, we are segregating the Harijans and setting them up as a separate and permanently untouchable community and that the every object of the abolition of untouchability is thus being defeated. I made it very clear even last year that the very purpose of all the Harijan welfare work, in its essence, is the complete eradication of untouchability in all its forms, and that it is not, as some imagine, the mere transformation of a depressed and suppressed class into a favoured class. The Government are fully alive to the fact that the various measures carried out by them for the advancement of the Harijans should not tend to create a separate and distinct class or community for ever, but should, on the other hand, aim at the complete fusion of the Harijans with the rest of the community.

To facilitate such complete fusion, active help to the Harijans to come up to the average level of the other communities in education and economic condition is an imperative necessity. I may, at this stage, make mention of the very valuable work done in this direction by the Harijan Sevak Sangh and to other social reform organizations. As a result of their endeavours and of the steady, though not very fast, but sure, economic upgrading of the conditions of the Harijans through the efforts of the Government for the last over three decades, I am already witnessing the beginning of India's social revolution, whose foundation Gandhiji laid. The barriers which separated the Harijans from the rest of the community are slowly crumbling down.

Work of the Rayalaseema Development Board

The Rayalaseema Development Board met twice during the quarter ending December 31, 1950. The Fourth Meeting of the Board was held on the 3rd October 1950 at Hospet, Bellary District, and several subjects relating to Agriculture, Electricity, Industries, Communications and Co-operation which also included some of the proposals of Sri P. V. Subba Rao, made in his Report for the Economic Development of Rayalaseema, were discussed. The Fourth Meeting commenced with an opening speech by the Chairman. The Chairman made a detailed review of the stages of the several developmental schemes in the Rayalaseema area, particularly the Tungabhadra Project and other Major Irrigation Schemes, viz., Pennar-Kumudavathi, Upper Pennar and Bhairavanthippa Projects and the Tungabhadra Hydro-Electric Scheme.

AGRICULTURE

The question of starting an Agricultural Research Station at Dharmavaram for evolving improved strains of paddy for red soil areas was once considered and deferred by the Government and the Director of Agriculture was requested to renew the proposal in proper time for consideration as a Part II Scheme for 1951-52. The Director of Agriculture renewed the proposal and requested the Government to approve the scheme for inclusion in Part II Scheme for 1951-52. The Board considered the proposal of the Director of Agriculture and recommended to Government for its early sanction and execution.

The Board also considered the proposal of the Director of Agriculture for the establishment of a Fruit Service Extension Unit for the development of Horticulture in the Rayalaseema districts. The Board considered that for this type of intensive propaganda towards fruit development in Rayalaseema, the staff provided for the establishment of Model Orchard cum Nursery in Chittoor District would be inadequate and therefore recommended to Government for early sanction of the scheme.

The Board considered the proposal of Sri P. V. Subba Rao in paragraph 64 of his Report, viz., granting of a subsidy of Rs. 25 an acre for encouragement of Fruit Growing, and decided to drop the proposal as in its opinion, the ryots are themselves showing preference to fruit cultivation which is now more paying to the growers than food crops. The Board considered the proposal of Sri P. V. Subba Rao in paragraph 29 of his Report, viz., raising of paddy nurseries by sinking of wells in tank beds and to induce the ryots to give up the practice of drill sowing of paddy and resolved to drop the proposal as it is neither practical nor feasible.

INDUSTRIES

The Board considered the proposal initiated by the Development Commissioner that stipends may be extended uniformly to all the trainees in the Rayalaseema Polytechnic, Bellary, and increased wages be paid to the workers to ensure better standard of training. The Board accepted the proposal and resolved to recommend to Government that all the trainees in the Polytechnic, Bellary, may be given stipends uniformly at the existing rates and that this may be limited to a period of five years.

The Board also considered the proposal of Sri P. V. Subba Rao in paragraph 98 of his Report that an Industrial School may be opened each at Cuddapah, Nandyal and Kuppam. The Board was of the opinion that the existing schools should be improved before opening new schools. The proposal was therefore not pressed.

ELECTRICITY

The Board considered another proposal initiated by the Development Commissioner that the selected Firkas which are in the vicinity of the existing power lines in the Rayalaseema districts should be electrified as expeditiously as possible. The Board accepted the proposal and requested the Government to call for estimates in respect of all unremunerative schemes from the Electricity Department and sanction them immediately for execution.

CO-OPERATION

The Board considered the proposal of Sri P. V. Subba Rao in paragraphs 104 and 105 of his Report that twenty godowns may be constructed for commercial crops in the Rayalaseema districts during a period of five years at an estimated cost of Rs. 12 lakhs, 50 per cent of the cost to be given free and the balance to be recovered in twenty instalments. The Board decided to drop the proposal in view of the concessions already granted by the Government in G.O. Ms. No. 1807, dated 2nd April 1949.

COMMUNICATIONS

The Board recommended to Government to resume the construction of the bridge at Kalvapalli in Anantapur District as expeditiously as possible in view of the importance of the bridge and the incomplete state in which it was left after spending huge amount over it. The Government have since issued instructions to the Chief Engineer (Highways) to expedite the construction of the bridge. The Board considered the proposal of Sri P. V. Subba Rao in paragraphs 107 to 109 of his Report for the development of communications in the Rayalaseema districts. The Board recommended to Government to give full grants to all the District Boards in Rayalaseema area for the formation of new roads and to make these grants unlap-sable. The Board requested the Government to reconsider their orders refusing the grant of Rs. 5 lakhs to Cuddapah District Board in view of the bad condition of the roads in the district. The Board resolved to request the Government to take over all Major District Roads as early as possible. The Board also recommended to Government that all the fanline roads in the Project area whether vested in the District Boards or not, be taken over by the Highways Department and maintained. Regarding the roads in the non-Project area, the Board decided that they should be examined by the Highways Department and the important among them be taken over and maintained by the Highways Department.

The Government have informed that the District Board, Cuddapah, has provided Rs. 7.1 lakhs for the maintenance of roads and for capital works in the current year and that when this amount is spent, the District

Board roads would be substantially improved and that it is, therefore, not necessary to sanction any special grant at present. The matter will be taken up for further consideration by the Board, if necessary.

HOUSING

The Board considered the proposal of Sri P. V. Subba Rao in paragraph 116 of his Report, viz., to spend Rs. 20 lakhs on the improvement of housing conditions of the Harijans in the Rayalaseema districts. The Board considered that as a five-year scheme for provision of house-sites to the Harijans in the State is under preparation by the Honorary Director of Harijan Welfare and that under this scheme, the expenditure to be incurred in Rayalaseema is likely to exceed Rs. 20 lakhs, the proposal made by Sri Subba Rao was not pressed.

IMPLEMENTING THE SCHEMES

The Board recommended to Government the opening of a District Poultry at Hindupur in Anantapur District.

The Board also recommended to Government the proposal of the Director of Agriculture that 50 per cent of the cost of seedlings may be borne by Government for

Tackling the Problem of Soil Erosion

Soil erosion is a slow and gradual process which has devastating effects on agricultural economy. Every year thousands of tons of fertile and valuable top soil are being washed away as a result of unscientific land use. Consequently, the soil loses its natural fertility and become barren in course of time, rivers and tanks silt up, the general water table is lowered and rainfall becomes infrequent and scanty. It is common knowledge that soil erosion has wrought great havoc in the Nilgiris and other hill slopes in recent years in consequence of the denudation of forests to meet the demands of the Defence services, Government departments and the civil population for timber and fuel and the clean tilling of the soil for raising potatoes. The erosion problem has been engaging the attention of Government for some considerable time. With a view to concerting effective steps to deal with this insidious menace, a conference was held in Madras in August last under the Chairmanship of the Hon'ble Chief Minister. The several aspects of soil conservation were considered at this conference and certain decisions were reached. In pursuance of these recommendations the Government have taken action as indicated below:

1. A Soil Conservation Board has been constituted for the State with 12 members. One of the members will be a representative of the planting interests on the Nilgiris. The Board will generally initiate and co-ordinate all work in the State concerning soil and water conservation, afforestation, land utilization, etc.

2. The Madras Land Improvement schemes (Contour Bunding and Contour Trenching) Act, 1949, has been extended to the Nilgiris District and the outer slopes in the Goochettipalayam and Avanashi Taluks of the Coimbatore District and the Wynaad, Ernad and Walluvanad Taluks of the Malabar District with effect from 6th September 1950. Under the provisions of the Act, the Government may cause a Soil Conservation Scheme to be prepared in respect of any area and call upon the owners of land to carry out the

encouraging the growth of coconut trees in wet lands. As regards the progress of implementation of the schemes recommended by the Board at its previous meetings, the Government have issued orders sanctioning the following schemes:—

1. Tungabhadra Hydro-Electric Schemes.
2. Upper Pennar Project.
3. Bhairavanthippa Project.
4. Ex-gratia grant of Rs. 2,000 to the Pennar Leather Manufacturers' Co-operative Society.
5. Purchase of water tanks and a wire gauge to the Laboratory for the working of the Fruit Canning Factory at Kodur, Cuddapah District.

The execution of the Pennar-Kumudavathi Project is under progress and a sum of Rs. 35,000 has been spent up to the end of 15th November 1950.

Regarding the Upper Pennar Project, one Executive Engineer has been posted and one Assistant Engineer and two Supervisors have already joined duty. The Board is watching the progress of the development of electricity under the Ceded Districts Scheme.

works. Where the land owner is not willing or is unable to execute the work himself, the Government may have the work executed through departmental agency, the cost being recovered from the beneficiary owner either in a lump sum or in annual instalments at his option. The Government have accordingly directed the Board of Revenue to prepare detailed plans and estimates for a scheme of soil conservation in the Nilgiris.

3. The question of amplifying the Act so as to provide for certain additional matters relating to soil conservation is under the consideration of Government.

4. The Government have banned the assignment of lands in the Nilgiris District for a period of ten years except to political sufferers of that district. The ban will not, however, apply to assignments already made.

5. The Government have also asked the Collector to take steps to prevent the cutting of trees in unreserves in the Nilgiris District. They have also banned the cutting of bluegum trees in patta lands exceeding 50 cents in extent in certain villages in the Nilgiris except under a permit to be granted by the District Forest Officer, Nilgiris. The question of extending the ban to all trees and to extents of 50 cents and less is under consideration.

6. The question of afforesting the hills and planting other species besides bluegum and wattle in the Nilgiris is under the consideration of Government.

7. It has been decided to amend the Madras Forest Act, 1882, and incorporate in it the provisions of the Madras Preservation of Private Forests Act, 1949, and such other provisions as may be necessary to deal with soil conservation problems.

Constructive suggestions from the public in regard to soil conservation on the Nilgiris and other hill slopes are welcome. Communications containing such suggestions may be addressed to the Secretary to the Government of Madras in the Development Department, Fort St. George.

Revival of Cottage Industries

The attempt to develop cottage industries in this State on an organised basis which was first made towards the end of 1946, has received a great impetus in 1950-51. It has been found that the village people being mostly agricultural, the cottage industries to be developed in their interest should be of two kinds, one serving as a subsidiary occupation for the agriculturists in their off-season and the other as the main occupation to many of the traditional village artisans. The experience gained in the last four years showed that the village artisans and the villagers in general have been struggling under adverse conditions such as want of finance, non-availability of raw materials easily at reasonable low prices, want of proper tools and implements and lack of marketing facilities for the products.

With a view to overcome these difficulties, this Government sanctioned early in January 1950 a comprehensive scheme for the revival of the dying village industries. The scheme provides for the free distribution of labour saving tools and implements costing about Rs. 6 lakhs to the deserving village artisans in the areas selected for rural reconstruction work. Provision has also been made for the supply to the villagers at their own places of raw materials at cost price through co-operative agencies, and for this purpose an advance of Rs. 12 lakhs has been sanctioned by Government. This scheme has already been functioning satisfactorily. The formation of suitable co-operative agencies in the villages for the purpose of distributing raw materials has recently been sanctioned. Two Model Centres, attached to each of the Grama Sevak Vidyalyams at Kallupatti in Madurai District and at Gopannapalem in West Godavari District, impart training to at least 30 artisans at a time, in village industries for five months, two courses being conducted in a year. With the functioning of these agencies and centres good progress is expected.

Another scheme prepared by Sri M. Visweswarayya for the development of small scale rural industries has also been sanctioned in January 1951. The scheme is being tried as an experimental measure in two taluks in each of the districts of Nellore and Tiruchirappalli and will be extended to other taluks in the Districts subsequently if it produces satisfactory results, the entire district being covered in the course of two or three years. This scheme provides for the formation of village group units for every 15 to 20 villages with a population ranging between 10 to 20 thousands and the constitution of Village Group Committees for these units composed of the most competent businessmen and leaders available in the area, the Government agents advising them in the discharge of their functions, wherever necessary. A co-ordination committee will also function in each taluk consisting of all the presidents of the Group Committees as members and presided over by the Director of Industries and Commerce. This scheme will be complementary to the Village Industries Scheme sanctioned early in January 1950. It is proposed to give annual grants not exceeding Rs. 1,500 to each of these Group Committees. By this scheme it is expected that discipline, habits of self-reliance and collective effort, will be inculcated among the villagers besides increasing the production from the rural industries and the consequent income from them.

Besides these general schemes, training is also being given in select industries, such as glass bangles and beads industry at Kalahasti and at Kasargod, the coir industry at the Beypore Coir School and the leather making and tanning industry through demonstration parties formed for the purpose. The construction of a building at Rajahmundry for the Ceramic Service Centre is in progress. With a view to develop certain select industries such as (1) match industry, (2) palmyra fibre and leaf products, (3) leather goods manufacture, (4) woollen cumby and blanket weaving, (5) pile carpets and (6) hand made cotton lace, six Advisory Boards have been constituted in the areas where these industries have established firm traditions to advise Government as to the measures that should be taken to develop them.

A State Cottage Industries Board has also been formed to devise ways and means for the intensive development of cottage industries in this State. It has met once and a survey of the industries has been made by the Economic Adviser to this Government and it was placed before the Board for its consideration on 26th March 1951. State aid, up to Rs. 500 in each deserving case, is being given to cottage industrialists by the Director of Industries and Commerce under the Madras Cottage Industries Loans and Subsidy Rules, 1948, issued under the Madras State Aid to Industries Act, 1922.

The development of the drugget industry is also receiving the best attention of this State and the Mysore State which is equally interested in the development of this industry. An Inter-State Joint Drugget Industry Advisory Board for Madras and Mysore has been constituted for the purpose and it has fixed standards and specifications for druggets intended for export to U.S.A. where there is a good market for it. Druggets which do not conform to the standards fixed are not permitted to be exported. To enable the drugget manufacturers to secure tannery wool at reasonable prices and to the extent required by them, the Government of India have banned the movement of tannery wool to places other than Wallajah, Salem and Bangalore. Druggets are dollar earners for India and every effort is being made to encourage this industry.

B. PARAMESWARAN,
Minister for Rural Development.

Multipurpose Activities

The Kollar Multipurpose Rural Credit Society

The Kollar Multipurpose Rural Credit Society in Gingee Taluk of South Arcot District was registered on 11th April 1915. There are at present 120 members on the rolls with a paid-up share capital of Rs. 1,544. It has invested Rs. 631 in the shares of the South Arcot Co-operative Central Bank and Rs. 75 in the shares of the South Arcot District Co-operative Central Stores, Limited. The maximum borrowing power of the society is Rs. 20,000. As on date 116 members are indebted to the society to the extent of Rs. 14,659 in 134 loans. The society is indebted to the extent of only Rs. 13,972 to the South Arcot Co-operative Central Bank and there are no overdues to the District Bank either on account of principal or interest. Only seven members are defaulters and the overdues from members amount to Rs. 601 under principal and Rs. 36-11-0 under interest, and only one of the loans to the extent of Rs. 3-11-3 under principal and Re. 0-2-6 under interest are overdue for over one year. It is expected that even this small amount of Rs. 601 under principal and Rs. 36-11-0 under interest will be collected during the present harvest season, and the society classed as one of the best run rural credit societies.

The society has been sanctioned a cash credit loan of Rs. 1,000 for meeting its short-term requirements and for financing the several agricultural operations such as sowing, weeding, harvesting and marketing of the members' produce, and a further cash credit of Rs. 500 was sanctioned on 18th September 1950 for undertaking the purchase and sale of handloom textiles. The society is making the best use of the cash credit accommodation sanctioned to it and is periodically converting them into short-term loans under the scheme of *post-sanction* of loans, which is working well in this district.

"One of the primary objects of the scheme is to convert the existing rural credit societies into multipurpose societies in a period of two years and within the framework of the by-laws so that they might cater to all economic needs of their members, besides providing credit which was hitherto their main function, and help the villagers in the triple programme of "better farming, better business and better living." Under this programme of expansion of rural credit societies in this district, multipurpose activities of one kind or other, have been introduced for the welfare of the members such as supplying their domestic requirements, supply of agricultural requirements, marketing their produce, collection and sale of milk, introduction of thrift through hundi boxes, encouragement of cottage industries, construction of godowns, introduction of social and recreational activities, etc.

This society at Kollar in Gingee Taluk took up these activities only from 12th September 1949 and within a year, it has undertaken multipurpose activities dealing with handloom and mill textiles, stationery, distribution of chemical manures, etc. It has so far purchased mill made and handloom cloth, stationery, etc., to the value of Rs. 1,023 and sold goods worth Rs. 998 with an unsold stock of Rs. 103-6-0 which will be disposed of soon, and has benefited 110 members. It has purchased one ton of ammonia valued at Rs. 380 and distributed it to 30

members. It is only after 35 years of working the society, the members have realised how useful a rural credit society can be in catering to their all round needs.

The Saliyamangalam Multipurpose Rural Credit Society

Saliyamangalam is one of the headquarters of the Rural Development work. It lies on the main road from Tanjore to Nagapattinam. The area of operations of the Saliyamangalam Society extends to Saliyamangalam revenue villages and Pachaikottai, hamlet of Puthur, having a population of about 3,000 people.

The Co-operative Society in this village was registered on 30th October 1918 and started work on 20th November 1918. After 22 years of service to the rural public today it stands with 78 members on roll with a paid-up share capital of Rs. 1,240. The members have got a net asset of Rs. 18,891-7-6 and the maximum borrowing power of the society is Rs. 20,000. An individual member can borrow up to Rs. 2,000. The society has advanced loans to a tune of Rs. 9,423 while the amount due to the Co-operative Central Bank, Limited, Kumbakonam, is Rs. 8,214.

The society was able to accumulate a Reserve Fund of Rs. 2,764-4-0 out of which a sum of Rs. 2,624-13-0 has been invested in the Co-operative Central Bank, Limited, Kumbakonam. The society has taken shares in the Central Bank to a value of Rs. 500. To cultivate the habit of thrift among members the society has started various savings schemes such as Home Safe, recurring and fixed deposits. The amount accumulated in hundies by members has amounted to Rs. 565-11-6.

The scheme of introduction of non-credit activities was implemented in this society in the year 1949. The society undertook the sale of textiles and other necessities of life. The society has sold textiles to an extent of Rs. 5,840-3-8 and other provisions, such as coffee seeds, cotton seeds and oil for Rs. 1,210-6-0. The society has earned a good name in this area for production and distribution of good gingelly oil. To increase the food production the society has purchased chemical fertilisers jointly and distributed to its members.

Madras Coal (Permit Fee) Control Order

The Government of Madras have promulgated an order called "The Madras Coal (Permit Fee) Control Order, 1951", to prohibit persons from purchasing coal from a dealer except under a permit or coal issue card issued by the Provincial Coal Controller.

A small fee of As. 8 per ton will be levied by the Provincial Coal Controller on the quantity of coal actually supplied against a permit or coal issue card issued by him.

This order will apply only to the coal and coke released by the Director of Controlled Commodities out of the State Quota to the various industries in this State and will not apply to the coal and coke imported by sea and distributed by Messrs. Binny & Co., Madras.

Wealth from Fish Waste

By D. P. HOPKINS, Fellow of the Royal Institute of Chemistry, Great Britain

The development of a wide range of by-products is an important aspect of a fishing industry's total economy. Thus, although the primary function of this industry, which plays such a vital role in Britain's national life, is to provide food for the inhabitants, this cannot be done without at the same time producing a high percentage of "wastage". It has been estimated that not more than 50 per cent of the fish taken from the sea is finally distributed as fresh, preserved or canned fish. With better methods of handling at sea and on land this proportion may improve in years to come. But the "wastage" percentage will always be high. All this material, however, can be converted into useful and saleable products. It is an economic loss to the industry only when it is thrown back into the sea.

Some uses of fish waste have long been known. Whole fish rejected for poor condition, as well as fish offal, can be applied directly to the land as manure. But, as fish contains 75 per cent or more of moisture, it was generally more economic to process fish waste into a drier form and use it as a more concentrated fertiliser. Today most of the fish meal produced is used as a feeding-stuff for cattle. Fish glue is another traditional by-product from fish waste treatment.

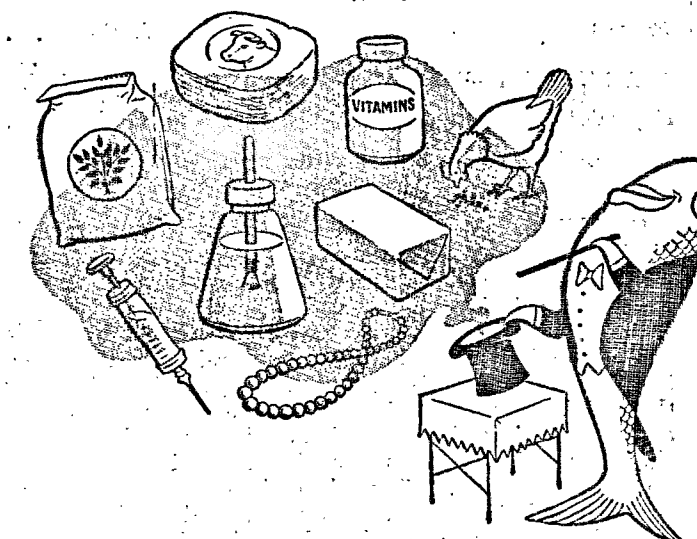
The fishing industry's contribution to margarine production is less widely recognised. The strong smell and taste of fish oil has always been a serious handicap to its use as an edible oil, but in recent years modern processes have been able to remove these objectionable features. The up-to-date fish oil and fish meal factory is clean and odourless. The plant is entirely self-contained and enclosed. Steam and vapours are quickly led off into de-odorising sections where the objectionable constituents are removed—often by special chemical reagents—before the volatile waste is released to the air. These advances in processing and plant design have stimulated fish by-product manufacture. The necessary factories can now be operated close to fishing ports.

Protein for Feeding Cattle and Poultry

The oil can be refined and hydrogenated at margarine factories to produce a hard "non-fishy" fat; the meal, when ground, is a first-class form of protein for feeding cattle and poultry without the risk of imparting flavour taints to dairy produce or eggs.

For both oil and meal production, the herring—whose body is particularly high in oil content—is an ideal fish. In 1949, Britain's herring industry provided just over 2,000 tons of oil, enough to make approximately 20,000,000 individual weekly margarine rations in the United Kingdom, and sufficient protein for 45,000 tons of animal feeding-stuffs. Moreover, these figures represent what is so far only a limited and somewhat experimental venture.

Since World War II Britain's Herring Industry Board has been energetically fostering this indirect method of using the prolific herring as a source of food, and has set up an entirely modern factory for oil and meal production. In the past herring catches have often been much greater than the total demand; fish have been thrown back to sea or the herring fleets have restricted their efforts.



BY-PRODUCTS FROM FISH: Some of the various things now being produced from the by-products of the inedible parts of fish are shown in this illustration. There is concentrated fertiliser, cattle food, vitamins, drugs, margarine, feeding-stuff for cattle and poultry, fish glue, while fish scales produce a substance used in the artificial pearl industry. The comparatively high percentage of what is called "wastage" in the fishing industry can be converted—by modern scientific research—into useful and saleable products.

(Continued on page 40)

The United Kingdom industry, however, believes that a quite different demand for herring—the oil and meal factory demand—will stabilise the economy of herring fishing. But it is not enough to supply factories with surplus herring. The factories themselves can only be economic if there is a steady supply, at any rate during the season. Some of the herring fishing must be deliberately aimed at the factory market.

Oil in White Fish

White fish are much lower in oil content, but all wastage and offal that accumulates at the ports can be similarly converted into fish meal for cattle or poultry. The oil in white fish is concentrated in their livers, and this makes a separate treatment for oil extraction possible. It is carried out on a large scale with the livers of cod and halibut, for the oils of these fish are extremely high in their content of Vitamins A and D. Today the fishing industry provides either the crude oils or the liver material for the pharmaceutical or food industries to refine into concentrated vitamin products.

But many other products from fish and fish wastage are less well known than fish oil, fish meal and the liver oils. From another part of the cod—its swim bladder—islinglass, used in jelly manufacture and beer clarification, is extracted. Fish scales might seem a particularly useless part, but several products can be made from them. Much of the substance in scales is cystine, one of the amino-acids which makes up the structure of proteins. In treatment for

Message of the Mahatma

THE POLITICAL PHILOSOPHY OF MAHATMA GANDHI

By GOPINATH DAWAN.

Pages 407]

[Price, Rs. 6.]

SARVODAYA—ITS PRINCIPLES AND PROGRAMME

Pages 60]

[Price, Re. 1.]

[Both published by Navjivan Publishing House, Ahmedabad]

Gandhiji's greatest contribution to modern thought is his insistence on the observance of an uniform moral and spiritual code for individual as well as group behaviour. Society acknowledges and bows down to norms of ethical conduct as far as the individual's private life is concerned, but in group relations diplomacy is almost an euphemism for dishonesty. The efforts for the attainment of noble ends through impure means can only lead to the frustration of the soul and fouling of the very end. There are no absolute ends as there are no perfect means. They depend on each other for strength and sustenance, grow with, and in the process of fulfilment, perfect each other. It follows then that there can be no achievement of good, without practising good or 'Satya'. Firm faith in, and devout adherence to 'Satya' in every sphere of life and in every act of ours, however trivial it may be, is the only sure and stable foundation on which our efforts to build a new order can be based.

It was once fashionable to criticise Gandhian thought as spiritualism straying into politics. Humanity has by now, had more than a taste of the evils to which the pursuit of politics divorced from ethical values can lead. The vicious circle of violence provoking more violence, of dishonesty thriving on itself, can and must be broken through. World peace cannot be attained unless peaceful behaviour and constructive endeavour are developed as individual, social and national characteristics.

Sri Gopinath Dawan's book *The Political Philosophy of Mahatma Gandhi*, is an eminently successful attempt at an analytical presentation of Gandhian thought. It is no less objective in its analysis than it is passionate in its conviction. The study is prefaced with an account of how the principle of non-violence was preached and practised in almost all countries at all stages of cultural and historical development. After an analysis of the metaphysical and ethical principles and psychological assumptions of the doctrine of non-violence, it stresses the assiduous cultivation of mental and moral discipline, so essential for a true Satyagrahi. A bibliography introducing the reader to the many valuable contributions to Gandhian literature has been added.

If Gandhiji's life was an inspiration to us, his death was a challenge. The 'Sarvodaya Samaj' is the Gandhian fellowship that has been formed to take up the challenge and keep his ideals alive. 'Sarvodaya' means the good of all—not the good of a few or the greatest good of the greatest number. The non-violent way of life and constructive, productive labour are the essentials of the 'Sarvodaya' concept. Articles expounding the ideals of Sarvodaya by Bapuji, and his close associates like

Sri Vinoba Bhave and Mashruwale have been collected in the handy booklet *Sarvodaya—Its Principles and Programme*.

INDIANS OUTSIDE INDIA

By DR. N. V. RAJKUMAR.

Published by the Foreign Department of the Indian National Congress, All-India Congress Committee, 7, Jantar Mantar Road, New Delhi.

Pages 90]

[Price Annas fourteen.]

For every hundred that stay in their motherland, one Indian seeks his living overseas. Today about four and a half million of our stock are spread all over the world from the North Atlantic over the Indian Ocean to the South Pacific. With this startling—but thrilling—bit of information Dr. Rajkumar begins his short essay on the conditions of Indians overseas. From 400 B.C. intrepid Indians colonised far-off lands. But the real problem of emigration arose only in 1833, when slavery was abolished in the Western countries and the Indenture System was formulated to provide European imperialists with cheap Indian labour for plantation work. This system, which lasted till January 1920, led to the large-scale organised emigration of thousands of illiterate rustics seeking a meagre livelihood. Almost everywhere they met with hardships and insults, and only a microscopic few could aspire to climb higher on the social scale to become lawyers, doctors, merchants, administrators, from the morass of lowly labourers in far-off lands.

Mahatma Gandhi, Gopal Krishna Gokhale, Deenabandhu Andrews and many other leaders fought the pernicious

Government Awards for Best Books in the year 1950-51

The Government have approved the proposals of the Tamil Academy, the Karnataka Sangha, and the Pan Kerala Literary Academy for the award of prizes for the best books in Tamil, Kannada and Malayalam, respectively in the year 1950-51. The prize books are:

Tamil.—*Iyal-ganitham* by T. Govinda Rajan; *Kulavi-Ullam* by Kumari E. T. Rajeswari; and *Thaimai* by Dr. Tirupurasundari.

Kannada.—*Garbini Mattu Shishu* by Sri K. Vittal Shenoy and Dr. M. A. Kamath; *Jenina Vyavasaya* by Sri Pailoor Lakshmi Narayana Rao; and *Saikhana Manovijnana* by Dr. B. Kuppuswami.

Malayalam.—*Kootukrishi* by Sri Itasseri Govindan Nair; *Bharathaparyatanam* by Sri Kuttikrishna Nair; and *Shasthradrishtiyiloode* by Sri M. C. Namboodripad.

The prizes awarded will be of the value of Rs. 500 each.

Indenture System which enslaved thousands of our countrymen. But since India herself was struggling for freedom, she could do little then to ameliorate the conditions of her overseas children.

Dr. Rajkumar surveys conditions of these 'miniature Indias' in South Africa, East Africa, Zanzibar, Mauritius, Ceylon, Burma, Malaya, Fiji, West Indies, British Guiana, Surinam and other countries. The another succinctly states the core of the problem: "While Indians will always have a home in India; where they are welcome to return any time, they should, as long as they are abroad, make common cause with their fellow countrymen even in their fight for freedom and political rights." But silken bonds of social, religious or cultural ties will hold them to the mother country.

A foreword by Dr. Pattabhi Sitaramayya, and three appendices—Statement showing population of Indians in the Commonwealth and other countries, text of Resolutions of the Indian National Congress on Indians Overseas from 1885 to the present day, and list of important organisations of Indians Overseas—enhance the value of this little book. One feels that there is scope for a larger volume on the subject, on the same authoritative lines, comparing living standards, describing development of colonial settlements and the advancement of individual and community careers and status.

MYSELF AND RURAL LIFE (Part I)

By SRI M. CHENNA SUBBA RAO.

Deenabandhu Press, Anantapur.

Pages 70.]

[Price not stated.]

A significant phrase in this short autobiography affords a clue to the character of the author and the nature of the book: "I am a small man for big things and a big man for small things." There are plenty of chroniclers for big men and big things; this book therefore should be an interesting addition to the literature on the study of the rank and file.

From his life story we gather that Sri Subba Rao, to whom opportunities for social service has ever been a trumpet call to duty, has a praiseworthy record of Congress work, as field worker, satyagrahi and Khaddar propagandist. This record is not unique, for there are thousands of careers on similar lines, devoted to the unglamorous patriotism of national work. Yet it warns one's heart to read of such accounts of selfless, altruistic service, more so since the current tendency is to take such work for granted.

After his A.I.S.A. work Sri Subba Rao settled down in Gooty; having had earlier training in Ayurveda, he opened a pharmacy, became a rural practitioner and ministered to the needs of the villagers. His work was humble yet satisfying; but he was conscious all along of the feeling that with better organisation, more could be done. A 'social conscience' would not let him rest in apathy; he had to take up various causes, and so he records his activities in various fields as land revenue remission, district board elections, co-operative societies, tank repairs, state loans, factions and feuds, free schools and village accounts. He made friends among the great and the poor; people whose interest were at stake became his enemies. He had his tilts with local authority, but these neither embittered nor enraged him.

Sri Subba Rao concludes on a note of appeal for help in the running of his institution. For all his expression of frustration, we still get the feeling that the book is the story of a soul which least regrets sacrificing self-interest to community welfare; the regret, if any, is for the absence of greater opportunities for such service. The staccato, sometimes even incoherent writing in quaint English does not veil the passion for social service.

—P.V.S.

Commercial Directory for Madras State

The Government of Madras propose to publish a Commercial Directory for this State. The value of such directories in the promotion of internal and foreign trade has been widely recognised in all the advanced countries where they are revised every year and kept up to date. The directories are usually published by commercial, industrial or manufacturers' associations, or in certain cases, by private individuals. In this State, private enterprise is not likely to cope with this work due to lack of resources, finance, and accessibility to Government statistics and documents. The Government therefore propose to undertake the work themselves. The intention is to publish the directory annually as early as possible in the beginning of the financial year.

The directory will contain detailed information regarding the natural resources of the State—agricultural, forest, mineral and industrial; various industries in the State—their output, cost, labour, power, etc.; State aid to industries; facilities provided by Government for import, export and internal trade; foreign trade service; trade statistics; and also full particulars about all manufacturers, firms and traders, their branches, representatives, trade-marks, brands, etc.; all products manufactured in the State; exporters, importers, forwarding and shipping agents, bankers, insurance companies, etc.

Some space will also be available in the publication for advertisements and the tariff for such advertisements will be fixed later on. All important firms, traders and manufacturers who want to have their names appear in the directory and those who want to advertise in it may apply with full details required at an early date either through their Chambers of Commerce or directly to the Secretary to Government in the Development (Planning and Development) Department.

Supply of Iron and Steel

The Government have directed that no iron and steel shall be released from the State non-agricultural quota for the construction of rice mills and oil mills except under their orders. Applications for iron and steel for the construction of soap factories will be considered on merits and allowed only on authorisation by Government.

PROSPERITY FOR VILLAGES

By SRI K. V. KARANTHA, M.A., M.I.E.,

Harsha Printery and Publications, Puttur, South Kanara.
Pages 78.] [Price, One rupee.

What are the causes that contribute to the abysmal poverty of our rural brethren? Will large-scale mechanisation of industry and agriculture bring back prosperity to our villages? Or is the solution to be found in the Gandhian technique of rural reconstruction? The volume under review tackles these and similar questions with verve and sincerity, presenting a cogent and thought-provoking thesis.

The author builds his theme round the increasing unemployment and penury prevailing in Rural India; he contends that the continual drain of wealth to urban areas by way of payment for manufactured articles, will inevitably lead to a disastrous state of affairs, climaxing in the simultaneous collapse of rural and urban economy. Sri Karantha attributes this miserable impasse to haphazard development of large-scale mechanisation of the country by industrialists and technologists. The large-scale industrial units destroyed millions of cottage type industrial units. Since agriculture cannot absorb these village artisans, and industry but a microscopic fraction, unemployment is the result. Western parallels do not hold good in India's case; conditions in America (conveyor belt output), Canada (mechanised farming) and Britain (colonial markets) are quite different. Switzerland offers an example of a nation making a virtue out of necessity, triumphing over natural handicaps. Unfortunately, the author has not discussed Japan, which should afford a splendid lesson to India.

To the great problem the author offers a sensible and rational solution: he advises the politician and the technologist to get together. The technologist, with his Western bias, till now had no idea of the havoc his work is creating; the politician, aware of the villager's misery, had so far overlooked the ability of the technologist to devise new techniques for full employment and efficient production. Technology reoriented to Indian conditions is therefore the solution; the modernisation of cottage industries, streamlining on a novel rural bias, is the need of the hour. Village self-sufficiency is the goal; but there is no going back to inefficient outmoded methods.

"If inventors and technicians so choose they should just as well apply the results of pure science for the purpose of increasing the economic self-sufficiency of small owners, concerned not with mass distribution but with subsistence and the supply of a local market." (Aldous Huxley). But have we technologists of the calibre of Arkwright, James Watt, Faraday, Marconi, Graham Bell or Edison? The author bluntly admits: "Our one ambition has been to copy, to imitate, but never to invent." The accent hereafter in our technical institutions should be on knowledge, not diploma.

Sri K. V. Karantha is nothing if not sincere. He is appalled by present-day conditions, and his analysis leads him so clearly to definite conclusions that he is "amazed that false steps are being persistently taken even now."

His passion, however, does not blind him to counter-arguments, and he tackles them in his stride, marshalling his facts coherently and parading his authorities competently. A book for every politician, sociologist, industrialist, technologist and rural welfare worker.

—P.V.S.

Villager's Guide and Calendar

Villager's Guide and Calendar for 1951 published by the Agricultural Department, in Tamil, Telugu, Kannada and Malayalam, will be available for sale from all the Agricultural Depots in May 1951. The price of one copy is annas two.

The Guide contains useful information for agriculturists.

Wealth from Fish Waste

(Continued from page 37)

nutritional disorders, pure amino-acids are often used; fish scales are a useful source of cystine for this purpose.

The glistening property of scales is due to the presence of a substance called guanine. "Pearl essence," the basis of the artificial pearl industry, is largely a concentrated extract of guanine from scales. For many years manufacturers of these extracts have kept their processes secret, but fishery product research is now tending to end that. It is now believed, for example, that an excellent "pearl essence" could be made from herring scales.

Animal Charcoal Produced

By slow combustion of fish scales an excellent grade of animal charcoal is obtained. This type of charcoal is, of course, widely used in a number of industries for clarifying, decolourising, and purifying processes. Foam-making substances for fire extinguishers are also made from fish scales.

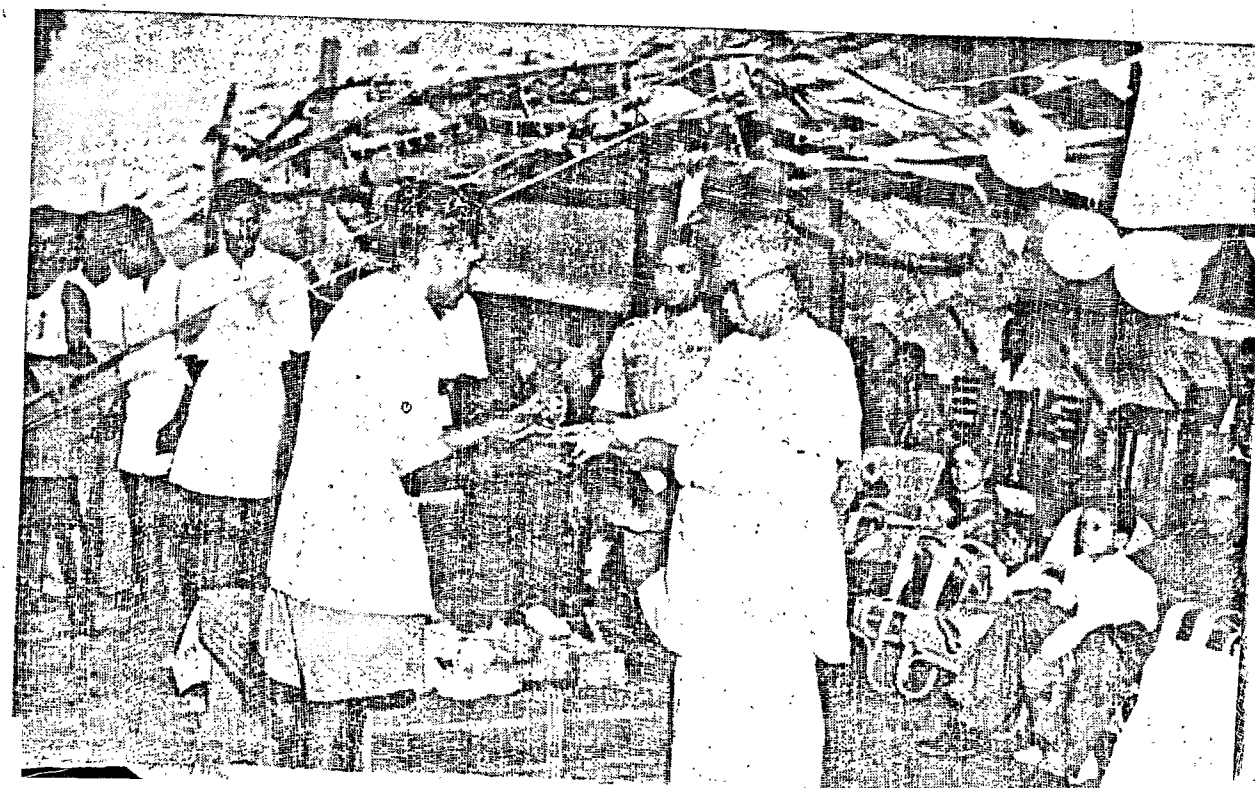
Another amino-acid, arginine, is considerably used today for the nutrition of young poultry; it is prepared by hydrolysing an extract from salmon milts. But proteins themselves can be made from fish waste. Edible albumin made from fish is recognised today as a substitute for egg white, and an albumin suitable for whipping for confectionery creams or ice creams. Unfortunately it does not coagulate on heating. Unless this disability can be corrected it is unlikely to displace egg while in baking processes.

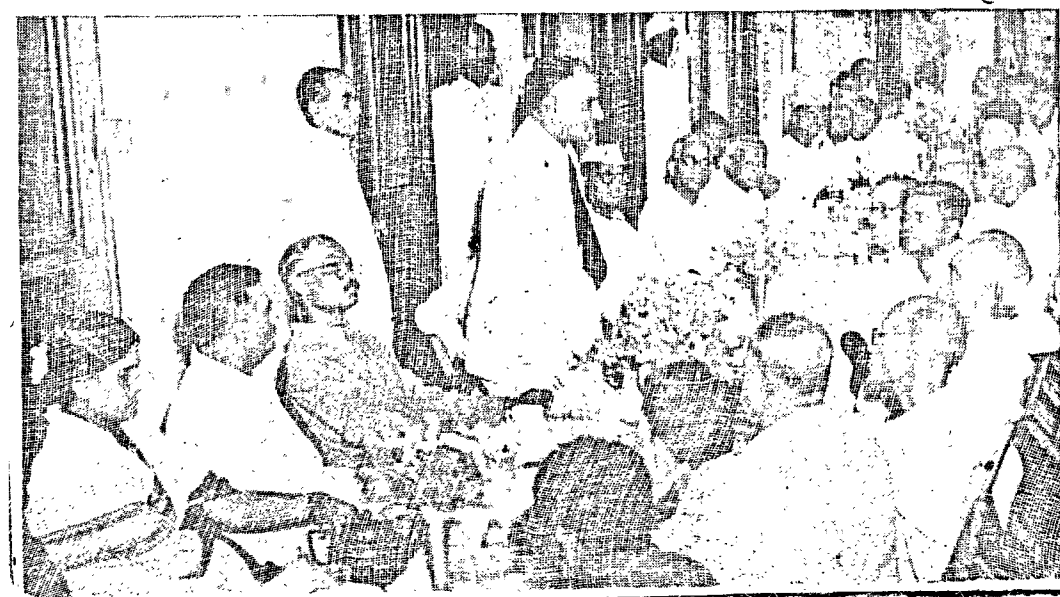
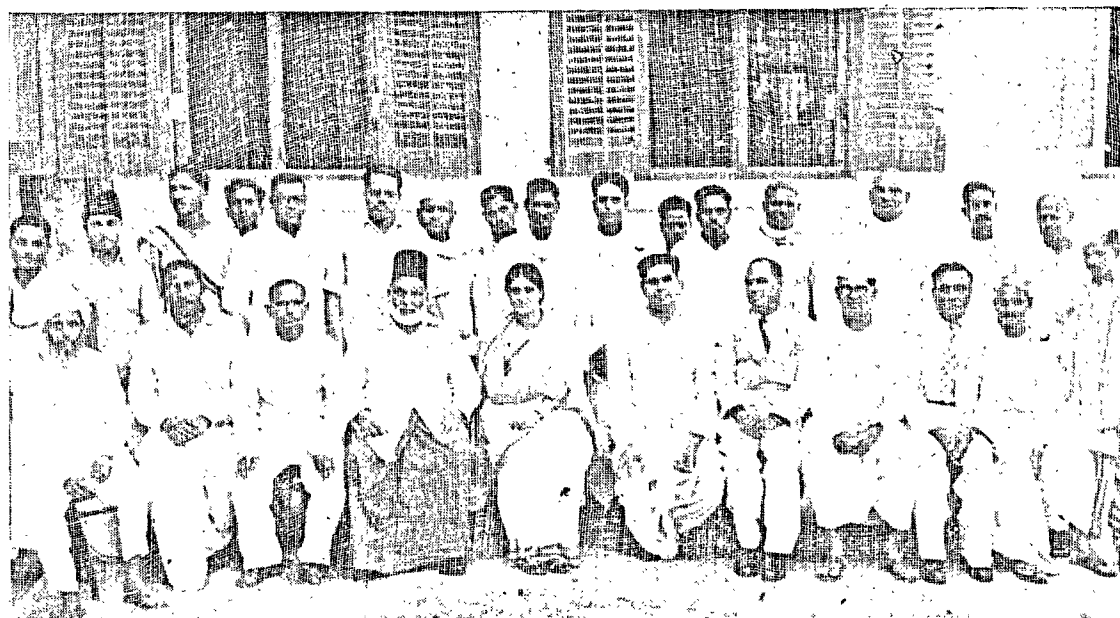
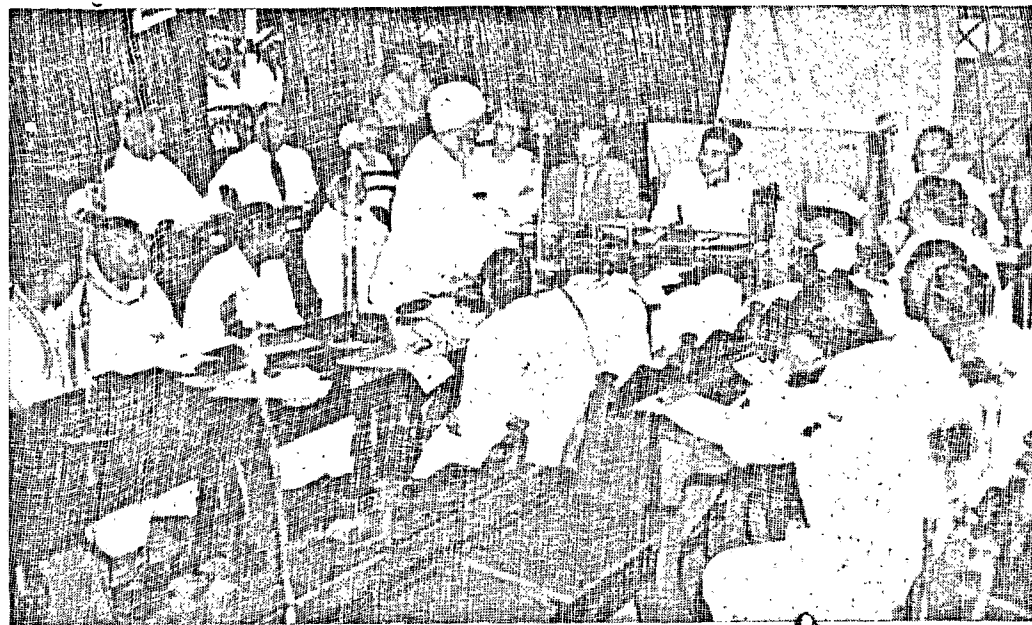
But, in addition to pearl essence, there are other non-edible by-products. Attractive soft leathers can be made from the skins of suitable fish species; they are comparable with the better known leathers made from reptile skins. Certain enzymes—proteolytic enzymes—are used in leather tanning. These are generally made from the pancreas of cattle, but modern research has indicated that they can also, and probably more cheaply, be extracted from the digestive tracts of fish.



WORLD CANCER DAY: The Women's Indian Association organised the World Cancer Day celebrations at Government House, Guindy. Mrs. Sarojini Varadappan, Honorary Secretary, on behalf of the Cancer Relief Committee of the Association, presented a welcome address to Dr. Rajendra Prasad, who attended the celebrations. Said the President: "It is good that this day is being celebrated all over the world to draw the attention of the people to this fell disease and to check its toll of human lives. Apart from taking lives, cancer is a most painful disease, and it has to be tackled in the earlier stages. What is necessary for the purpose is well-equipped hospitals."

EIGHTEENTH ANNIVERSARY: The Indian Air Force recently celebrated its eighteenth anniversary. To mark the occasion I.A.F. installations all over India went en fete, service organisation and public enthusiasm making it a gala event. Here Sri M. Bhaktavatsalam is seen distributing prizes to winners of the sports items held at the I.A.F. Station, Gummidipundi.





Registered No. M-4767.

Tribes Advisory Council : A representative raises a point at the first meeting of the Tribes Advisory Council, which met recently at the Fort St George, Madras. Sri B. Gopal Reddi, Minister for Finance, presided. The duty of the Council is to advise on matters pertaining to the welfare and advancement of the Scheduled Tribes and on regulations framed for the peace and good government of the Scheduled Areas.

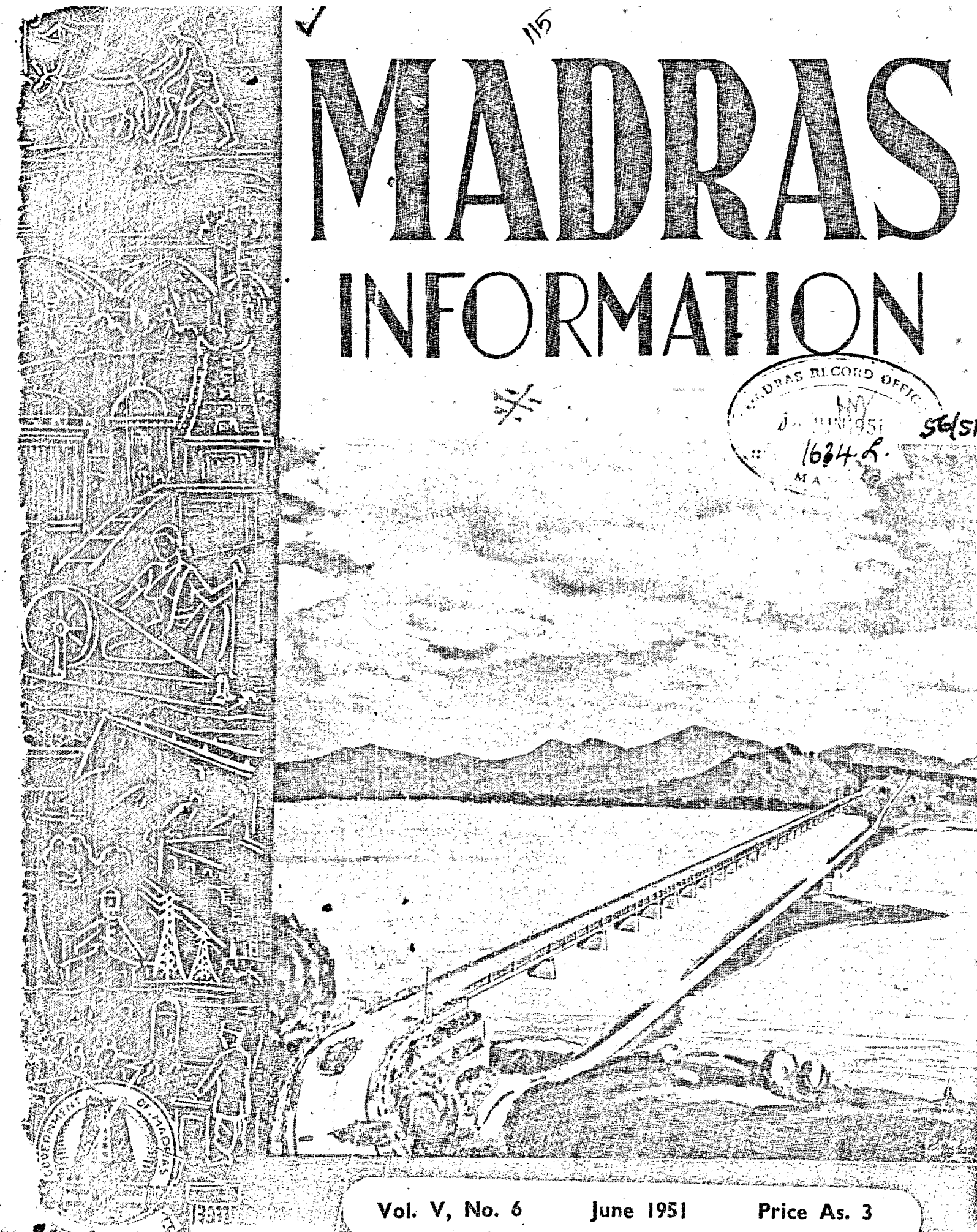
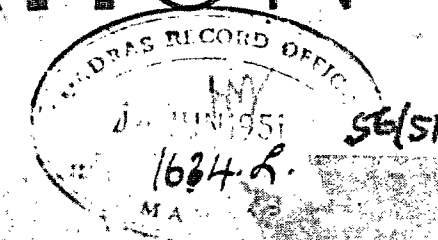
Raising The Economic Level: Members of the Tribes Advisory Council with Sri B. Gopal Reddi. The Finance Minister told the Council : To stop exploitation and to raise the economic level of the Tribes the Government have been endeavouring for some time and have passed various enactments for their benefit.

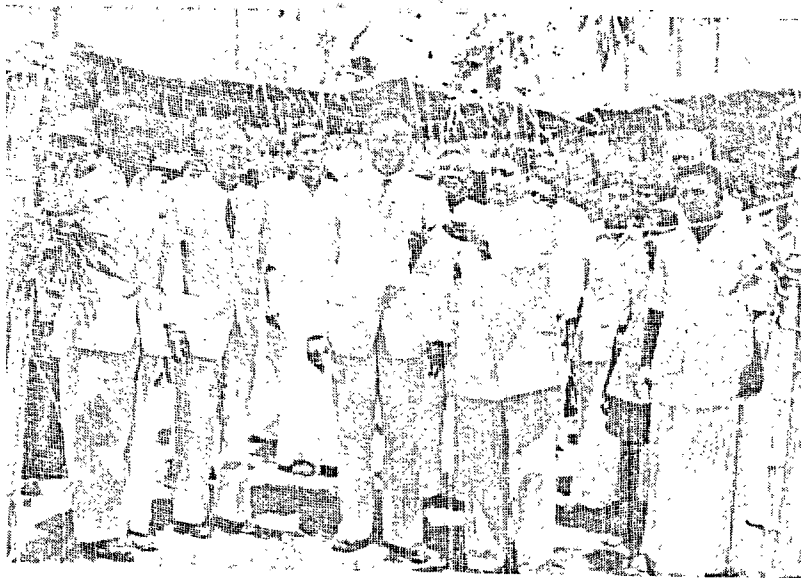
The tribes which have been declared by the President of India as "Scheduled Tribes" under Article 342 (1) of the Constitution of India mostly belong to the Agency areas of East Godavari, West Godavari, Visakhapatnam and Srikakulam Districts, and the rest with the exception of the Laccadive (including Minicoy) and Amindivi Islands, who form a class apart, belong to the other areas.

Popular Officer Retires : At the party given in his honour by members of the Madras Legislative Assembly, Sri D. K. V. Raghava Varma, Secretary of the Madras State Legislature who retires after 22 years of service, replies to the various speeches commending his work in the Assembly office.

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MADRAS INFORMATION





LAND FOR HARIJANS

Many Harijans in Tanjore District recently realised what must have been a life's ambition, or even the fervent prayer of generations, when they were presented with gifts of free land. Philanthropic mirasdars offered maniakats to the labourers working under them. Sri B. Parameswaran, Minister for Rural Development and Harijan Uplift, had the pleasant task of distributing the pattas (title deeds) to the Harijans, at a solemn and thrilling ceremony.

Photos above show the Hon'ble Minister distributing pattas to the Harijans at Vaduvur Vadapathi, marking the transfer of the lands assigned to the Harijans.

At left Sri B. Parameswaran is seen opening one of the new colonies for Harijans in Tanjore District.

Bottom : The new Tuberculosis Sanatorium at Chengipatti.



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"WE SEEK TO SERVE AND NOT TO COMPETE"

June 1951

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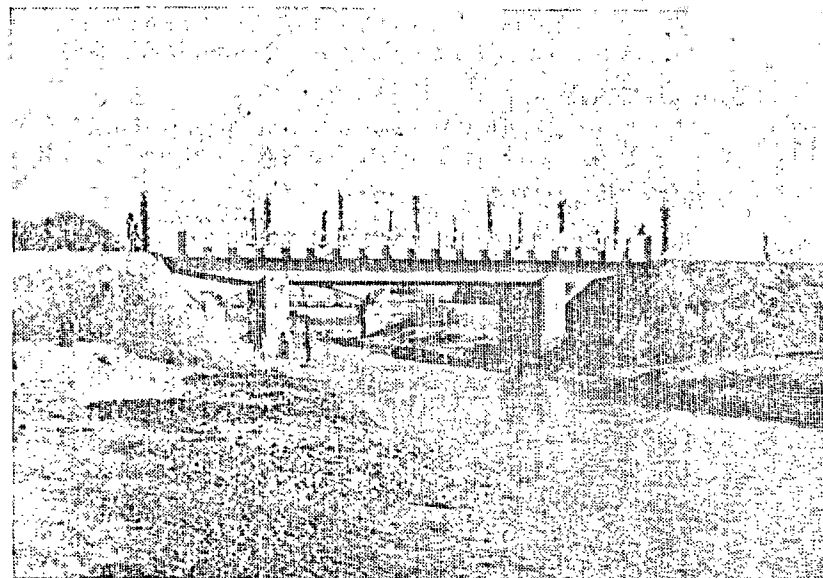
Our cover page picture illustrates the artist's conception of the new bridge to be built across the Palar River, off the 38th milestone, near Chingleput.



NEW BRIDGE AT TIRUVANMIYUR

ONE MORE LINK: The newly constructed bridge near Tiruvanniyur in Chingleput District, was declared open by Sri M. Bhaktavatsalam, Minister for Public Works. This forges one more link in the chain of important highways, a vital measure in the forward programme of improving communications.

LONG-FELT NEED: The new bridge replaces the century old nine-feet wide "Lattice Bridge" and fulfils a long-felt need for a modern and convenient construction. The bridge is on the shortest route from Madras City to Tirukalikunram and Mahabalipuram.



SPECIAL FEATURES: Sri K. Chandramouli, Minister for Local Administration, addresses the gathering at the opening ceremony. The special features of the bridge are that it is an all-concrete bridge of cantilever type without abutments, unique in this State. The cost of the bridge is Rs. 98,000.

RURAL RECONSTRUCTION

Development Of Cottage Industries

By SRI B. PARAMESWARAN, Minister for Rural Development and Harijan Uplift.

India is a land of villages and her cottage industries are as ancient as her civilization. In the past when the village was a self-sufficient unit, the handicrafts occupied an important place in the social economy of the country, while the art craft displayed the country's cultural civilization. But gradually, on account of various influences and the impact of modern civilization, the villages became more and more urban in their outlook. The advent of the British rule and the import of machine-made goods from abroad caused the decline of many of these industries. In spite of such adverse conditions, some of these cottage industries have been able to survive the onslaught of machines. For example, the handloom industry is not a decaying industry, though at present it is facing a great many difficulties. The survival of these industries is mainly due to the fact that they have adjusted themselves to the changed circumstances.

The large-scale industries which have been established so far only in towns and cities have been able, no doubt, to attract large numbers of workers from the villages and have provided them with comparatively better wages and amenities. The factory owners have also become very rich. The factories have brought prosperity to the towns and the people therein seem to be comparatively happier. It is, therefore, urged by some that the industrialization of the country on these lines is the only right path to be pursued.

Draining of the Countryside

But this is only partially true. Let us examine whether it will ever be possible or desirable in India to attract the 80 per cent of her population living in the numerous villages scattered throughout the length and breadth of the country into a few large cities and towns. The establishment of large factories has not been an unmixed blessing, however great the need of the hour may be for increased production. The installation of these factories in cities and towns has resulted in the continuous drain of not only the wealth but also of the more intelligent and enterprising of the men from the villages to the towns, leaving the villages very much the poorer, both economically and intellectually. Unless this enormous drain of wealth and intellect to the towns from the villages is arrested, it will not be possible for us to bring to the villagers a fuller, happier and more prosperous life.

Rapid industrialization and urbanization on the lines pursued hitherto will shatter our village economy and destroy our village tradition. The installation of large factories in towns has led to the inevitable migration of lakhs of village workmen who have had to leave their cottage homes and their village occupations in search of employment in these new factories, and live a cramped and somewhat unnatural life in congested and insanitary slums. The factory workers and their families uprooted from their villages and herded with other workers in tiny tenements in unhealthy slums are cut off from congenial life, unlike the village craftsman plying his trade in the peaceful rural atmosphere.

If the vast majority of the rural population are uprooted in this way, it will create an endless variety of baffling problems which it will be beyond our power to solve. For, have we not seen in recent years, the tragic and disastrous consequences of the uprooting of even a small fraction of the people from their traditional background? In a vast country like India which is mainly dependent on agriculture and which has more than 80 per cent of its population living in villages, there can be no conceivable plan under which the majority of the villagers can be brought into the cities. For a long time to come and as far as one can foresee, India must remain a land of villages and the majority of her people must continue to live in the villages.

Foreign to our Genius

Whatever may be the situation in other countries, I am convinced that in India industrialization and urbanization of the pattern hitherto followed are foreign to our genius and culture. Cottage industries have a special place in the economic rehabilitation of India because they provide subsidiary employment to the vast rural population who are unemployed or agriculturists and they form the mainstay of the villagers. If these collapse, it will inevitably result in the impoverishment of a large section of the population.

I should not be understood as arguing that we have no use at all for factories and large-scale industrial units. They have their own place in our economy. In certain spheres as in the manufacture of locomotives, motor cars and ships, and in the manufacture of steel, aluminium, etc., cottage industries are obviously unsuitable. In these cases mass production in large factories is the only feasible solution. Leaving aside these large-scale industries, which do not lend themselves to development on the cottage basis, the vast majority of the other industries should, for the reasons explained by me already, be developed in decentralized cottage units by utilising wherever possible power to lighten the labour of the worker and to accelerate the speed of production.

The Case for Cottage Units

Realising how important a place cottage industries occupy in our economic structure, the popular Government, ever since they assumed office, have been doing their best in all possible ways to revive cottage industries. In this State a real effort to revive and develop cottage industries and particularly those which meet the basic needs of the villagers, was first made in 1946, when an elaborate scheme for the development of cottage industries was introduced in 25 firkas then selected for intensive rural reconstruction work. The primary object of the scheme was to train rapidly local workers in up-to-date methods of manufacture of articles of daily use. Experience of the working of the scheme for over one year revealed the need for laying greater emphasis on the production side of utility articles of improved quality rather than on the mere training of artisans.

Rural Welfare Grants-in-Aid

The Government have revised and reissued their orders regarding the payment of grants-in-aid to non-official institutions engaged in constructive work.

In March 1948, the Government set apart a sum of Rs. 6 lakhs for payment of grants-in-aid to non-official institutions engaged in constructive work and formulated a scheme in connection therewith. Subsequently in November 1948, the scheme was extended to cover also the co-operative societies engaged in similar work. Under the orders now in force, all applications for payments of grants-in-aid under this scheme should be sent through the Collectors of the districts and in some cases through the Registrar of Co-operative Societies.

Government felt that this procedure entails delay and that in order to give effective and speedy aid to deserving non-official institutions the present procedure should be simplified. They have therefore directed that henceforth all such applications from non-official institutions and co-operative societies engaged in rural welfare work for payments of grants-in-aid should be submitted straightaway, in the prescribed form, to the Director of Rural Welfare or to the respective Deputy Directors of Rural Welfare.

Revised Schemes for Villages

The scheme was therefore revised during the middle of 1948. The modified scheme contemplated the starting of a number of production-cum-training units by private agencies, the Government fulfilling their legitimate role of encouraging and assisting production and marketing. The demonstration and training units formed under the Scheme of 1946 were ordered to be transferred to non-official agencies like co-operative societies, limited companies and partnership concerns for being run as production-cum-training centres. As some old village industries like hand-pounding of rice, flour grinding, oil pressing, which are indispensable for village economy, are decaying, the Government of Madras decided to undertake their immediate revival.

A scheme designed to ensure speedy revival of the dying village industries was therefore drawn up and put into execution in April 1950. This scheme aims at helping the villagers to produce their daily requirements for consumption in their own villages, thus making the villages self-sufficient economic units. Improved labour saving tools and implements up to Rs. 6 lakhs in value are being distributed free of cost to enterprising village artisans engaged in any of the village industries in the selected areas; and the Government have appointed 13 Technical Instructors to impart instruction to the village artisans in the use of the tools and implements supplied to them. So far tools have been distributed to about 700 artisans. Raw materials to the value of Rs. 12 lakhs required for these industries will also be stored and supplied to the

village artisans at cost price through co-operative agencies specially formed for the purpose.

Rural Industrialization

The Madras Government have also sanctioned a scheme for Rural Industrialization. It aims at bringing about intensive development of small-scale or rural industries in every village in the State in order to increase production and income from them, besides encouraging the growth of the spirit of self-help, initiative and ambition in the rural population by affording them an opportunity to acquire higher operative knowledge, skill and practice in industries. Village Group Units for every 15 to 20 villages with a population ranging between 10,000 to 20,000 will be formed. Group Committees composed of the local competent businessmen and leaders will also be formed. These Committees will be responsible working agencies which will make every endeavour in their power to induce the residents of the areas concerned to start new industries and increase the production of the existing industries. These Committees will be advised and guided by Government agents. It is proposed to work out this scheme as an experiment first in two districts by selecting two taluks in each of them, the scheme being extended to other taluks in those districts, if it produces satisfactory results, the entire district being covered in the course of two or three years. A sum of about Rs. 1,10,000 has been sanctioned by Government for expenditure on this account.

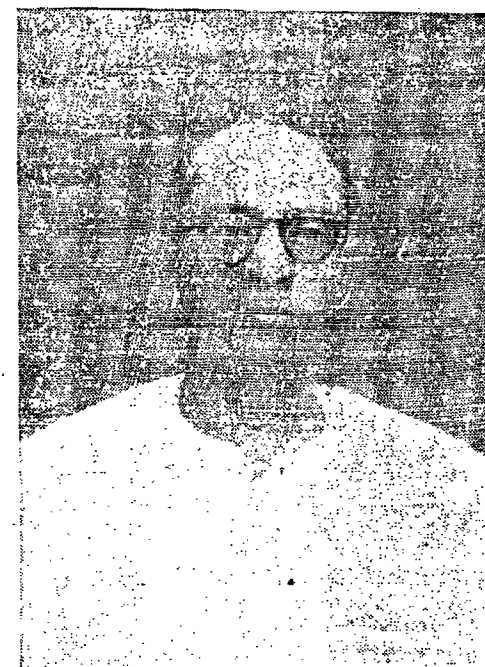
Besides these village and rural industries, certain other cottage industries, which have developed firm local traditions, have been selected for intensive development, and they are:

- (1) Match industry in Sivakasi and Sattur areas in Ramanathapuram District.
- (2) Palmyra fibre and leaf products in Tuticorin and Tiruchendur areas in Tirunelveli District.
- (3) Leather goods manufacture in Dindigul area in Madurai District.
- (4) Woollen cumby and blanket weaving in Kudligi, Kudatani and Bishalli areas in Bellary District.
- (5) Pile carpets in Eluru in West Godavari District.
- (6) Handmade cotton lace in Narasapur in West Godavari District.
- (7) Coir in Malabar District.

Advisory Boards Constituted

To stimulate the development of these industries, Special Advisory Boards have been constituted with a view to enlist the services of the people experienced in the industry and the local non-official intelligentsia. The Government have also constituted a State Cottage Industries Board which advises the Government on the ways and means of developing cottage industries in the State.

The Government have also constituted a Joint Drugget Advisory Board for Madras and Mysore, which State also is interested in the development of the drugget industry. This is a dollar earning industry. The Board has met a number of times and fixed standards for druggets to be exported to the United States of America, so that the market for druggets in that country may not suffer. With a view to help the drugget manufacturers to secure tannery wool easily and at reasonable cost, the Government of India have, at the request of the Drugget Board, restricted the



HE GAVE FREE LAND TO HARIJANS: Sri S. Rangaramanujam Naidu, B.A., Mirasdar and President of the Harijan Sevak Sangh, Nagapattinam, gave a free gift of 50 maniakats of land to the Harijan labourers working under him in Vadakachert village. The gift deeds were presented to the Harijans by Sri B. Parameswaran, Hon'ble Minister for Rural Development.

movement of tannery wool to places other than Wallajah, Salem and Bangalore, except on permits issued by the Directors of Industries and Commerce concerned.

Training and Research

Training and research have always been recognised as the chief necessity in the campaign for the development of cottage industry. Accordingly, training has been arranged in respect of certain industries like coir-making, leather goods manufacture and glass bangles and lead manufacture. Artisans are trained in the Glass Bangle and Bead Industry Centre at Kalahasti and in the technique of bangle-making. A block glass plant has also been established at Gudur to supply raw materials required for the industry. This scheme has been in operation for the last three years and many students have been trained in the industry. Another centre has also been opened at Kasaragod and one more centre is likely to be opened in a suitable place in Tamilnad.

Four demonstration parties have been formed in respect of leather-making and tanning industry, one for the Ceded Districts, one for the Northern Circars, another for the Tamil Districts and the fourth for the remaining areas. These demonstration parties tour the various places and give training for the candidates in the leather-making and tanning industry. For the development of the wool textile industry in Rayalaseema, an Honorary Special Officer has been appointed to investigate and report on the various measures that should be taken to improve the industry there. Besides organising training in several cottage industries, arrangements have also been made to get some artisans or village workers trained outside the State. Three Rural Welfare Officers and six Grama Sevaks have

Seven-Man Committee to consider Reorganisation of District Boards

A 7-Man Committee to examine the provisions of the Madras District Boards Act, 1920 (Madras Act XIV of 1920), and to make recommendations regarding the reforms required in the administration of District Boards and for improving their resources so as to make these bodies efficient organs of local administration, has been constituted by the Madras Government. The following have been appointed members of the committee:—

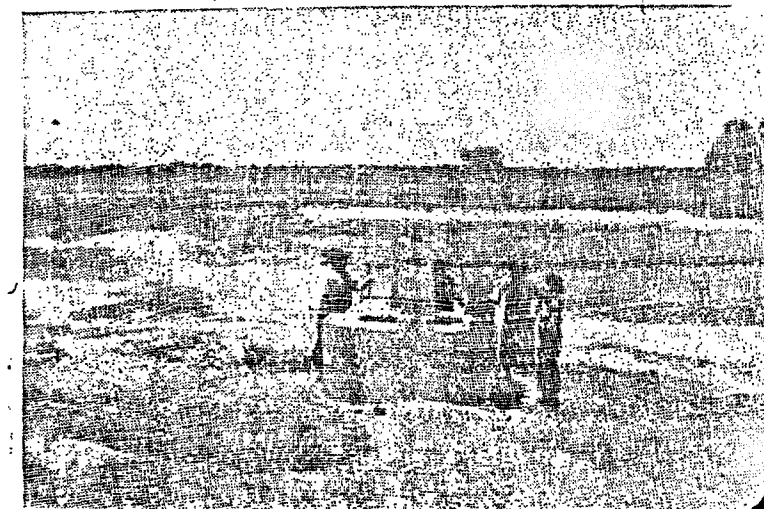
Sri K. Kuttikrishna Menon, former Advocate-General (Chairman); Sri V. K. Palaniswami Gounder, President, District Board, Coimbatore; Sri T. Pulla Reddi, President, District Board, Cuddapah; Sri C. V. Naidu, Advocate, Tiruvallur; Sri K. A. Mukundan, President, District Board, Malabar; Sri Rajiah D. Paul, retired Secretary to Government, Education Department; and Sri M. Narasanna, President, District Board, East Godavari.

For some time past the question of reorganising the administration of the District Boards and of increasing their resources has been under the consideration of the Government. The Chamber of District Boards suggested that a committee might be appointed to go into the question of finances, sphere of work and functions of District Boards and suggest ways and means for enlarging their powers and improving their finances. But consequent on the changes brought about by the Madras Village Panchayats Act, 1950, the question of reorganising the administration of District Boards has assumed greater importance. The Government have hence decided on the constitution of the committee.

been trained in village industries at the All-India Village Industries Association, Wardha.

—By courtesy, A.I.R., Madras.

BOON TO RURAL FOLK: One of the dire needs of villagers is a good well in the vicinity which can supply clear potable water. Below is one such well built in a Tanjore District village. Designed for both Harijans and others, it will be a common centre in a casteless colony.



Welfare Work in the Villages

A review of the salient features of the activities of the Rural Welfare Department in the areas selected for rural welfare work during January and February 1951:

South Arcot District.—A women's adult school was opened at Thensiruvallur during January. In February the Collector of South Arcot inaugurated the formation of a road from Sendanadu to Thoppiankulam with free labour of 100 villagers. The meeting of the District Rural Welfare Committee was conducted. At the meeting Sri Venkatachalam Chettiar of Sendanadu offered Rs. 156 as donations for running two adult schools for one year.

The Collector laid the foundation stone for a rural dispensary in a private land offered free of cost. He declared open a radio house newly constructed and switched on a radio set newly installed with half-grant from the Rural Welfare Department.

Tanjore District.—In January 58 manure pits were dug and 80 compost pits were laid. Forty-three cheris were cleaned and 26 insanitary pits were filled up. Two latrines of Wardha type and one latrine of other type were constructed. The villagers contributed a sum of Rs. 1,145 during the month. In February numerous meetings were held in all the villages during the Adult Education Week. Magic lantern lectures were conducted. A new adult literacy school was opened at Vedaranyam. Forty-eight manure pits and 46 compost pits were dug. About 40 charkas have been introduced in the two new firkas.

Salem District.—A sum of Rs. 38,227 has so far been spent for Rural Water Supply Scheme. During January two radio houses and three reading rooms were constructed. Books and slates were supplied to poor Harijan boys free of cost. Twenty-five cheris were cleaned. Three adult night schools were started. Two post offices were opened during January. In Ayyampatty village, a drainage existing for more than 100 years is being improved by constructing a masonry drain at a cost of Rs. 6,560.

During February a sum of Rs. 6,465 under Village Communications, Rs. 995 under Rural Water Supply and Rs. 1,975 under Discretionary Grant was spent. Thirty-two Kisan charkas and 37 tukklies were distributed to the self-spinners. Khadi, vegetable and cattle exhibitions were held at Gangavalli. A radio house was constructed at Elumpalli with the funds of villagers. A short camp for training village workers was inaugurated by the Director of Rural Welfare, Madras, with 34 trainees. The trainees were given training in flag hoisting, Khadi work, village sanitation, rural games and other activities.

Krishna District.—Three road works were undertaken during January. Nine compost pits were dug in the selected areas. Three board elementary schools were opened in Peddavaram, Akkapalem and Boravanehu villages. Three rural ayurvedic dispensaries were started in Tunikipadu, Penugolam and Chanubanda villages. In February a Cattle Show was organised at Agiripalli village. Two rural dispensaries were opened. Fifteen adult night schools were started in 15 villages of the three firkas.

Chittoor District.—Five works under Discretionary Grant have been completed by January. Two individual sanitary drives were conducted and 98 insanitary pits were got closed; 479 manure heaps were got removed. One co-operative society was formed. In February seven works under Discretionary Grants were completed. Two in-sanitary pits were closed and 18 manure heaps were removed away from dwelling houses. One cesspool was constructed. One night school was started.

South Kanara District.—In January intensive sanitation drives in all the three firkas were conducted. A Harijan Welfare School was opened. Cash contributions for the tank work and flood bank were collected from the villagers. The carpentry unit manufactured salad bowls for supply to foreign countries. In February a road work in Enmakaje village was completed, the Government grant being less than 50 per cent. A well work was completed at Nasambady. The Grama Seva Sangam, Mundhur, organised an exhibition at the time of the District Rural Welfare Committee meeting. In all the three firkas Adult Education Week was celebrated with the co-operation of the Education Department. A short training camp for the constructive workers was held from 6th February 1951 to 8th February 1951 under the guidance of Rev. R. R. Keithan of Gandhigram.

West Godavari District.—In January 145 acres of waste land were ploughed with tractor and reclaimed. Thirty-two new charkas were introduced in Dendurur unit. 'Sarvodaya Sammelan' was convened at the Andhra Grama Sevak Vidyalyam, Gopannapalem, and various subjects like Village Industries, Basic Education, Village Sanitation, and Harijan work, discussed. A second short training camp for village workers was conducted. In February an important event was the celebration of Sarvodaya Sammelan which commenced on 30th January 1951 and continued up to 12th February 1951. Non-stop spinning and Basic Education, Art, Fruit and Vegetable Exhibitions were some of the important features of the Sarvodaya Sammelan. Village workers were given instruction in the theory and practice of rural work on various subjects like Khadi, sanitation, compost manures and other activities.

Tirumelveli District.—A sum of Rs. 1,787 was spent under Rural Water Supply Scheme during January for Pazhancottai firka and an amount of Rs. 2,293 was spent under Communications. Intensive propaganda for "Grow More Food" was done in the villages. About 20.26 acres of land were brought under cultivation and 173 manure pits were dug in the month. Three hundred and seven charkas were sold to the public at half cost and 17,271 hanks of yarn have been spun so far. As regards village industries, 58 tools to the value of Rs. 686-12-0 were issued to 20 artisans free of cost. In February, a sum of Rs. 1,405 under Rural Welfare Scheme and 2,065 under Communications were spent. Ninety-two manure pits were dug; 312 charkas were sold at half the cost and tools to the extent of Rs. 686-12-0 were distributed free of cost to the artisans.

The Nilgiris District.—The Mukkimalai Water Supply Scheme was completed during January. One beehive box was supplied. Villagers were instructed in the art of bee-keeping. Anti-soil erosion measures were demonstrated and terracing was done in an area of 15 acres. Contour

ploughing was undertaken in an area of 11.45 acres; 118½ lb. of insecticides were distributed during the month. A Grama Seva Sangham was organised at Naduvattam village. In February, an Agricultural and Cattle Show was held at Naduvattam in Prospect Estate. The Adult Education Week was celebrated and the objects of the Week were explained to the public.

Madurai District.—The Rural Welfare Officer visited 36 villages and cheris during January. In connection with the training of the Rural Welfare Officers at Kallupatti, the Director of Rural Welfare, Deputy Directors of Rural Welfare (South) and (North) and the Khadi Special Officer attended the closing function. The Khadi Special Officer gave instructions to Grama Sevaks on the Khadi Scheme.

Cuddapah District.—In January, 30 spinning demonstrations were conducted in several villages with a view to popularise hand-spinning. Intensive propaganda was done on the manufacture of compost and its importance, as well as construction of trench latrines of Wardha type. Thirty-four public meetings were held to explain the Rural Welfare Scheme and to organise villagers for self-help and co-operation. Sanitation work was done in several villages. Twenty-four sanitation drives were conducted during February, 30 cess-pools were got constructed and 264 manure heaps were properly preserved. Thirty-four new charkas were introduced, 245 hanks of yarn were spun by self-spinners and 50 yards of Khadi cloth produced.

North Arcot District.—Four well works in Kadaladi firka and one well work in Thurinapuram firka were completed during January. The Panchayat Board, Thenmadimangalam, contributed Rs. 325 for the installation of a battery radio set in the village. A branch post office was opened at Kothandavadi village. An agricultural model farm was opened at Kadaladi village. Nine adult night schools were opened during February. A multi-purpose co-operative credit society was started in Sananandal village. Two Grama Seva Sanghams were organised in Arunagiri and Kidampalayam villages.

Tiruchirappalli District.—A sum of Rs. 46,167 under Rural Water-Supply and Rs. 42,431-10-0 under Village Communications and Rs. 1,550 under Discretionary Grant has been spent so far. In January, 43 composts were made and 386 trees were planted in Musiri and Thathiengarpettai firkas. Spinning competitions were arranged in Perambalur firka. A cattle show was conducted. A camp dispensary of the Veterinary Department was opened at Arumbavoor village. Eighteen well works were taken up for execution in Vellakoil centre. One well work and two road works were completed. The Special Development Officer, Tiruchirappalli, has taken steps to organise more co-operative societies in the new areas. A sum of Rs. 4,657 under Rural Water-Supply, Rs. 42,965-7-0 under Village Communications and Rs. 3,092-13-0 under Discretionary Grants have been paid so far. In February, 49 compost pits were formed and 366 trees were planted in Musiri and Thathiengarpettai firkas. A school building costing Rs. 15,000 was opened at Papparapatti. In Vellakoil firka, 11 out of 18 well works were completed. Adult Education Week was celebrated in a fitting manner. Twenty-two compost pits and 36 manure pits were opened; 42 cheris were cleaned. In Vengalam firka, spinning competitions were held in ten villages and the best spinners were awarded prizes. The villagers were paid subsidy to encourage compost manuring.

Bellary District.—The number of works completed during January was three under Discretionary Grants and four under Rural Water-Supply Scheme. Twelve sanitary drives were made, 63 compost pits formed and 25 charka demonstrations were conducted. Twenty charkas were introduced during the month. During February, 13 works under Discretionary Grants, four under Rural Water-Supply and one under Village Communications were completed. Two sanitation drives were conducted, ten compost pits were formed, 320 books were distributed and eight charka demonstrations were conducted.

Visakhapatnam District.—In January in Pendurthi, 12 well works were completed, 28 sanitation drives were conducted, 30 spinning demonstrations were organised, 33 compost pits were dug and 39 manure heaps were covered. In Kotauratla, 11 Grama Seva Sanghams were formed, 43 sanitation drives were conducted, three well works under Rural Water-Supply and two works under Village Communications were completed. Sanitation drives in Pendurthi, Kotauratla and Madugula firkas were conducted in February. Spinning demonstrations were held in Pendurthi and Madugula firkas. Twelve well works under Rural Water-Supply and two works under Village Communications were completed.

Guntur District.—In January in Ongole and Ammanabrode firkas, 17 sanitation drives were conducted; eight spinning demonstrations were organised; 15 compost manure pits were dug; six adult night classes were conducted; eight public gatherings were addressed on 'Grow More Food' and 600 seedlings were planted. In Guravareddipalem centre and Doddavaram area, eight well works were sanctioned under the Rural Water-Supply Scheme and the villagers have offered not less than one-third of the value of each work as voluntary contribution by way of labour and materials. Four spinning demonstrations were conducted and two mass and individual sanitation drives organised. During February, 15 sanitation drives in Ongole and Ammanabrode firkas and 37 in Guravareddipalem and Doddavaram centres were conducted. Spinning demonstrations were held. Vegetable exhibitions were organised.

WATER FOR THUMBE: This deep open draw well was dug in Thumbe village in Mangalore taluk, South Kanara, under the Rural Water-supply Scheme. Its depth is 40 feet with complete steining. It cost Rs. 2,379 and will benefit 300 persons.



RURAL RECONSTRUCTION



WELL IN UDYAWAR: Under the Rural Water-supply Scheme, this open draw-well was constructed in Udyawar village in Kasaragod taluk, South Kanara. Its depth is 42 feet with steining right through. It cost Rs 3,900 and will benefit 250 persons.

Malabar District.—Four adult night schools were opened in January and a non-stop spinning demonstration was conducted in Kottayam Taluk on Sarvodaya Day. About 50 spinners including women participated. An adult education class was opened at Payyanur and 28 illiterate adults are attending the class. One Kasturba Village Centre under the auspices of the Kasturba Gandhi National Memorial Trust was opened in Vellur village. One Khadi spinning class was opened at Kunhinangalam. In February, charka classes were opened in several villages. Five acres of waste land were brought under cultivation. One multi-purpose co-operative society was organized in Ramanthali village at the instance of the Rural Welfare staff.

Nellore District.—In January 68 sanitary drives were conducted; 37 sullage pits were covered; 28 compost pits were dug, 75 new trees were planted and 60 spinning demonstrations were conducted. Propaganda for adult literacy was done in the villages.

Coimbatore District.—A scheme to increase the number of breeding bulls was formulated in January and bulls were stationed at all important villages. A drama to educate the public on the evils of drink was staged at Vadugapalayam on the Republic Day. Twenty hamlets and ten cheris were visited by the Rural Welfare staff. Eight compost pits were opened. In February in Vellakottai centre, 20 adult education centres were opened and 400 adults are being educated. The second Adult Education Week was celebrated in a fitting manner. In Tiruppur centre, 914 glyricidia cuttings were planted and the importance of green manure was explained to the public. The construction of school buildings in three villages under the Collector's Discretionary Grant for 1950-51 is in progress.

Kurnool District.—Twenty sanitation drives were conducted in Kurnool sirka in January. Trench latrines and drainages of draw-wells were cleaned by the Grama Sevaks. Twenty-seven spinning demonstrations were conducted; 21 compost pits were dug and 75 manure pits were set right. Quinine was distributed to the villagers. One breeding bull was purchased in Satanikota. In Yerragondapalem, 21 adult classes were conducted. Ten mass sanitary drives in Kurnool and four in Yerragondapalem

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MADRAS INFORMATION

were conducted during February. Twenty spinning demonstrations were held; 58 manure pits were set right and 15 compost pits were dug.

East Godavari District.—Thirty-three sanitation drives were conducted; 76 compost pits were dug; 145 compost pits were set right; 81 spinning demonstrations were organized and eight charkas were sold during the month of January. Thirty sanitation drives were conducted, 36 compost pits were dug, 55 spinning demonstration were conducted, seven charkas and 17 spindles were sold during February.

Srikakulam District.—Thirty-seven sanitation drives were conducted and 1,278 books were distributed during January. In February, 12 works under Discretionary Grant were completed; 29 sanitation drives were conducted, 1,215 books were distributed; two adult schools were started, two magic lantern shows were conducted and 27 spinning demonstrations were organized.

Chingleput District.—Under the Rural Water-supply Scheme, out of 27 works sanctioned, 18 works were completed during January. Thirty mamotti blades were distributed at half cost through the Panchayat Board, Kakkam; 45 compost pits were dug. One cattle show was held at Kadambattur, 17 street drains were cleaned, 20 common meetings were held by Grama Sevaks and discussions held on the constructive programme, rural development, agriculture, etc. During February, 44 compost pits and 23 farm yard pits were dug. The repair and improvement of an irrigation tank in Tirupachur village was sanctioned at a cost of Rs. 3,000 and an extent of 1,000 acres will stand to benefit by the work. Four adult night schools were opened during the month. Two midwives were appointed in the Rural Women Welfare Centres at Tirur and Kilamur.

Anantapur District.—A cattle show was conducted at Madakasira on 9th February 1951 and prizes were awarded to the best breeding bulls, working bulls, cows, calves and buffaloes. Two more night schools were opened. About 50 books were collected freely from the public to the Central Circulating Library. Competitions on sports, games and spinning were conducted.

Ramanathapuram District.—In February, 22 branch libraries and a Central Library were opened in this district. Sweeping campaigns were conducted by the Rural Welfare staff. Spinning demonstrations were held. Seventy charkas were introduced during the month and 1,283 hanks were spun by the spinners. One radio set was installed and eight are expected to be installed.

Community Radio Receivers

One thousand six hundred and three community radio receivers have been installed in the State up to March 1, 1951, by the State Broadcasting Department. These sets are working in 1,169 Panchayat Boards, 256 Municipalities, 46 schools and 132 other institutions.

Hundred special type receivers designed by the Laboratories of the State Broadcasting Department are being assembled at the workshop for installation in rural centres.

There are 67 radio service stations spread throughout the State attending to the servicing and maintenance of these sets. The Government have realized Rs. 1,79,900 as revenue towards the annual maintenance charges of the sets which come to Rs. 4,00,750.



Another milestone was reached along the road to progress with the laying of the foundation stone of a bridge across the 2,300 feet wide Palar River at Chingleput, by the Hon'ble Sri M. Bhaktavatsalam, Minister for Public Works. This marks another landmark in the achievement of the Madras Government in its constructive programme for improving communications by bridging most important Highways—the lifeline in the economic set-up of any progressive State. Great strides have been taken in recent years in the direction of ensuring through communication at all times of the year on the Highways in the State. The plan of the popular Ministry to provide uninterrupted traffic facilities even during seasons of floods in streams and rivers, which interrupt communications, will shortly be fulfilled when a few other bridges which are either under construction or nearing completion on the National Highways are completed.

The great plan familiarly known as "Vipan's Scheme" has almost been executed. In the short period of three years the present Government have in addition to the starting of major bridge projects on the Highways envisaged in Vipan's Scheme, approved plans for taking up construction of 330 bridges on Government maintained Highways and 399 bridges on roads maintained by District Boards.

The Great Northern Trunk Road had to be bridged at several places and the Madras Government lost no time in taking up the construction schemes. The first great bridge over Champavathi at Nathavalsala (Visakhapatnam District) is now under construction; the Gowtami-Godavari Bridge at Alamuru (East Godavari District) is well under way; the Bridge works at Pennar in Nellore District is in full swing; the Cauvery Bridge at Pugalur (Tiruchirappalli District) is nearing completion. The Palar Bridge now practically completes the scheme of rendering the lifelines uninterrupted means of communication from Calcutta to Cape Comorin.

The Palar Bridge when completed, will be the longest pre-stressed bridge in the world and will be an important engineering feat in India. Pre-stressed concrete is a more rational process than plain reinforced concrete structures. Pre-stressing is subjecting high quality cement concrete to direct compressive stress by the application of an external force. By pre-stressing, cracks in concrete are

completely eliminated, with the result the pre-stressed members behave as a homogeneous material similar to steel and not as a heterogeneous one like ordinary reinforced concrete.

After the foundations, piers and abutments are completed, the cement-concrete girders are poured. The pre-stressing cables are then assembled. Pre-stressing operations are undertaken when the concrete reaches a particular crushing strength. The girders are then moved into position on the piers. After this, the general concrete construction work such as the laying of the deck-slab, etc., is done. The technique of the pre-stressed concrete will entail a saving of 40 per cent in concrete and 70 per cent in steel.

Though some bridges have been constructed in Europe with pre-stressed concrete, and recently in India two railway bridges were constructed with pre-stressed concrete, the Palar Bridge will be the longest pre-stressed concrete bridge on any highway in the world.

The bridge will consist of 23 spans of 90 feet (clear) each. Twenty-one lakhs of rupees have been sanctioned for this bridge designed for 'A' class loading (70 tons). The bridge is expected to be completed in two years' time.

Age-limits for Admitting Harijan Boarders into Hostels Enhanced

The age-limits prescribed for admission of Boarders into the hostels receiving lump-sum boarding grants from the Harijan Welfare Department, have been enhanced by three years in the case of pupils belonging to Aboriginal and Hill Tribes.

The effect of the order of the Government will be that pupils belonging to Aboriginal and Hill Tribes should not exceed the following age-limits on the 1st July for being eligible for the lump-sum boarding grant:—

Elementary and Secondary Classes.—IV Standard, 15 years; V Standard, 16 years; VI Standard, 17 years; VII Standard, 18 years; VIII Standard or III Form, 19 years; IV Form, 20 years; V Form, 21 years; VI Form, 22 years.

College Classes.—I Class, 23 years; II Class, 24 years; III Class, 25 years; IV Class, 26 years.

Our Road Requirements

Madras State has been able to claim the largest mileage of roads in India and what is even more significant is that it has the largest mileage of surfaced roads in India. All the same, our achievements meet our road requirements only in a small part and there is considerable work yet to be done.

Almost the first thing that is considered under development of communications is the addition to the existing mileage of roads. In our country which is inadequately served by roads this is important; but it is equally important that the existing roads are well maintained. The most common type of all weather surfacing that we adopt is the water-bound macadam and we are adopting this particularly on account of its initial low cost irrespective of the traffic intensities; under high traffic the water-bound macadam surface has to be renewed too frequently and we have also the other serious disadvantage of dust that the motor vehicles raise on such roads.

Superior surfaces are therefore called for in such heavily trafficked stretches. But with our limited finances, we are not able to find the large initial amounts that such superior surfaces require. In the result we have to spend large amounts annually by way of recurring cost in repairing the water-bound macadam surface. If these annual maintenance costs on the heavily trafficked roads in a period of say 20 years is capitalized, the amount will be seen to be much greater than what will be required to provide cement concrete surface straightaway. Therefore, in taking a long range view, there is considerable savings in the amount spent on the road by adopting improved surfacing. The other advantages are that the road surface will be superior to water-bound macadam being smooth, dustproof, and free from frequent attention. It also helps to conserve the stone at quarries.

Next I wish to deal with the roads under District Boards. These are roads essentially local in character feeding the interior villages. They serve as connecting links between the villages and the main lines of communications. Neglect of such roads will seriously hamper the communications to these villages and every one including the villagers realizes that without proper communications their economic prosperity and that of the nation will go down. These roads in our system of communications have been left with District Boards for the main reason that the Boards consisting of representatives of local people would take much greater interest than any central authority of the State. And, to enable this to be done better, a great relief has been given to them by transferring most of the important heavily trafficked roads to Government, which were in the past taking away much of their road finances. But yet we find that the District Boards have not been able to provide finances for meeting even 50 per cent of the minimum requirements of maintenance, of the roads left with them. How then can the roads be kept maintained satisfactorily?

The Motor Vehicles Taxation Committee was set up by the Government of India to examine the existing taxation in the country and to recommend a rational method of taxation. This Committee has completed its work and has brought out a detailed report. The recommended taxes might result in reduced income to this State by way of road revenue and to this extent it has an indirect effect on the road communications. Though this State has been spending much more than the income from road revenues, for road expenditure, this new situation would mean that even more amounts will have to be met by Government which may be very difficult in the present financial position of the State. The five-year programme was approved for Rs. 12.06 crores but the expenditure was limited to Rs. 8.5 crores.

Also, the Rs. 12.06 crores was at pre-war rates plus 80 per cent and at current rates the cost of the programme will amount to 18 crores; against this only about six crores will be made available for the five-year period ending 1951-52. This is so because the allotments on District Boards side have been low. On the Government side however, the total allotments by the end of five-year period will be more than its share of Rs. 8.5 crores. These insufficient allotments have therefore reduced the five-year programme practically to a third of what was approved by Government and we will have to implement the other 2/3 after the first five-year period. Unless we are able to make better progress, the comprehensive plan of Post-War Road Development which is to be implemented in 25 years will far exceed this period. The works taken up from State allocations of the Central Road Fund were comparatively fewer in the previous years. But now it is seen that the balances have increased very much as seen from the recent announcements of the share in the post-war and post-partition periods. Increased activity to utilize the large balances is proposed in the coming years which may help to accelerate our post-war programme.

Government do realize the place of communications in the economy of the nation. But our needs are many and are all accumulated. The National Planning Commission which has been appointed by the Government of India is immediately concerned in drawing a five-year plan of development for the various States. We have been discussing the problem of our State with the Planning Commission. We have presented to them a fairly good and ambitious plan. But for carrying out the plan we must find necessary resources.

M. BHAKTAVATSALAM,
Minister for Public Works.

Programme of Highways Development

By SRI M. S. THIRUMALE IYENGAR, Chief Engineer (Highways)

There are approximately 37,000 miles of roads in the Madras State whose population is fifty million. The economic and social welfare of the State are particularly dependent upon these traffic arteries. During the War period, restrictions on materials and equipment curtailed Highways activities to the extent that construction was practically at a standstill, and maintenance operations were limited to the barest essentials.

With highway construction and development being blocked by the necessities of the war effort, the Department set about with such personnel as was available to make surveys and prepare plans and specifications for the work so deferred. It was at this juncture in 1943 that the Chief Engineers of all the Provinces in India met at Nagpur and evolved what is popularly called the "Nagpur Plan" for an all-round integrated plan of road development. Under this procedure, a shelf of much needed construction projects was built up for the time when such operations could be undertaken at the close of the war.

Formation of Sole Agency

Serious thought was therefore turned towards the post-war era and to the speeding up of preparations for that period. War ended and in 1946, the separate Department of Highways was created. The influence of increased motor vehicle transportation, the war and post-war conditions, all tended to gradually shift the administrative control of Major District roads and their urban extensions from the local bodies to Governmental organizations. This naturally shifted the financial burden also on to the shoulders of Government.

The Madras State Highways Department formed in 1946 on the eve of India's Independence has perhaps no parallel in any other State in India, in that it is the sole agency in the State for the administration of all Government roads as well as the District Board roads and other connected and allied works. Madras has the following road systems: The National Highways system comprising 2,039 miles maintained entirely out of the Union funds, is administered by the State Highways Department. Into this system is integrated the four principal highways systems of the State, viz., the Provincial Highways comprising 3,069 miles, Major District Roads forming 15,055 miles. Other District Roads amounting to 7,968 miles and Village Roads totalling to 8,822 miles. And these four systems are financed by State funds, a moiety being met from the District Board funds.

Comprehensive Scheme

The objectives of Post-War Road Development framed in accordance with the Nagpur Plan are clearly defined in the 25-year comprehensive scheme of highway development for the State.

When this programme is completed, the length of roads in the State shall have been increased to over 55,000 miles and virtually every village would be accessible by an all-weather road and the Highways system will serve about 45 millions of people—practically the whole of the State population—urban and rural.

The broad details of this programme are:

	Proposed mileage.	Anticipated cost (RS. IN CRORES)
Cement concrete	1,746	9.68
Black top	2,608	3.44
New metalling	29,612	14.57
New formation	17,891	3.98
Minor bridges		13.03
Major bridges	Nos. 885	10.39
Land acquisition and other items.		8.91
Grand total		64.00

Out of the total cost of Rs. 64 crores, the cost of schemes relating to the different categories of roads are—

	RS.	crores.
National Highways	8.31	
Government roads	19.00	
District Board roads	31.93	
Other roads	4.56	

With this overall objective in view, works are being carried out in accordance with a Five-year Programme comprising the high priority works of the comprehensive plan. The salient features of the Five-year Programme (1947-52) are: the provision of about 470 miles of improved surfacing, metalling of about 890 miles, new formations of about 540 miles, and construction of major bridges to a tune of Rs. 175 lakhs in the State Road system; metalling 2,430 miles, building 10,000 miles of new roads and constructing major and minor bridges costing over Rs. 100 lakhs under the District Board Road system.

Quinquennial Achievements

That the importance of rapid development of rural communications has been fully appreciated, in drawing up the programme, can be seen from the fact that very

SYLVAN AVENUE: Shaded by tall trees on both sides, this village road offers an inviting walk. Rural road-making, however, is still a grave problem, and energetic measures are afoot in the Madras Highways programme to provide villages with vital communication links.



HIGHWAYS

nearly half the total cost of Rs. 12 crores goes to the development of the District Board Road system. Owing to financial considerations, even this modest programme costing Rs. 12 crores had to be stretched out so as to limit the expenditure to Rs. 8.5 crores for the five years 1947-52. There is no approved programme for National Highways comparable to the State Roads programme, but works are being taken up in inescapable cases subject to the sanction of the Government of India.

Out of the programmed expenditure of Rs. 8.5 crores during the quinquennium 1947-52, we have spent to the middle of the year 1950-51, 3.77 crores of rupees. Our modest achievements are the laying of improved surfacing to roads, for nearly 114 miles, metalling of about 1,065 miles of roads, construction of 710 miles of new roads and of several bridges costing 41 lakhs of rupees. Besides this, several large bridges on National Highways and State and District Board roads have been put on hand and their completion is well within sight. The bridge across the Cauvery at Pugalur, across the Pennar near Nellore, and across the Coleroon at Anaikaranchathram are outstanding works. The greatest and largest bridge of that class is the Godavari Bridge and approaches—overall cost, about Rs. 2.25 crores.

Rural Programme Behind Schedule

The rural programme under which we have to build about 10,000 miles mainly of new roads is behind schedule. The biggest single factor contributing to the greatest delay has been the tedious process of the "Right of way acquisition". In recent months Government have enacted amendments to the Land Acquisition Act, and issued certain instructions with a view to minimising the procedural delays. These measures, it is hoped, would shorten considerably the time required for transferring control over the land to the Highways Department.

This is the fourth year of the Five-Year Post-War Development and despite the tremendous handicaps we have been able to cover about half the programme, and just now when we are in a position to go forward and implement the programme at a much faster rate, we have been suddenly faced with the problem of lack of funds for intensive financing of the Highway programme of construction as well as maintenance. Appropriations of Government have fallen off. While we need annually a total sum of 9.10 crores of rupees for maintenance and construction, the total budgetary provisions for this year for National Highways, State Roads and District Board roads amount only to Rs. 6.73 crores. Thus, there is a wide gap to be filled. And road maintenance cannot and should never be put off. The deterioration of the road will be so rapid that you will be faced with the need to spend enormous sums for rectification of damage. And Madras therefore spends nearly seven crores from general revenues on Highways maintenance and construction.

The All-Purpose Road

The ox-cart or more familiarly speaking, the bullock-cart is still very largely a general means of transportation by the rural population. The carts, with narrow iron tyred wooden-spoked wheels, still rumble along over the water-bound macadam roads, the squeaking of its unrolled axles turning in the holes being heard for considerable distances,

and specially in the night the fading squeak reminds one of ebbing transient life. These vehicles are drawn by oxen, yoked by the horns and controlled by nose-strings or head-strings by drivers poking the animals in the sides to keep them moving and twisting their tails to speed up the pace. Alongside this slow moving vehicle, the modern automobile flashes past at enormous speed, sucking the road surface binders. We are fast making the all-purpose road, dustproof, durable and pleasant to ride on, be it in the slow moving ox-cart or in richly upholstered, soft-cushioned interior of a luxury limousine. So, we are making the comphalt road, black-top road, and all concrete road. The days of water-bound macadam are fast going. Soil-stabilized roads in the rural and deltaic tracts will hold the field for economy and service.

Concrete and comphalt roads will become the rule in urban and suburban areas. Outside the urban areas, we are fast improving the roads to the 12-foot traffic lane with widened shoulders for increased safety and traffic capacity. And, in these five years the Madras State which has the largest transportation system in India, has kept in the forefront the development of its Highways, without which the other essential nation-building activities embracing food and power production, can make little headway. Thus Madras leads for others to copy and benefit by example.

New Bridge at Tiruvanmiyur

The newly constructed bridge at Pappanchavadi near Tiruvanmiyur in Chingleput District, declared open by Sri M. Bhaktavatsalam, Minister for Public Works, on May 11, 1951, fulfils a long-felt need of the public. This adds one more link in the chain of beneficial measures which the Government have been launching. The construction of bridges across important Highways forms an important item in the forward programme of improving the vital means of communications in the State.

The new bridge replaces the century old nine feet wide bridge popularly known as "Lattice Bridge". The vehicles had to crawl through the old bridge with much inconvenience and delay and the construction of a new bridge was a long-felt need. The bridge is on the shortest route from Madras to Mahabalipuram passing through a picturesque and fertile strip of countryside. The road touches interesting places like Kelambakkam, Kovalam, etc.; and the construction of this bridge will prove to be a welcome amenity to tourists who are now obliged to take a monotonous drive along the longer route of the Great Southern Trunk Road through its 4,000 tons of fast and slow moving traffic, to reach historic Mahabalipuram and holy Tirukkalikunram.

Besides its utility value the new bridge is of technical interest from an engineering point of view. Its special features are that it is an all-concrete construction of cantilever type without abutments, and is slated to be the first bridge of its type in this State. The cost of the bridge is Rs. 98,000 and the work was started in November 1949. The Chingleput District Board has been given a full grant for the work by the Madras Government under the Post-War Road Development Scheme.

FORESTRY



CENTRAL BOARD OF FORESTRY : Sri P. S. Kumaraswami Raja, Chief Minister of Madras State, addressing the first meeting of the reconstituted Central Board of Forestry which met in Dehra Dun recently. The conference discussed the national forest policy, forestry education, match industry, All-India Forest Services and Vanamahotsava.

Preservation of Forest Wealth

By SRI P. S. KUMARASWAMI RAJA, Chief Minister

Presiding over the meeting of the Central Board of Forestry held at Dehra Dun on the 7th May 1951, the Hon'ble Sri P. S. Kumaraswami Raja, Chief Minister of Madras, said :

I belong to Rajapalayam in Ramanathapuram District in Madras State—a town which has gained a place in the list of places famous for their being centres of forest wealth. Of course, there are forests and forests. It is hardly necessary for me to point out to you, the officers and experts in Forestry, that there are some reserve forests like the one we have near the City of Madras or some places in the plains, which stand more as an apology for forests. But the forests and the mountainous regions that form the place of start of my life are not of that category. I am very happy to tell you that my place is situated in the region of the Western Ghats—almost in the southern end of our peninsula; and you know that the Western Ghats are famous for their heights and expansive area and also for the abundance of forest wealth.

Forests in the Western Ghats are not merely potential sources of natural wealth; but they also stand as the sanctuary of the wild life in all its variety. The wild

animals like tigers, boars, bisons, etc., and more especially elephants engage the energy and attention of the people of my place very frequently. The devastation and damage caused by wild elephants to our gardens and plantations almost perennially have made our relationship with them a live issue, to be fought, to which the Chief Conservator of Madras will bear ample testimony. My place is virtually one which is the scene of constant warfare between the human citizens of the plains and the wild four-legged citizens of the forests. There we are engaged in solving the endless trouble by the wild elephants. I am making reference to it now not with a view to make that problem a subject for discussion and solution at this conference. But I refer to it only to indicate that my connection with the forests and Forest Departments, have commenced almost with my life, as it were. And so, even apart from the accidental official connection of mine with the Department now, I can claim to know something about Forestry.

Store-houses of Natural Wealth

None can dispute that forests are the store-houses of natural wealth, the potentialities of which could, if properly harnessed, be utilized for promoting our country's

prosperity. The importance and the need for the preservation of forests in good condition cannot be overestimated. They are undoubtedly the springheads of prosperity of the country. The river valley and irrigation projects, dams and canals and every water-source that is tapped for the benefit of man, depend for their sustenance on the forests and their preservation. None can dispute the fact that the rainfall depends to a large extent on the forests; and that the perennial and unfailing springs that give supply to our rivers also depend on our forests. The forests, apart from being Nature's beauty spots, are the preservers and givers of natural wealth to us. Disafforestation going on in an unprincipled way and in a mass scale is really a national disaster which should be averted by every possible method.

Myself hailing from the region which unfortunately experienced monsoon failure for the fourth year in succession, I can state with confidence that the disafforestation in that region, which went on a mass scale during the war years, should also be a cause for the misery of monsoon failure. It is imperative that scrupulous care should be taken for the preservation of our forests. Trees should be planted. The tree plantation implemented as part of the Vanamahotsava festival, was indeed a welcome measure. Enthusiasm evinced by the people during the Vanamahotsava was great. But the Vanamahotsava is not the end. It is only a means to an end. It is a symbol or rather the commencement of the great responsibility to be discharged by us. Trees should be grown and reared with care and attention. We should organise ourselves to go ahead in the implementation of that scheme more fully and effectively. That matter is of course one of the subjects on the agenda for this meeting.

Problems of Forestry

The agenda contains several subjects requiring deliberation and discussion, all of which are important in the

interests of Forestry. The organisation and equipment of the administrative machinery of the Department, the schemes for the utilisation of the forest produce and materials, and several other matters for the promotion of Forestry in general, are scheduled for discussion at this meeting.

Important among them is also the subject relating to the adoption of measures for the preservation of soil erosion. Soil erosion problem is one that is engaging the attention of the Government of Madras. Many tracts in the Nilgiris and other mountain regions there are subject to the danger of soil erosion caused by the unprincipled and indiscriminate cultivation of the soil. Taking of steps to check that danger effectively is in the contemplation of the Government of Madras; and I presume that other States also should be facing similar problems.

Popularising Agriculture among Todas

For creating an agricultural bias in the Todas of a few selected *Munds* in the Nilgiris District and for teaching improved methods of cultivation to them, the Government have sanctioned the employment of a special staff for a temporary period. The special staff will conduct propaganda among Todas for taking to cultivation.

The scheme sanctioned by the Government, besides propaganda, envisages the rendering of material help to the Todas. Twenty selected Todas will be allotted each an acre of land. A first crop of potato, followed by vegetables and cereals, will be raised by Todas on the respective lands allotted to them. The seed, manure and implements required by them will be advanced and the cost recovered at the time of sale of their produce, which will be done through the Agricultural Department.

Advance Compensation under Estates Abolition

On behalf of Government, the Director of Settlements has made the following further deposits of amounts with the Estates Abolition Tribunals, Vizianagaram and Madurai, towards advance compensation, and interim payments for Fasli 1359, in respect of certain zamin and under-tenure estates notified in the first batch.

(1) With the Estates Abolition Tribunal, Vizianagaram.—

Date of deposit.	Towards advance compensation.	Towards interim payment for Fasli 1359.
	RS.	RS.
29th October 1950 ..	3,492	113
15th November 1950 ..	2,54,992*	9,649

* Exclusive of Rs. 2,810, deducted towards Government dues.

(2) With the Estates Abolition Tribunal, Madurai.—

Date of deposit.	Towards advance compensation.	Towards interim payment for Fasli 1359.
	RS.	RS.
11th December 1950 ...	36,378	1,938

Lists of zamin and under-tenure estates in respect of which further amounts have been deposited are mentioned in the notifications published at page 68 of Part II of the *Fort St. George Gazette*, dated 9th January 1951, and pages 274-277 of Part II of the *Fort St. George Gazette*, dated 20th February 1951. The latter notification includes also certain cases in respect of which the amounts already deposited have been withdrawn for one reason or other.

A Sanctuary for South India

By Lieut.-Colonel R. W. BURTON, Indian Army (Retd.)

Wherever there is a Reserved Forest already containing a sufficient resident stock of wild birds and animals, it is possible to establish a wild life sanctuary. Such temporary sanctuaries have always, since the early days of the Forest Department, been in existence in all the Provinces where the Shooting Block System has been in force, also in the Madras State, in a number of Indian States and in Kashmir. In forests under the Forest Department Administration, these sanctuaries were (and presumably still are) notified as such in October of each year when Conservators of Forests prepare a list of forests closed absolutely as sanctuaries or for other purposes, and open for shooting subject to rules and licence conditions. The 'other purposes' include closed for fire protection, for special forest operations, as sanctuary for some particular species of animal, as shooting blocks for the Troops in vicinity of large Cantonments (e.g., Dehra Dun, Kamptee, Jubbulpore), or as reserve for District Officers. For instance, in the 19 Forest Divisions of the Madhya Pradesh, 63 of the 457 shooting blocks were (in 1946) set aside, for such 'other purposes'.

The effectiveness of all blocks reserved as sanctuaries and the stock of game in the shooting blocks naturally depended upon the sense of duty and reliability of the Subordinate Forest staff; also upon the amount of active interest displayed by the respective Administrative Forest Officers. Under that system, there were sanctuaries and there were shooting blocks, and these were constituted as one or the other according to circumstances. A watch was kept on the wild life population so that necessary control could be exercised and stock of animals maintained. The balance of carnivora versus herbivora was also watched. A block might be open for shooting of carnivora only, or a particular species of deer only, and so on. The system is a good one if worked, as designed, for the benefit of the game and sportsman alike, and if the forests are properly guarded.

Need for Sanctuaries

The above has been the background to the present situation. It is now well known, and has to be recognized, that in many parts of the country the stock of some animals within reserved forests, deer in particular, has very greatly diminished. Perhaps the idea behind the request for this article is that there are very necessary in the Madras State at the present time one or more sanctuaries of a more permanent nature designed as preserves for wild life in general and as areas accessible to the public and tourists of this and other countries. It may also be the intention that one or other of such sanctuaries should eventually attain the status of a national park.

In Part IV of the Bombay Society's Series published with Vol. 38 of the Society's *Journal*, it is stated by a reliable authority that there are in the Madras State two areas which could become national parks or game sanctuaries. The selection would be made by a committee composed of representatives of all concerned departments with, it is suggested, two or three non-official co-opted members.

With the above in view, some of the considerations ruling the formation of a national park are discussed and stated.

Site for National Park

What is a national park; An accepted definition may be stated as:—

An area dedicated by Statute for all time to and for the people for the preservation of the flora and fauna of the selected area in all its aspects.

At the present time there is urgency in selecting, gazetting, demarcating and providing for the administration of areas to be devoted to the purpose of national parks where such are contemplated. A long-term view—fifty years and more—and much forethought and mature consideration are necessary. Every aspect has to be weighed and considered, for it has to be anticipated that within the stated number of years all usable land will be required for the ever-advancing claims of agriculture, forestry and other human activities. Therefore, so far as can be possibly foreseen, none such should be now taken up for a national park. The area should be large enough to prevent overcrowding of any species and admit of overflow into contiguous forests.

Other considerations are:

- That the area must contain no human habitations other than for providing essential needs of the Park area;
- That there can be no extraction of timber or any other forest product, or mining, or water projects other than for providing the essential needs of the Park area;
- That the forest should be of a type which allows of the animals being seen in some parts from the roads and in others from elephant-back;
- That the park should not be too far from areas of considerable population;
- That the park should be served by roads existing, or to be improved or made; and have within it motorable roads for sightseeing visitors, and paths suitable for riding elephants;
- That necessary funds should be available or capable of development to meet all requirements;
- That it may be necessary within the long-term period to fence in much of the park area;
- That a sufficient grant-in-aid be provided by Government to initiate the formation of the park.

Water and Food

Water.—It is necessary to take a very long view regarding the vital question of water-supply in all parts of park and sanctuary areas. Where there are perennial streams, lakes, marshy places, etc., no problems arise. But in areas where in hot weather months or periods of drought seasonal streams cease to flow, pools form and dry up, animals have to dig in sandy *nala* beds for water; at such times animals suffer much. They become a too easy prey to carnivora and the ubiquitous poacher.

Food.—Needs of all the species in the area have to be considered. It may be necessary to deforest selected

over patches of jungle to provide grazing. In these, and in jungle valleys, annual grass-burning is a necessity, for neglect in this allows excessive growth of bush and thorny scrub which comes up with rapidity, blocks the glades, and through increasing denseness of vegetation causes migration from the area of animals such as *sambur* and spotted deer.

(a) Where exotic fodder plants, such as clover, have been safely introduced in other parts of South India, they could be added with advantage to the local grazing supply for the wild animals. In the matter, the advice of the scientist would be obtained.

(b) To promote prosperous breeding seasons there should be plenty of grazing and water. Where there are bison, their needs also have to be thought of.

(c) For some of the animals, and for bears, monkeys, birds, squirrels and other creatures, fruit-bearing trees may have to be planted. In fact, the question of food has to be considered in all its aspects.

Salt-licks.—Natural so-called 'salt-licks' are of vital importance to the conservation of wild life. Because of their attraction to the animals they should be improved if necessary, and safeguarded from poachers in every possible way. (Hubback.)

Environment.—All animals depend for their existence upon a suitable environment, and this should be preserved, as far as may be, intact.

Carnivora. It will be necessary to maintain the right balance between carnivora and herbivora.

Census of Population.—Basic to any management measure is an accurate knowledge of the size of the population and the yearly changes in its size. The aim of good management should be to detect over-population before it has reached serious proportions, and to take appropriate measures to balance proportions and food. To the above end, repeated census should be the basis of intelligent management of game resources; and the reduction of stock, if necessary, should include the culling of female animals and excessive number of males where that occurs. Habitat improvement through modification of timber or grazing arrangement can be made to increase game carrying capacity.

Crops.—It should be borne in mind that deer, pig and monkey population should be encouraged in order to provide food for the larger carnivora and so lessen the outside depredation on domestic stock.

Value of Wild Life

Research by scientists and management by warden and staff should be complemented by education of the public so that it will support the programme:

(a) The management of wild life resources, both animals and birds, can only be established on a scientific basis.

(b) In respect of all projects and measures concerning wild life, there should be a wholly adequate background of scientific knowledge and research.

(c) Conservation and control must be combined into a common policy. There should be a balanced picture of control as well as conservation.

(d) Conservation implies the preservation in perpetuity of a reasonable quantity of game and wild fauna and flora on account of their educational, scientific, economic, recreational and aesthetic value.

(e) Control implies the need, which is growing as human population increases, to keep the population of game and wild fauna within reasonable bounds, so that animals do not unduly conflict with the use of land for production purposes.

(f) Certainly for the present and perhaps for always, wild life has a useful part to play in the economy of the land.

Funds for Wild Life Administration

It is reasonably argued that the considerable revenue accruing to Government both directly and indirectly through existence of wild life, should be applied to the conservation of the resource—or the resource will continue to dwindle and eventually vanish. The suggested receipts included in my original pamphlet which was first printed and widely distributed to Governments, high officials, newspapers, and then published in Vol. 47, No. 4, of the *Journal of the Bombay Natural History Society* may be seen. To that may be added special contribution towards Game Conservancy automatically levied at the same time as Licence Fees, as in the above list.

This is an original idea now in force in France. The procedure of collection ensures that this money is earmarked and cannot be used for any other purpose than game conservation. Where, in India, licences are at present issued without fee, this special levy might be placed at a low figure; in all other cases a higher figure.

Factors Governing Choice of Site

Sanctuaries, if they are to be effective, must, among other considerations—

1. be suitably sited with sufficiently well distributed and permanent water supplies for the several species;
2. be sufficiently large to allow animals to live in them all the year round without inducement to wander outside;
3. contain no human habitation or cultivation;
4. comprise natural game country having abundant water, food and cover;
5. be free from grazing rights, since domestic cattle spread disease, besides reducing the food and water supplies; they also disturb the forest and give opportunities for poaching;
6. be undisturbed by timber extraction and other forest works;
7. possess security of tenure and not be liable to sudden changes of constitution or control;
8. be sufficiently inaccessible to prevent the animals being molested and harassed by villagers and others encroaching upon their boundaries;
9. be sufficiently accessible to permit frequent inspection by responsible officers and their staff. To facilitate this, they must have necessary motorable roads, cart-tracks, and riding or foot paths;
10. contain one or more natural 'salt-licks'.

The contents of this contribution are compiled from the writer's own knowledge and experience during sixty years in this country, aided by the contributions of Dr. E.B. Worthington, Mr. Albert M. Day, Dr. T. G. C. Vaughan-Jones, M.A., Professor A. Urbain and other experts to the International Conference on the Protection of Nature assembled at Lake Success, 22nd to 1st September 1949.

Improving the Co-operative Movement

By SRI J. M. LOBO PRABHU, I.C.S., Secretary, Development Department

The Co-operative movement in the Madras State is a highlight for India. The size and variety of its activities are evidence that its principles have taken root in climate congenial to it. Every year the capital invested and the area covered have grown, the more so during the last four years. In the circumstances, it may appear inappropriate to raise the question if the movement is capable of improvement.

Yet this question must be raised, for at least three reasons: first, that a vast organization which touches intimately the life of nearly one-third of the total number of villages in the State, has to be perfect in every detail because even small margins of error reckon up considerably in the aggregate; second, that all our organizations have been built on bureaucratic principles and have to be adapted to democracy, and third that we are at a moment of history when the foundations of the future have to be well and truly laid. The proper mood for the country therefore is not one of complacency but of relentless search and endeavour. Everything has to be looked in, under and around, as everything has to be done with inaugural intensity and thoroughness.

I have been connected with the Co-operative movement for the last 23 years. In Utter Pradesh I have contributed something to it by introducing grain and cane marketing. In the same province my study of the pathology of the movement, particularly the brief span of prosperity of newly formed societies, led to the evolution of the multi-purpose society. My thesis then or now is that provision of credit is the means and not the end of co-operation, that unless there is fuller production and wiser consumption, cheap and easy credit is in the nature of only an anesthetic. The question we may ask ourselves is, whether co-operative credit has made visible changes in the working and living conditions of co-operators? Can we, without being told, distinguish the house holding or person of a co-operator? If not, what can be done, even now, to use the leverage which credit provides to impose a new spirit and scope in the movement?

Fundamental Weakness

The fundamental weakness of our economic structure is inefficiency in production. The Fiscal Commission found that in agriculture, there was work in unirrigated holdings for about three months in the year and in irrigated holdings for a slightly longer period. Even in this short period of employment, the work is characterized by haphazard method, like broadcast sowing, dry ploughing which reduce yields even by 30 per cent, overcrowding in nurseries, wasteful storage of manure, insufficient or defective irrigation and other habits of unmethodical and indifferent work, which reduce the production even to the limit of 50 per cent. Is it impossible for co-operators to accept the proper discipline, when it demands only time and

attention they can well spare? If credit is made dependent on such discipline, the resulting success could lead to larger measures of co-operation like consolidation of holdings, contour bunding, deepening of ponds and digging of wells.

A proposal is before Government that remission of revenue may be given to progressive villages which collectively accept and enforce the proper economic discipline. This is an opportunity for villages commanded by the Co-operative movement to show a lead and set an example. A proposal has also been made to Government that Land Armies may be organized out of the labour which is constantly drifting to towns. In colonization schemes to absorb this labour co-operation can play its part.

Scope for Collective Action

In urban co-operative societies, particularly consumers societies, the scope for collective action may be small. At the same time, a proper consciousness of being a co-operator could help to create better standards of efficiency. In the United States of America such a consciousness would be created first by giving an identity to each member, which others could recognize; second, by enabling the members to meet each other socially; thirdly, by a code of behaviour in which the members can take pride. Can this be done here? Can the Triplicane Urban Co-operative Society, the largest Society in India, organize a club, the members of which could bind themselves to have a proper pride in their houses, work and department? Could they also bind themselves in the spirit of freemasonry to help each other? And to recognize each other the more easily could they wear small button badges like the Rotarians? These ideas may appear trite, farfetched, but they have worked in practice abroad. As men are made, small outward things can bind them to great deep purposes. The Co-operative movement has to be proud of itself, before the many resistance factors, which reduce its scope, can be eliminated.

There are several resistance factors. Both the Andhra and Tamilnad Conferences have suggested that a seminar may be organized to examine these precisely and to devise schemes, even of an experimental nature. Government are considering the proposal, but in the meanwhile, individual co-operators should be able to make their own research and propose schemes, which the Government will be glad to examine. In the first place, there is resistance to the idea of full co-operation. While the members may be committed to unlimited liability in respect of the debts of each other, they cannot be persuaded to share their means to liquidate the cause of indebtedness. Even in designedly co-operative schemes, cultivators cannot be persuaded to collective ownership of implements, carts, animals, though they may require them only in part. This is quite contrary to the collective consciousness on which our village life is based. It is the result of the money economy and the administrative changes introduced by the British rulers.

Deep down collective consciousness still exists, which it should be the first aim of the Co-operative movement to

From the address by Sri J. M. Lobo Prabhu, I.C.S., Secretary to Government, Development Department, on the T.U.C.S. Day, Sri P. S. Kumaraswami Raja, Chief Minister, presiding.

revive and re-establish as a vital force in our economy. A careful strategy is required for this, as time and usage have fortified distrust, and self-sufficiency. The first step may be for all co-operative societies to take a census of all surpluses of labour, land and materials, then to fix a rent payable for their service required by members of the society. If any member fails to accept the plan for such services, the society may withdraw its unlimited liability for his future loans. If all members accept the plan, the society as a whole may receive loans at preferential rates.

Targets and Categorical Progress

In order to expedite the conversion of societies to the collectivization of their surpluses, some expedients can be employed. The first, which was more successful in Russia than blood and iron, is the award of the services of modern agricultural machinery. Each Central Bank may acquire tractors, bulldozers, boring drills by purchase or by loan from Government to be given to societies, which fully capitalized their human and natural resources. In the existing competition for such services, this conditional grant will lever change which are now not considered possible. In this connection, it will be useful if targets for specified items are set for all societies, in respect of which the progress may be precisely recorded. It should be possible to consider this progress in categorising societies as A, B, C, D. The same system of categorization should also be applied to the officials in charge.

Nearly all officials now lack interest in their work, because it is not precisely estimated and favourably considered in making their promotions. There is a proposal pending with Government that the practice in the army of categorising annually the work of all officials as A, B, C, D should be introduced. The Co-operative Department could benefit from such categorization, as the incentive offered by it has a large scope in the potential of the Co-operative movement.

Great Potentialities

I regard the Triplicane Urban Co-operative Society as the finest expression of the Co-operative movement in this State. With its membership of 16,950, its monthly turnover of Rs. 13 lakhs, its 32 branches and 39 depots, the T.U.C.S. stands as a monument of co-operative activity. Its organisers have rendered a great service to the movement and to the country. Much of what I have said may be in advance. Much of what I have said may have appeared critical, but it is impossible to be constructive today, without taking to pieces what was built for other times and purposes.

The Co-operative movement has great potentialities, the Government have faith in it and have been very generous to it. Its hour has now struck to play a new and dynamic part, in which it cannot fail so long as it can retain the interest of the Chief Minister of the State. I may let you into the secret that while all schemes for development interest him, the Co-operative movement appears to be his first love. At least to commemorate a Chief Minister, himself a co-operator, the Co-operative movement must now begin a new and glorious chapter so that the dream for which he works relentlessly, may be realized that Madras becomes the richest, happiest, the first State in India.

Thummapudi Multipurpose Society

The Thummapudi Multipurpose Co-operative Society in Tenali Taluk was registered on 9th November 1906 as a rural credit society and started on its work on 23rd December 1906. At the time of starting there were 16 members with a paid-up share capital of Rs. 1,380. On 30th November 1950 there were 87 members on rolls with a paid-up share capital of Rs. 681.

There are no defaulters among panchayatdars. On 30th November 1950 the members owed Rs. 2,510 under 19 loans to the Society, whereas the society owes nothing to the Central Bank. The society has invested the following amounts outside the society:

Rupees 500 invested in the financing bank under share capital.

Rs. 7,986-10-0 invested in the financing bank under Reserve Fund.

Rs. 200 invested in the Wholesale Co-operative Stores under share capital.

Rs. 500 invested in defence bonds.

The society has the following reserves to its credit which are merged in the working capital at present:

RS.	A.	P.	
286	9	0	under building fund.
816	3	0	under bad debts reserve.
300	0	0	under business reserve.
1,003	11	0	under undistributed profits.
455	10	0	under dividend yet to be distributed.

There are thrift deposits to an extent of Rs. 273-11-0. The maximum borrowing power of the society is at present Rs. 20,000 and the individual maximum borrowing power is Rs. 1,000. The area of operations is limited to the village of Thummapudi. The society has earned a net profit of Rs. 407-14-0 for 1949-50. The panchayat have introduced hundi boxes and distributed 12 boxes to their members and eight boxes to non-members. An amount of Rs. 125 was thus collected. The society is dealing in controlled articles, namely, sugar, wheat and cloth. They have purchased stock worth Rs. 1,351-6-0 up to 30th June 1950. The total sales up to the close of June 30 was Rs. 1,421-5-0.

The society has also introduced two beehive boxes and is collecting honey. It has also installed a radio for the use of the public and is using it daily in the evenings. It has also a library of books on co-operation and agriculture. The books are being used by members and non-members. The society was awarded the rolling silver cup by the Local Co-operative Union at Nandivelugu twice in successive years for good work. The President of the Society, Sri S. Sanjeevarayanam, is maintaining a hospital at his own cost for treating the poor of the village free of cost.

Maternity Ward to Tiruchengode Hospital

The Government have accepted with thanks the offer of Sri V. V. C. R. Viapuri Mudaliar, Managing Agent, Pulliccar Mills Limited, Tiruchengode, to construct a maternity ward of eight beds in the Government Hospital, Tiruchengode, at a cost not exceeding Rs. 20,000 and to hand over the ward to the Government for maintenance.

Progress of the Co-operative Movement

By SRI J. C. RYAN, Registrar of Co-operative Societies

The Co-operative movement in Madras is over forty-five years old. It has developed considerably and is probably more firmly established than in the rest of India. Indeed, in some directions, it leads the way for the other States to follow. I shall endeavour here to indicate briefly the magnitude of its development.

The working capital of the Co-operative movement in Madras is larger even than the revenues of the Madras Government. It commands seventy-two crores of rupees whereas the Madras Government budgeted for only an income of sixty crores of rupees for the year 1951-52. The short-term credit movement, represented by the Madras Provincial Co-operative Bank, the Central Co-operative Banks, the Urban Banks and the Rural Credit Societies, handles thirty-four crores of rupees. The Urban Banks disburse every year about Rs. 9 crores as loans and the rural credit societies disburse about Rs. 7 crores every year.

The long-term credit movement, represented by the Central Land Mortgage Bank and its affiliated primary land mortgage banks, handles about four crores of rupees. Every year these mortgage banks disburse about Rs. 75 lakhs as long-term loans to agriculturists for a period of 20 years. The Co-operative Stores Movement with its Central Stores and its primary stores sells goods to the extent of Rs. 49 crores. The Madras Handloom Weavers' Provincial Co-operative Society produces every year about six crores of rupees worth of handloom goods in its primary weavers' co-operative societies. The societies for milk supply distribute over a crore of rupees worth of milk in the State. The Marketing Societies help agriculturists to dispose of four crores of rupees worth of agricultural produce every year.

Nearly 80,000 Persons Employed

The extent of development of the Co-operative movement in Madras can also be measured by the strength of the staff it employs. The Co-operative Department now consists of about 4,000 persons. The paid staff employed by co-operative societies as Secretaries, Managers, Clerks, Cashiers, Salesmen, Purchasing Agents, Storekeepers, etc., will, on a modest estimate, be 20 times that number or about 80,000. Indeed, we have reached a stage when the Central Co-operative Institute and the four Co-operative Training Institutes at Tanjore, Coimbatore, Anantapur and Rajahmundry are not enough to train the staff who are employed in co-operative societies but have not yet undergone training and to provide for the annual replacements which are inevitable. At least two more training institutes are necessary for providing even the existing co-operative societies with trained staff.

The services of the Co-operative movement have now reached 64.6 per cent of villages in the State, and 17.28 per cent of the rural population are members of co-operative societies. As the breadwinner in a family alone is usually the member of a co-operative society, the number of individuals helped by the entire Co-operative movement in the State works out to 16 millions, which is roughly 32.7 per cent of the population.

Variety of Development

But the magnificence of the development of the Co-operative movement in the State lies probably in the variety of its development. Landless labourers have got together in land colonization societies and settled on lands given by Government. Tenants have grouped themselves under field labourers' co-operative societies and taken lands on lease for cultivation from the Government or from private landowners. Fishermen have established co-operative societies for leasing out fishing rights and catching fish. Demobilized soldiers have organized themselves into co-operative workshops or motor transport co-operative societies. Cottage industrialists have set up societies for the manufacture and sale of metal-ware, leather goods, coir goods, pottery, etc. Toddy-tappers thrown out of employment on the introduction of Prohibition have taken to co-operative societies for the manufacture of jaggery.

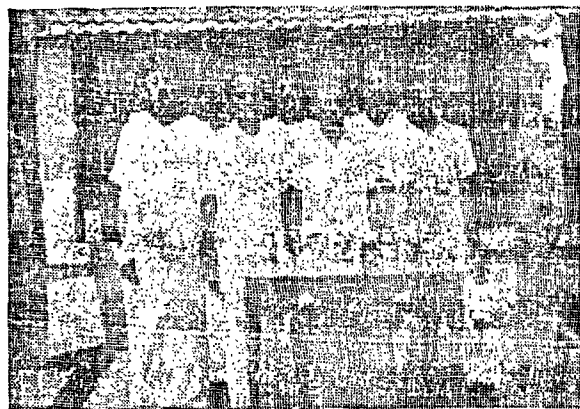
Women employ their leisure hours in the manufacture and sale of garments through women's co-operative societies. Sugarcane growers in the Visakhapatnam District have established a sugarcane factory of their own on co-operative basis so that the profits of sugar manufacture are retained by them. Recently the weavers' co-operative societies and the Provincial Handloom Weavers' Society have got a co-operative spinning mill of their own registered at Guntakal so that they may manufacture for themselves some part of the yarn they need for handloom weaving. In urban areas, people who wish to have houses of their own have set up co-operative housing societies through which they borrow money from Government and either build their houses themselves or get them built by the societies.

Such a variety of Co-operative activity has not only made the movement popular but has given rise to an unfortunate impression that every form of economic activity can be undertaken on a co-operative basis. I have had, for instance, dealers in yarn coming to me for a co-operative society for the purchase and sale of yarn. While Co-operation helps consumers of yarn (handloom weavers) to purchase yarn to satisfy their needs, it cannot help dealers in yarn to make profits at the expense of handloom weavers.

Elimination of Middlemen

Co-operation seeks to eliminate middlemen, not to perpetuate them. I have had also landowners asking for land colonization societies, not for the reason that they might settle on the lands and cultivate them, but for the reason that field labourers could be employed by the society for tilling the land for the benefit of the landholders.

Co-operation cannot promote absentee landlordism or help landlords at the expense of their tenants. Just as in the co-operative credit society, the borrower and lender are identical, just as in a co-operative stores the buyer and the seller are identical, so too, in a land colonization co-operative society, the tiller of the soil and the shareholder of the society ought to be identical. Only the agriculturist who cultivates his land can be a member of a co-operative land colonization society.



PREMIUM ON THRIFT: These six youngsters have offered to insure their lives out of their thrift savings in the Punganur Multipurpose Co-operative Society.

The Co-operative Spinning Mill at Guntakal has given rise to a demand for similar co-operative spinning mills in other parts of the State with individuals and co-operative societies of different kinds as shareholders. This suggestion emanates from a capitalistic outlook. The capital needed for a spinning mill could easily be provided by rich individuals and co-operative institutions with large reserves and the business could be made to yield decent profits. But the co-operative method of starting a mill is not to find profits for the capital that could be accumulated together. It is intended to satisfy the needs of the individuals that get together under the co-operative mill. Thus, the Co-operative Spinning Mill at Guntakal is intended to satisfy the need for yarn which its members (weavers' co-operative societies) experience. It is possible that cotton growers in a compact area might organize a co-operative spinning mill in order to secure good prices for their cotton by selling it to the spinning mill. The profits made by the spinning mill by manufacturing yarn will go back to them as bonuses on the value of cotton sold to the mill. But a spinning mill composed of members who have no common economic need to satisfy but only a desire to make the capital they have pooled together to yield good returns, cannot be registered as a co-operative society.

Ideology of Common Economic Need

It will be observed from what I have stated that Co-operation has an ideology of its own. It aims at promoting the economic well-being of the individual by linking with him others experiencing similar economic needs, so that all of them together may work for their individual and common good. In a co-operative society, each member toils for his own good and for the good of others associated with him in the same enterprise. In recent years some traders have complained that the entry of co-operatives in their field by distributing foodstuffs, chemical manures, mill cloth, etc., has affected them adversely. But who can object seriously to groups of people joining together to purchase and distribute their requirements themselves without the aid of traders?

Yet, Co-operation does not pretend that all enterprises on earth could be brought under its ideology or that any line of business can be done exclusively on the basis of self-help and mutual help. It recognizes that it is only one mode of doing business. It is, therefore, tolerant of other

ideologies. The individual *entrepreneur*, as well as capitalistic organizations can and should flourish besides it. A variety of economic systems makes for better progress. Competition between the co-operative system and other economic systems will improve efficiency and confer wider happiness among the masses, and this is what India needs at the present juncture.

—By courtesy, A.I.R., Madras

The Vaithiswarankoil Multipurpose Co-operative Credit Society

The society was registered on 2nd December 1918 at Vaithiswarankoil, Tanjore District, an important centre of pilgrimage, and commenced functioning from 20th April 1920. The area of operations of the society extends to the villages of Edakudi, Vadapathi and Kadiramangalam. The Society has on its roll 221 members with a paid-up share capital of Rs. 2,248 on 31st December 1950.

The net assets of the members as per the property statement comes to Rs. 4,45,852. The maximum borrowing power of the society was Rs. 20,000 and has been raised to Rs. 35,000 after the introduction of the reorganization scheme, so as to enable members to avail of the credit facilities available through the society. The individual maximum borrowing power of the society is Rs. 2,000. The outstanding under Central Bank loan as on date is Rs. 19,595. During the year 1949-50 a sum of Rs. 12,945 was issued as loan to members. The outstanding loan against members comes to Rs. 21,375-14-0 as on this date.

The society has a reserve fund of Rs. 1,062-10-0 out of which Rs. 1,003-2-0 is invested in the Co-operative Central Bank, Limited, Kumbakonam. The society has invested Rs. 510 in the Co-operative Central Bank, Limited, Kumbakonam, and Rs. 50 in the Tanjore Central Co-operative Stores, Limited, Tiruvarur, as share capital.

Under the scheme of reorganization of rural credit societies the society has undertaken multipurpose activities. The society has opened a rice ration depot also. The society is enjoying a cash credit accommodation of Rs. 500 from the Co-operative Central Bank, Limited, Kumbakonam, for multipurpose activities. The society purchased chemical fertilizers and groundnut cakes to the value of Rs. 633-4-0 for joint sale among its members.

The volume of business transacted under multipurpose activities during the period from 1st July 1950 to 31st December 1950 is given below:—

1. Sale of controlled articles

			RS.	A.	P.
Rice	..	..	31,277	10	11
Wheat	..	..	679	11	8
Sugar	..	..	2,685	3	5
		2. Others			
Coffee seeds	..	..	790	0	3

Women's Cottage Industries Co-op

The Madras Women's Cottage Industries Central Co-operative Society, Ltd., was registered on 30th November 1948 and started on its work on 20th January 1949. This is a special type of society formed exclusively for the benefit of the primary women's cottage industries co-operative societies working in the City of Madras. The Central Society was started with the twofold objects of co-ordinating the activities of the primary women's cottage industries co-operative societies in producing wellcut and properly stitched garments and arranging for the sale of the garments produced by these societies. Prior to the formation of the Central Society, there were nine primary societies which produced readymade garments worth more than Rs. 55,000 in a year and these garments were sold gradually and slowly by the Madras Provincial Co-operative Marketing Society on consignment basis. Due to the sudden decontrol of cloth, there was diminution of demand for readymade garments as the public were able to get cloth freely in the open market without any restrictions and stitch their garments according to their tastes.

Owing to this slump, stocks worth Rs. 29,000 belonging to the primary societies were locked up idly and the working of these primary societies came suddenly to a standstill. Therefore, the need for the formation of a Central Society was felt. All the primaries were federated and a Central Society was formed with the object of clearing the dead stock and also helping the societies to arrange for quick marketing of goods. The Madras Women's Cottage Industries Co-operative Society came into existence and it took charge of the emporium run by the Madras Provincial Co-operative Marketing Society at Mount Road, next to Wellington Talkies, with a stock of goods worth Rs. 29,000, on 7th February 1949. The Central Society made great efforts in all directions under the able guidance of the late Srimathi Kamala Sathianadhan, M.A., who was the founder-president of the society.

Management and Working

This is the third year of the working of the Madras Women's Cottage Industries Central Co-operative Society and there are 15 individuals and nine Primary Societies as members on rolls of the society. The management of the affairs of the society vests in an Executive Committee consisting of 12 members of whom four are individuals, six are representatives of the primaries, one is a nominee of the Registrar of Co-operative Societies and the other is a nominee of the financing bank. Out of the 12 members, a sub-committee, consisting of the president, a director and a representative of the primary society has been formed to conduct the business affairs of the society.

The primaries were formed specially to improve the economic conditions of the lower middle class womenfolk and to teach them the art of tailoring, embroidery, needlework, etc., and manufacturing of garments from out of the mill cloth available with them and send them to the Central Society on consignment basis to be sold on their behalf. The Central Society in its turn undertakes to sell all these goods and takes a small percentage, i.e., 7½ per cent, as commission for acting as agent of the primaries. Apart from this the Central Society manages to get raw materials

for the production of readymade garments, such as shirts, pyjamas, half pants, full pants, blouses, frocks, pillow covers, bush coats, etc., from Binny & Co., and Mettur Industrials, and gives work to the primaries by placing specific orders for conversion of the mill cloth into readymade garments.

Payment of Wages

The primaries, on execution of the Central Society's orders, get the wages prescribed by the Executive Committee from time to time. In addition to this, ten per cent of the wages is given as commission to the primaries to subsidize their working expenses. The wages are distributed by the primaries to the members. Besides this, the Central Society has recently purchased a sewing machine with accessories for Rs. 500 from the subsidy, viz., 50 per cent of the value sanctioned by the Registrar of Co-operative Societies. A tailoring section has been formed to book orders to manufacture readymade garments suited to the taste of the consuming public. The Central Society has taken a retail textile licence and is dealing in mill cloth business.

Government Help

The Government have been helping the primary women's cottage industries co-operative societies by way of granting subsidy. During the years 1948-49, 1949-50 and 1950-51, sums of Rs. 3,120 and Rs. 2,640 respectively were granted to these societies to meet the pay of two group clerks, a peon and rent for nine women's cottage industries co-operative societies. The Government have also sanctioned a subsidy of Rs. 550 in G.O. Ms. No. 4200, Development, dated 13th August 1948, to the Nungambakkam Women Cottage Industries Co-operative Society to purchase a sewing machine and to meet the establishment charges to the Seven Wells Women Cottage Industries Co-operative Society incurred by it during 1945-47. The Vepery Women Cottage Industries Co-operative Society was also granted a subsidy of Rs. 435 by the Madras Provincial Co-operative Bank, Ltd., on 16th February 1949 to purchase a sewing machine and furniture for use in the society.

When the Madras Women's Cottage Industries Central Co-operative Society was organised, the Government sanctioned a recurring subsidy of Rs. 2,400 and a non-recurring subsidy of Rs. 500 in G.O. Ms. No. 5257, Development, dated 25th October 1948. The society purchased furniture from out of the subsidy of Rs. 500 for use in its emporium at Mount Road. The Government were also pleased to sanction a subsidy of Rs. 1,950 to meet the pay of the Master Tailor and rent of the society for the years 1949-50 and 1950-51.

Besides the Government subsidy, the Madras Provincial Co-operative Bank, Ltd., through the efforts of the Registrar, has also sanctioned a subsidy of Rs. 2,400 on 20th April 1949 for meeting other items of expenditure not provided for in the above G.O., such as payment of commission to salesmen, purchase of equipment for the show room and for meeting pay of clerk and menials. A sum of Rs. 2,500 was also sanctioned by the Madras Provincial Co-operative Bank, Ltd., to meet the pay of two Lady Instructors (at Rs. 50 per mensem each) from January to June 1950 and to pay the balance to the Central Society.

Agricultural Research Station

Problems of Sugarcane Crops

The Sugarcane Research Station, Gudiyattam, was started in 1935 on a temporary basis and is partly financed by the Imperial Council of Agricultural Research. The total area of the station is 35 acres, out of which 28.49 acres are under cultivation. The aim of the station is to study the problems of sugarcane growers in the central districts, viz., Chittoor, North Arcot, South Arcot and Salem, where sugarcane is grown to the extent of a lakh of acres. Within a few years of its starting, the station was able to fix Co. 419 as the most suitable variety for the tract and this gave 50 to 60 per cent more yield than locals. By continued trials other varieties were fixed. Co. 449 and Co. 467 are now found better than Co. 419, giving 10 to 25 per cent increased yield over Co. 419.

Experiments on the various manurial trials conducted at the station have shown that sugarcane responds in a marked degree to increased doses of nitrogen up to 200 lb. per acre. With such manuring it is possible to get high yields of 50 tons of cane or 50 pothies of jaggery per acre.

Work on Rotation Crops

Though sugarcane is the main crop on which research work is undertaken at this station, attention is also being paid to paddy and other foodcrops that are cultivated in rotation with sugarcane. The possibility of raising an additional crop of paddy or ragi by harvesting early maturing varieties of cane in December-January has been demonstrated. By regularly growing green manure crops like sunnhemp, by planting quick growing green leaf yielding trees on field bunds and by systematically converting sugarcane trash and other farm waste into compost manure, it has been possible for this station to produce all its requirements of bulky manures and maintain the fertility of the fields at a high level.

Even in this season, paddy crops adequately manured with green leaf produced on the farm itself, have yielded over 20 bags of paddy per acre on an average. By adopting efficient cultural methods, it has been possible to reduce the cost of production of paddy at Rs. 10 a bag at this station. It is gratifying to note that the ryots in the neighbourhood of the station are adopting all the above improvements on their holdings. Iron ploughs, ridge ploughs and other improved implements are being largely used and there is keen demand from the ryots for improved seeds and planting material of green leaf yielding trees. Three hundred to four hundred bags of pure seed of improved strains of foodcrops are being supplied to seed farm ryots for raising primary seed farms in the district.

Main Recommendations

A summary of the main recommendations that are being advocated from the various results achieved in the station is given below:—

- (1) Grow Co. 449 cane. It is superior to Co. 419 and is resistant to smut disease.
- (2) Use iron ploughs and ridging implements to reduce cost of cultivation and to ensure better tilth.
- (3) Irrigate sugarcane once a fortnight instead of once a week and reduce cost of irrigation.

(4) Apply 6 to 10 bags of groundnut cake and one to one and a half bags of ammonium sulphate per acre and not more.

(5) There is need to apply phosphatic manures to cane crops.

(6) In years of good rainfall canes mature early. Harvest then in December to January and raise an additional crop of ragi or paddy.

(7) There is no harm in planting sugarcane late in May. If you have facilities, take a crop of paddy from January to April and plant cane in May.

(8) When you raise a rich crop, the canes may lodge; prevent lodging by cheap "canetrash twist" propping.

(9) By proper cultivation and adequate manuring higher yields can be obtained from ratoon crops than from planted crops.

(10) Grow redgram, tapioca, vegetables, etc., on borders of sugarcane fields.

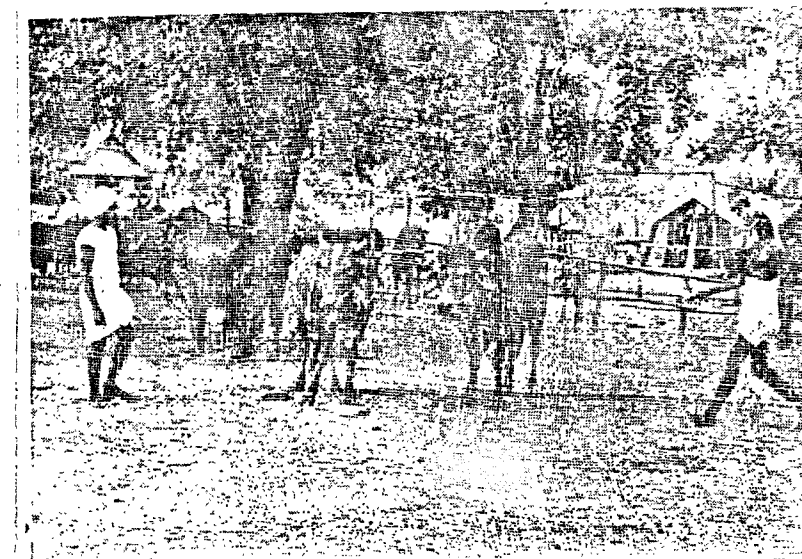
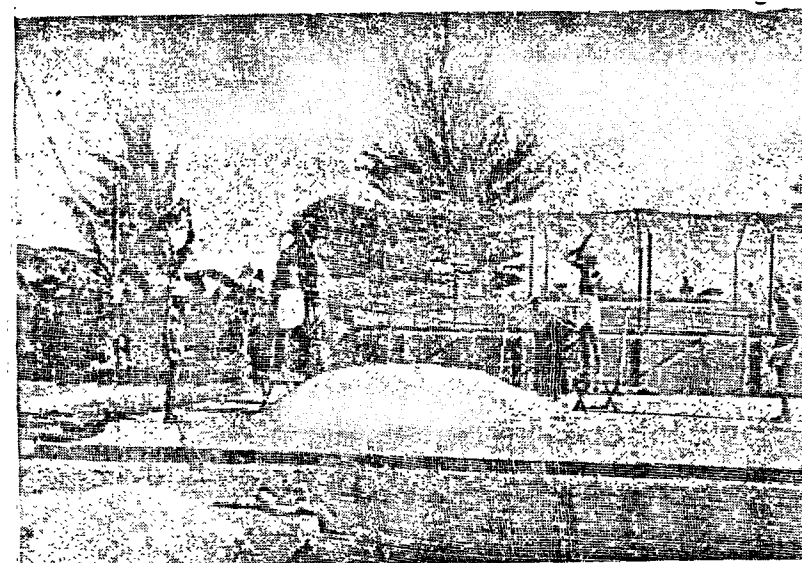
Paddy yields in Tanjore District

A review of the results at the Agricultural Research Station, Aduthurai, and in the intensively manured fields in Tanjore District during the last season and also under the various crop competition plots shows that paddy yields in this district can be increased at least by another 50 per cent. The average yield in Tanjore District as per crop and season reports, is only 1,750 lb. per acre, while good yields of more than 4,000 lb. have been recorded in the crop competition plots. Further, yields recorded at the Agricultural Research Station, Aduthurai, where judicious manuring is being adopted for the last two decades, have shown beyond doubt the possibility of raising average yields in the delta. The figures of harvests recorded during this season for all the three important crops, *Kuruvai*, *Samba* and *Thaladi*, confirm this statement. The average yields recorded at the Agricultural Research Station, Aduthurai, for *Kuruvai*, *Samba* and *Thaladi* crops during the last season are as follows:—

	Maximum. LB.	Average. LB.	Minimum. LB.
<i>Kuruvai</i> yields per acre—			
4,100	3,117	3,350	
<i>Samba</i> yields per acre—			
5,077	4,280	3,792	
<i>Thaladi</i> yields per acre—			
4,138	3,173	2,818	

In every case, the average yield is double the normal yield according to the season and crop reports. The total area in Tanjore District is nearly 13½ lakhs of acres and leaving out about 3½ acres under tank, water-logged and saline conditions, the yield in ten lakhs of acres can be increased by the judicious use per acre of 2,000 to 4,000 lb. of green manure or green leaf manure, 100 to 150 lb. of ammonium sulphate and 75 to 100 lb. of phosphatic manure. As a matter of fact, a good number of mirasdars who have taken up intensive manuring on the above lines during the last two or three seasons were able to increase the yields from 24 to 30 kalams (1,440 lb. to 1,800 lb.) per acre to 45 to 60 kalams (2,700 to 3,600 lb.).

AGRICULTURAL RESEARCH AT ADUTHURAI



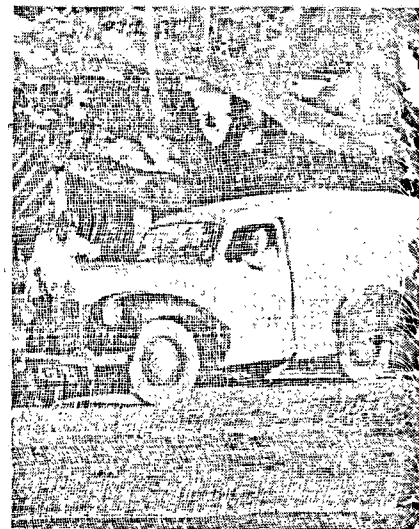
RESEARCH: All phases of farmyard work are studied at the Agricultural Research Station at Aduthurai, Tanjore District. New practices in seed selection, ploughing, manuring, irrigation, crop protection and harvesting are introduced to the general public only after intense research, experimental lines, and excellent results justify the launching of new techniques.

SEEDS: It has been found that perfect purity of seeds has to be maintained at all stages of growth, to ensure successful harvest of sturdy crops. Pictures at top and centre show how the different varieties of seed are separately thrashed, winnowed and cleared on separate concrete thrashing floors, with ample space between them to prevent mixing up of various quality seeds.

LIVESTOCK: The welfare of cattle is a vital point in any modern farm. The Aduthurai Station maintains good breeds of buffaloes and bulls in its Livestock Section, for the study of breeding and animal husbandry problems. Note the poultry yard in the background.



CO-OPERATIVE SOCIETY



The tinkle of a cycle bell rouses the still sleepy village at dawn, and housewives snatch at glistening brass vessels to meet the milkman. Milk from cans on a cycle—and in a village? Sounds incredible, but this minor revolution has been effected in Cuddalore. The secret of the metamorphosis is co-operation. The Cuddalore Co-operative Milk Supply Society was started as a primary society in 1938, and was converted into a union in 1948, when it began to broaden its activities.

Today it is composed of four milk supply societies, 20 multipurpose credit societies and nine individual shareholders. Feeder co-operatives both in the town and in the villages produce milk in common yards and the union undertakes distribution: 892 milkmen produce 530 Madras measures of milk from 569 cows and 93 buffaloes in 33 common milking yards.

Vessels and dairy equipment are cleaned and dried under special supervision, and milking is done in the presence of a union agent. Two motor vans of the union transport the milk speedily from distant places; distribution is done in sealed cans. The Dairy Assistant checks random samples of milk and the Inspecting staff send samples from the various centres for Laboratory testing. The milk procured is distributed as follows: House delivery (coupon system)—205 M.M. Depot sales



MILK FOR CUDDALORE



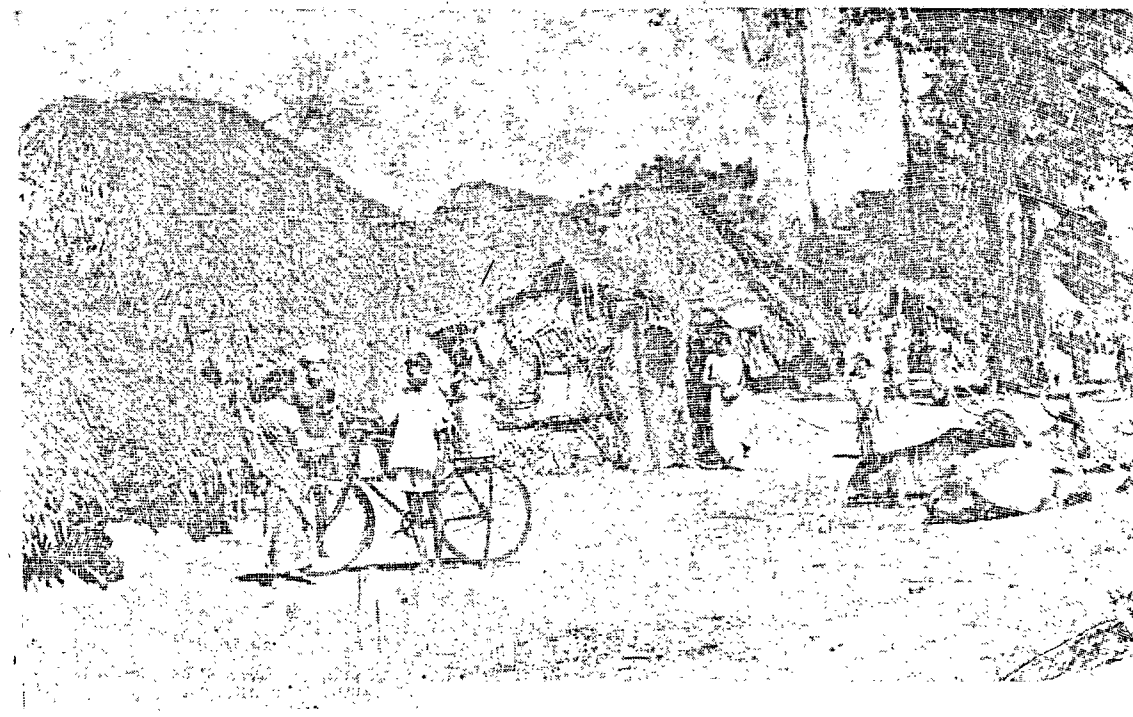
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(cash)—83 M.M. Hospital—75 M.M. Central Jail—106 M.M. Hostels and other items—61 M.M. Total 530 Madras measures.

Animals are well cared for. A specially computed cattle-feed mixture, conforming to a prescribed nutritive ratio, is prepared by the union and distributed on credit to the milkmen. On 6½ acres of leased farm land Guinea grass and Napier grass is grown and sold at the cheap rate of one anna for six pounds. A Sindhi breeding bull is maintained by the union under the Government Premium Scheme.

Medical aid is given to ailing animals and milkmen taught better methods of cattle management on the following lines: comfortable lodging, scientific breeding, adequate watering, sanitary surroundings, regular milking, pre-natal care and veterinary aid.

The Government have granted Rs. 7,000 for the purchase of a motor van, Rs. 175 for covering half the cost of a Sindhi bull and Rs. 420 as subsidy to meet the pay of an ex-tapper clerk for one year. The South Arcot Co-operative Central Bank has loaned up to March 1951 Rs. 50,000 for buying milch animals, and has again offered a loan of Rs. 6,000 for the purchase of a frigidaire. At present 25 ex-tappers are employed by the union.



Agricultural Engineering Development

The Agricultural Engineering Branch was set up as an active wing of the Agricultural Department on a province-wide basis in the year 1946 for the development of agriculture in all spheres and with a view to afford maximum possible assistance to agriculturists. This note reviews the development between 1946-47 to 1950-51.

The main activities under "Agricultural Engineering" may be briefly classified as development of "Lift Irrigation"—from wells both by use of bullock power and also by the application of mechanical and electrical energy; Land reclamation and mechanical cultivation; contour bunding; supply of essential requisites for day-to-day agricultural operations like iron and steel implements and materials; easy credit facilities, and affording all possible assistance to ryots in the matter of advice, repairs of privately owned agricultural machinery, research in agricultural engineering, etc., etc.

I. LIFT IRRIGATION—Power Lift Irrigation

Due to the high cost of work animals, their maintenance, and labour, the demand for power life irrigation appliances which minimize farm expenses, cover more acreages and thus aid not only assured irrigation to crops but more production as well, is becoming greater every day. Apart from the steady and assured productive aspects there is also a protective value in that they are an insurance against the failure of monsoons. The activities of the Department in this direction include:

(1) Issue of petrol pumping sets—both on hire and also for sale. These small sets are very useful and economical for emergency irrigation and for well sinking purposes.

Malabar Bifurcated into Two Agricultural Districts

The Government have passed order bifurcating the Malabar District into two agricultural districts, North Malabar consisting of Chirakkal, Kottayam, Kurumbranad and Wynad Taluks with headquarters at Tellicherry; and South Malabar, consisting of Kozhikode, Ernad, Ponnani, Walluvanad and Palghat (including Alathur sub-taluk) with Kozhikode as its headquarters. Each district will be placed under a separate District Agricultural Officer for purposes of agricultural administration.

This action has been taken in view of the fact that the work of the Agricultural Department has increased considerably in the district which is backward in agriculture. For the past four years an Additional District Agricultural Officer was working under the general control of the District Agricultural Officer; each officer was exercising supervision and control over half the district placed in his respective charge. It has been found that the arrangement should change and the district bifurcated into two agricultural districts.

(2) Issue of oil engine sets on hire basis and also sale.

(3) Recommendations for the purchase of oil engines and electric motor pumping sets from manufacturers' representatives.

(4) Supply of the much needed pipes and fittings for installing the above appliances at controlled rates through the district depots.

(5) Issue of oil engines and electric motor pumping sets as complete units, on hire purchase system through easy repayment instalment system, in order to help those who cannot afford to purchase these in one lump sum payment.

(6) Takkavi loans for purchase of implements.

Besides, there is also a scheme for the installation of river pumping sets at suitable sites in the various rivers and thus utilize the waters now running to waste, to irrigate more acreage during the second and third crop seasons or for irrigating fields on a higher level. The Departmental bulldozers have performed a useful work in the clearance of kasams and spring channels as this has helped many an acre to be cropped even in times of drought. The Department is also in possession of two water divining instruments with which suitable spots with underground water supply could be located in ryots' lands. The achievements in the past years are:

Year (Financial year)	(1) Petrol sets.		(2) Oil Engines.	
	Average number on hire.	Sold.	On hire at the end of each year.	Sold to ryots by Dept. directly. Recommended for supply to ryots.
1946-47	617	26	20	82
1947-48	469	164	19	112
1948-49	192	123	61	11
1949-50	178	76	302	2
1950-51 (end of Dec. 1950)	140	38	358	1,145
	427	358	207	2,866

Year	(3) Electric motors arranged for installation.		(4) Pipes and fittings supplied to ryots.	
			Pipes in feet.	Fittings Nos.
1946-47	1,386	132,914	2,397	
1947-48	1,258	16,088	1,703	
1948-49	1,257	258,722	6,062	
1949-50	2,301	293,807	3,541	
1950-51 (up to end of Dec. 1950).	1,385	207,869	Not given.	
	7,587	969,400	13,703	

(5) Hire Purchase System.

	Oil engines issued.		Electric motors issued (besides pipes).	
1949-50	87	5	92	Scheme started
1950-1951 (up to end of Dec. 1950).	692	168	860	from October 1949 only.
	779	173	952	

Note.—The target number fixed for distribution to ryots under Hire Purchase System has been increased in the year 1951-52.

II. LAND RECLAMATION AND MECHANICAL CULTIVATION

The Department is issuing tractors and bulldozers on hire basis to ryots. These power operated machinery, with suitably attached implements, can do many an operation such as ploughing, harrowing, levelling, reclamation of virgin lands and old and current fallows, etc., in order to bring them back under cultivation, clearing shrubs and bushes, clearing sand from sand cast lands, excavation and silting of tanks, kasams, etc., eradication of hariali and other deep rooted grasses, felling trees, etc. Tractors and bulldozers can perform these operations quickly and the cost involved is considerably less. The demand for these machines is on the increase day by day. The achievements are:

	Number of tractors at the end of the year on hire.	Area tackled during each year.	Number of loan applications sanctioned.
		ACS.	
1945-46	6	1,507.25	..
1946-47	54	3,708.50	..
1947-48	76	7,302.49	4
1948-49	152	25,206.19	2
1949-50	234	44,630.19	3
1950-51 (up to end of Dec. 1950) ..	237	54,783.92	Not given.

It is also proposed to issue tractors under Hire Purchase System.

III. CONTOUR BUNDING

Soil and water conservation practices prevent the land from depletion of its top-soil through erosion and also help to retain greater soil moisture. This in turn will result in additional production. Under the Intensive Cultivation Plan, the Madras Government propose to undertake contour bunding works in an area of 15,500 acres in Bellary and Anantapur Districts, during 1951-52. Topographical survey has already been completed in the selected sites and actual bunding work will be taken up very shortly. During the same year, such measures are proposed to be commenced in Visakhapatnam and Tirunelveli Districts where suitable sites have already been selected. This work will be gradually expanded to other areas as well.

IV. IRON AND STEEL

Iron and steel implements and materials are very essential for day-to-day agricultural operations. The scheme for the distribution of iron and steel for agricultural purposes was started in the year 1944. Raw materials such as cart tyres, G.C. sheets, etc., were supplied direct to ryots from the agricultural depots. Supplies of defectives and small quantities of standard steel are also made to rural fabricators for manufacture of agricultural implements for meeting the needs of agriculturists. This Department was in charge of the distribution of iron and steel materials to ryots till July 1950 and from then onwards the distribution work has been transferred to the co-operative societies. The planning and other connected work is being dealt with by the Agricultural Department.

	Total standard and non-standard iron and steel materials. (In tons)		Implements sold.	Amount of loans sanctioned for purchase of manures and agricultural implements.	
	Acquisition.	Sales.		RS.	RS.
1944-45	1,797	..	45,094	41,33,734	
1945-46	8,194	7,374	1,45,404	66,05,029	
1946-47	12,071	12,018	2,59,759	50,30,372	
1947-48	6,042	4,774	3,19,416	1,70,372	
1948-49	6,981	8,804	3,33,675	1,09,898	
1949-50	9,656	7,860	2,08,003	28,70,404	
1950-51	Not given.	..	..	..	..
	44,741	41,830			

V. TECHNICAL ASSISTANCE

Technical assistance is rendered to the agriculturists by the Departmental staff in the matter of installation of power pumping machinery or their repairs, etc. They are also attending to the repairs of privately owned tractors, on requests from ryots.

VI. AGRICULTURAL ENGINEERING RESEARCH

Research is the basis of Development. Research in Agricultural Engineering is being actively pursued at the Agricultural Research Engineering Section, Coimbatore, on a planned basis. Appreciable progress has already been made in evolving new implements and machinery, and in hitching Indian implements behind the tractor to suit the Indian conditions and to minimize production costs. Another notable feature is the successful demonstrations conducted to show the practicability of employing power farming machinery for puddling operations, and this has attracted the attention of the cultivating public and other State Governments as well.

Mechanization is a better, quicker and easier way to produce more food for the suffering millions. Thousands of acres of waste lands can be turned into beautifully cropped lands to bring more prosperity to our people. Mechanization can bring maximum food crop production at low costs and less effort.

Wynaad Agricultural Research Station

The Wynaad Colonization Scheme is for the agricultural development of a tract containing hills and forests at an elevation of about 3,000 feet above sea level. The climatic and other conditions in Wynaad are different from those in the plains. It was, therefore, considered necessary to have an Agricultural Research Station attached to the Colonization Scheme. It is intended that the Research Station should carry out demonstrations on the improved methods of agriculture and the proper development of the holdings of the settlers on sound and scientific lines, do propaganda among the settlers for adoption of improved cultural practices and make available superior seeds, plants and planting material of various crops for distribution to the colonists. The Research Station was opened at Ambalavayal within the colony area in July 1945.

The area of the station is 250 acres comprising 215 acres of dry land and 35 acres of wet land. The main crops grown in the farm are paddy, ragi, samai and vegetables. The cultivation of spices, plantain crops and fruits is going on. Reclamation of land, laying out plots and extending the programme of work took nearly three years, while research work went on simultaneously. The results achieved so far are very encouraging. High yielding strains of paddy were evolved and six strains from the important local varieties yielding 10 to 30 per cent increases in yield have been isolated and are under distribution in the tract.

The local practice is to raise only a single crop of paddy a year in the entire wet land, though water supply is available in sufficient quantities for raising a second crop of paddy. Experiments conducted in the farm clearly indicated the possibility of raising two crops of paddy, one yielding 2,500 lb. and the other 1,000 to 1,500 lb. in place of a single crop yielding only 2,000 lb. Similarly, trials on the cultivation of sugarcane, pulses and oilseeds are in progress and the results so far recorded go to show that all these crops can be successfully grown in this tract. Fruit crops have been introduced with a view to select the varieties suited for extensive cultivation in the area. Loose jacket oranges are extensively grown in the tract, while at the Research Station various fruits like *sathugudi*, plum, peach, rose apple, pineapple, etc., are being grown. The cultivation of pineapple and banana varieties has been a great success. Sweet potato and tapioca are also extensively cultivated in the tract.

Trials on spices like clove, nutmeg, cinnamon, ginger and turmeric are under way. Plantation crops like coffee are being grown. Trials have been initiated to study the economics of growing robust coffee both as a pure and as a fixed plantation crop with banana, orange and pepper. Pisciculture has been recently introduced. Mirror carp has been introduced in the tank attached to the station. Fingerlings are being distributed to the ryots for rearing in small ponds in their holdings. In due course it is expected that the results obtained in this research station will be of great value in raising the economic condition of the settlers and maintaining standards of good husbandry.



GOOD FISHING: "Ajit", the demonstration inshore fishing motor boat designed by the Fisheries Department, working in the Tanjore Deep Sea Fishing Unit.

Increased production of Subsidiary Food Crops

Madras is one of the States where edible root and tuber crops are generally well-known to the people and the production of all such crops is on the increase. Already trial of varieties of tapioca, sweet potatoes, etc., secured from outside sources as well from the chief producing centres within the State has been in progress at several Agricultural Research Stations. Such trials for selecting the best will be intensified and co-ordinated under the different schemes.

The nutritional value of the tuber and edible root crops will be investigated by the Nutrition Institute, Coonoor. The cultivation and consumption of tapioca are far greater in the coastal areas than in the interior, and in such areas fish eating is also common among the populace.

Potatoes, sweet potatoes and bananas are already being grown to the extent that facilities permit within this State. Potato is only grown in higher altitudes as in the Nilgiris, where no competition with cereals is expected. Banana is grown in rotation with paddy in some areas, while sweet potato is grown either under rainfed conditions or under irrigated conditions.

The Central Food Technology Institute, Mysore, is considered to be the appropriate centre where processing and conversion into food products can best be investigated. Recent reports of manufacture of synthetic rice from a blending of tapioca flour and groundnut seem to be promising.

In this State, jack fruit and bread fruit are already being consumed by all sections of the people and there is no need for any intensified propaganda to foster their increased consumption. Extension of cultivation of these fruits, bananas, mango and papayas, etc., which provide the chief supplementary foods among fruits, is being advocated by propaganda as a normal part of the activities of the Agricultural Department. Supply of seeds and seedlings is also being arranged through Government nurseries.

There has been an expansion of the area under tapioca cultivation in the districts of Srikakulam, Visakhapatnam, Chingleput, Salem, South Arcot and Malabar. The sale of manures and fertilisers to tapioca growers is effected at concessional rates classifying tapioca as a food crop. The continuance of the scheme for the free distribution of planting materials of tapioca, sweet potatoes and kurkan to ryots during 1951-52 is also under consideration.

GREEN MANURE FOR PADDY

SOIL NUTRITION: Green manure provides cheap, effective and abundant soil nutrition for crops from an indigenous source, replacing chemical fertilisers to some extent. A drive is afoot to popularise and intensify the growth of green manure to produce our own manure for paddy.

SHRUBS AND TREES: At Aduthurai, *Glycyrrhiza glabra*, a green manure shrub, has been planted on waste lands (*top*); quick growing green manure trees are grown on field bunds for use with paddy crops (*centre*).

COTTON: As an intermediate crop between paddy growing, cotton comes in handy. The Cotton Extension Service is experimenting with varieties, soil and periodicity. Here a field worker protects a cotton crop against diseases by spraying (*bottom*).



A Plan for Progressive Villages

The Fiscal Commission found that there was no work for the cultivators in unirrigated areas for more than three to four months and in irrigated areas, only 18.9 per cent for double that period, in a year. In addition to this persistent under-employment, the Commission found there was considerable disguised unemployment of those tied to land because of the absence of other outlets. For making better use of this labour, it recommended an Agricultural Extension Service for about 25 villages for improving agricultural efficiency. Since then, the Centre has proposed Associated Farms, under which for introducing modern agricultural practices, remission of revenue and subsidies are to be bartered.

There is little prospect for Associated Farms as no cultivator will agree to lease his land even for a short period, but there is much promise in the principles of barter. For reduction in revenue, the cultivator will do much; he is also susceptible to preferences in the use of assistance like tractors, drills, pump sets and agricultural aids like irrigation, fertilisers and good seed. He will overcome his indolence and what is even stronger, his fear of experiment, under these inducements. He may do so more quickly if he is committed collectively, that is if the induce-

Distribution of Chemical Fertilisers

More areas have been classified by the Government as intensive cultivation areas for the purpose of food production schemes. The following are the new areas so classified. These areas will be eligible for financial assistance during the year 1951-52 for the purchase of fertilisers. (1) Sriakulam, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Nellore, South Arcot, Tanjore, Tiruchirappalli, Madurai, Tirunelveli, South Kanara and Malabar Districts; (2) Selected blocks of 5,000 acres and above with assured irrigation facilities specified in the districts of Bellary, Kurnool, Cuddapah, Chingleput, Chittoor, North Arcot, Coimbatore, Salem and Nilgiris.

It may be recalled that a scheme was sanctioned by the Government last year for concentrating the supply of chemical fertilisers in the deltaic areas in the districts of East Godavari, West Godavari, Krishna, Guntur, Nellore, Tanjore, Tirunelveli, Madurai, Tiruchirappalli, and South Arcot. Under this scheme Takkavi loans were granted to the ryots at the rate of Rs. 25 per acre up to maximum of Rs. 200 free of interest, to enable them to purchase chemical fertilisers for application to their paddy crops. The loan was later recovered in March 1951 after the harvest of the long-term crop along with the kist.

The new areas cited above which have been classified as intensive cultivation areas will, with immediate effect, also be eligible for the grant of loans for the purchase of fertilisers.

ments are offered for the achievements of the whole village. Not only psychologically is herd action generally spontaneous, but practically, individual recalcitrance will not be tolerated by the general interests affected. In any case, neglected work can be done, if provision is made, at the cost of the defaulters.

Programme of Work

A plan for such progressive villages may be adumbrated as below:—

(1) Pitting and composting all the available manure, (2) green manuring to the extent necessary, (3) contour bunding all fields liable to erosion, (4) sowing improved seed and making its whole harvest available by exchange to other cultivators, (5) crop rotation, (6) ploughing and cultivation by approved methods, (7) contour bunding pastures, (8) deepening tanks, (9) reducing fallows, (10) reclaiming waste land for collected farming, common grazing, fuel reserves, (11) consolidation of holdings and (12) digging of wells by and for the community.

Targets may be set in percentages of increases over the average recorded production. For 10 per cent increase, there may be a 20 per cent remission of revenue for three years, for 15 per cent, 35 per cent for five years, and for 20 per cent, 50 per cent for ten years, provided the increased production is sold to Government procuring agencies. In order to introduce speed, the first village in each district to complete the whole programme and to secure a 25 per cent increase may be given full remission in perpetuity. In addition to remission, villages working in the Plan will have priority for State supplies like fertilizers and State services like irrigation, tractor ploughing, etc.

Organisation of Extension Centre

An Executive Agency of five elected representatives (with the village official as secretary) may be elected for three years. The orders of the executive on the programme will be subject only to appeal to another body of five elected for the villages in the Extension Centre, advised by the Extension Expert. Every village can enter the Plan, by electing its executive and notifying its intention to the Extension Centre, or Tahsildar, by a date fixed.

The cost of the Plan including the remissions of revenue, subsidies, price of tractors, pay of Extension staff, will be shared equally by the State and Central Governments. As this cost is to be paid retrospectively for actual increases in production, it will be the most economical expenditure Government could incur on Grow More Food. As the village realises its co-operative possibilities, it can be organized for other developmental activities on the same principles of barter of labour for State assistance.

Coimbatore Panchayat Forests

In pursuance of the policy of the Government to transfer the management of the Panchayat Forests to the Forest Department, the Government have directed the management of the panchayat forests in Coimbatore District be transferred to the Forest Department with effect from the date of taking over.

The F.A.O. Programme

The Food and Agriculture Organisation's headquarters was moved to Rome in April 1951. The F.A.O. activities are classified into three groups, namely:—

- (i) The collection and publication of statistics and technical and economic information;
- (ii) the provision of advice and assistance to member Governments; and
- (iii) the furthering of international co-operation through conferences, regional meetings and expert committees.

Agricultural production comprises a vast range of problems, each of which has both economic and technical aspects inevitably interlinked. Among the activities designed to have immediate practical results, may be mentioned the hybrid corn programme which has been in operation for three years in Europe.

A parallel activity is the rice breeding programme in South-East Asia now under the auspices of the International Rice Commission. Other examples are locust control in Central America, animal nutrition, animal disease control. Training centres for statisticians, economists and extension workers will be organised as in previous years.

Long-Term Programme

Next may be mentioned a range of activities of considerable importance from which benefits materialize only at a later date. Such are the building up of a catalogue of genetic stocks, advisory work in animal breeding, surveys of soil erosion and soil conservation practices, studies and advisory assistance on fertilizer problems, missions to individual countries to recommend which branches of agriculture should be expanded and by what means. Another activity is aid to Governments in developing agricultural production goals and targets to which the programmes in particular fields can be oriented. These goals also provide raw material for the appraisal of regional and world-wide trends.

The nutrition work of the Food and Agriculture Organisation extends over a wide range of subject-matter from mobilising the services of experts on the highly technical problems of physiological requirements and food composition down to advising national agencies on methods of measuring food consumption in the home.

Its year books and monthly bulletins give trade data, while economic analyses are found in the commodity bulletins and reports, the outlook for demand and prices of farm products, various food appraisals and the annual state of food and agriculture.

Projects to be Taken Up

Among the 1951 projects under agriculture, the chief items are:

Implementing the recommendations of the 1950 meeting of the International Rice Commission with respect to the production and processing of rice.

Completion of a publication on principles and methods of agricultural extension.

Compiling and publishing material on equipment available for use in developing small industries to service agriculture.

Collecting and making available information on tropical tree crops as sources of food and feeds and in relation to soil protection.

Assembling and making available information on new spraying technique.

Collecting and making available information on virus diseases of fruit trees.

Preparing a review of techniques of improving crops and forage production and methods of testing new and improved crop and herbage varieties.

Collecting, collating and making available the policies and methods followed in different countries to produce and distribute improved seeds.

The preparation and publication of available information on principles of safe grain storage and modern methods of infestation control.

Preparing a resume of information concerning six major diseases and nine major insect pests of rice.

Preparation and publication of available information on principles of grain storage and modern methods of infestation control.

Assembling and publishing information on tools and implements adapted to use on small farms in various parts of the world including tools and implements for the culture, harvesting and processing of rice, and facilitating international exchange of tools and implements known to be useful in other countries.

Collecting information on fertilizers, manures and soil amendments used in rice production and the treatment of rice seed with nutrient solution.

Collecting and disseminating information on methods of producing fertilisers from natural organic materials.

Target for Vanamahotsava 1951

The Executive Committee on Tree Planting which met recently has fixed a target of 50 lakhs of trees and a minimum of 500 trees per village for the ensuing Vanamahotsava celebrations. One-third of the trees thus planted will be fruit and edible nut trees.

The Committee suggested that for the sake of uniformity the first week of July 1951 will continue to be observed as the ceremonial Tree Planting Week throughout the State. For the purpose of the prize scheme, the Committee suggested that trees planted from 1st June to 31st October will be counted.

The Committee reviewed the report from the Collectors about the success of the Vanamahotsava scheme and the number of trees planted during celebrations. The total number of trees planted during the celebration in the previous year came to 8,350,883 and the best district was South Kanara, planting 1,737,301 trees.

Food Offences and Punishments Awarded

In the Madras State (except Nellore and Ramanathapuram), during the first fortnight of February 1951, 662 cases of prosecutions were disposed of in respect of food offences. The accused persons were people of various degrees of social standing and most of them belonged to the poorer classes. Fines ranging from Re. 1 to Rs. 300 and imprisonment up to two months were imposed.

Arumuga Udayar, Salem, was fined Rs. 250 with two months' rigorous imprisonment in default, and Sathamba Goundan, Kaliappa Goundan and Kamachi Ammal, Salem, were each fined Rs. 200 with a month's rigorous imprisonment in default, for unauthorized purchase and sale of foodgrains.

For hulling paddy without permits P. Rangarao and B. Subbaya, Guntur, in a case, were each sentenced to pay a fine of Rs. 200 with a month's rigorous imprisonment in default.

A fine of Rs. 200 or rigorous imprisonment for two months was imposed on P. K. Sahul Hameed, Madurai, for purchase of foodgrains without permit.

Fines of Rs. 200 and 300 or rigorous imprisonment for two months were imposed on Sellappa Goundan, Kali Goundan, Ramasami Goundan, Valiappa Goundan, Sengoda Goundan, Arunachala Udayar, Kattiappa Udayar, Mallappa Goundan and Palaniappa Goundan of Tiruchirappalli District for illicit transport of foodgrains.

Besides these punishments imposed in Courts, departmental action such as warnings, fines, forfeiture and enhancement of security deposits, cancellation and suspension of retail and wholesale licences was taken in 212 cases.

Seven hundred and thirty-seven cases of prosecutions in respect of food offences were disposed of in the various Courts in Madras State during the second fortnight of February 1951. The accused persons, majority of whom belonged to the poorer classes, were people of various degrees of social standing. The fines imposed ranged from Re. 1 to Rs. 400 and the period of imprisonment extended up to four months.

R. Papa Rao of Nidadavole, West Godavari District, was fined Rs. 200 for illicit transport of paddy.

A fine of Rs. 200 with simple imprisonment till the rising of the Court was awarded to Angammal of Coimbatore District for importing rice without permit.

In Guntur District, for illicit possession and transport of foodgrains, Aluru Nagasundaram, Chinna Venkatarajah, V. Arjuna Rao, Raghaviah, P. V. Subbiah and Venkateswarlu were each fined Rs. 200 to Rs. 250 with simple imprisonment for one week to one month in the case of the first four accused. Shaik Mohideen was fined Rs. 200 for hulling paddy without permit.

For illicit import of foodgrains, Kandappa Gounder, Ramaswami Goundan and Kali Goundan of Tiruchirappalli District were each fined Rs. 200.

Ch. Mutyalu, N. Panesa Ramana and N. Narasimha Rao were fined Rs. 200, Rs. 300 and Rs. 400 respectively for unauthorized possession of rice, incorrect maintenance of accounts, etc.

Besides these punishments imposed in Courts, departmental action such as warnings, fines, forfeiture, enhancement of security deposits, cancellation and suspension of retail and wholesale licences was taken in 138 cases.

Manuring Paddy Crops with Phosphates

Paddy being the chief food crop of this State, special attention has been devoted to the study of this crop with a view to increase its yield through improved methods of cultivation, selection of seeds, timely sowing, irrigation and manuring. Of the various aids contributing to increased yield, manuring is probably the most important. It has been fairly well established that by intensive and adequate manuring of the area under irrigated paddy crop, production can be increased to a great extent. Experiments carried on during the past two decades and more at the several agricultural research stations of this State, have indicated that paddy needs mainly Nitrogen and Phosphorus in easily available forms. Nitrogen in the form of Ammonium Sulphate and Phosphorus as Superphosphate or Ammonium Sulphate when applied, especially with green manure, have invariably proved beneficial to paddy crop. Hence these two important manures

(Nitrogen and Phosphorus) as well as bulky organic materials like green leaf or compost or farmyard manure, are being largely used in most of the areas under paddy in the State.

During the last season, large quantities of Ammonium Sulphate and Superphosphate were distributed under the Intensive Manuring Scheme in ten deltaic districts with assured water-supply. In localities where the ryots used Ammonium Sulphate and Superphosphate more or less in the proportion of 2:1, the yields recorded were extremely good and encouraging. The Government consider that the ryots in all the districts of the State should apply these two fertilisers in the ratio of 2:1 preferably with green leaf manure. This will give not only increased production to meet the food deficit in the State but also increased profit to the ryots. All the ryots in this State, especially in the assured water-supply regions, are requested to adopt this judicious application of manure to their paddy crop.

Control Orders in Force on May 15, 1951

Food and Agriculture Department

THE MADRAS FOODGRAINS PRICE CONTROL ORDER, 1949

This order fixes procurement and wholesale issue prices of foodgrains for the year 1949-50, in the several districts of the State. The order contains six schedules specifying the different procurement, ex-mill, f.o.r., and wholesale prices for paddy, rice and millets. Nothing contained in this order shall apply to the purchase of paddy and millet seeds by officers of the Agricultural Department. The State Government or the Commissioner of Civil Supplies, Madras, may, by a general or special order, authorize an increase over the prices specified for f.o.r. deliveries, ex-mill/godown and wholesale prices of paddy, rice and millets to meet the fluctuation in interest and capital extra transport charges, increase in cost of gunnies, etc.

ORDER PROVIDING POWERS TO REQUISITION STOCKS OF FOODGRAINS

This order extends to the whole of the State of Madras. This empowers the Government to issue directions to the Collector or any other officer to requisition stock of foodgrains whenever the Government consider it necessary to do so. This also empowers Collectors to call for declaration of stocks of foodgrains from any person.

THE MADRAS FOODGRAINS (INTENSIVE PROCUREMENT) ORDER, 1951

This order has been issued in supersession of the Madras Foodgrains (Intensive Procurement) Order, 1950, and it has come into force on May 11, 1951. This order applies to the delta areas of the Northern surplus districts of East Godavari, West Godavari, Krishna, Guntur and Nellore, and the entire districts of Tanjore and the Nilgiris to which the Intensive Procurement Scheme is confined (besides Malabar) under the Revised Food Policy of the Government. The details of the areas to which the order applies are as follows:

West Godavari—Entire taluks of Tanuku, Bhimavaram, Narsapur and certain delta villages in Kovuru, Eluru and Tadepalligudem taluks.

East Godavari—The entire taluks of Kakinada, Amalapuram, Razole and Ramachandrapuram.

Krishna—The entire taluks of Gudivada, Bandar, Kaikalur, Divi, and all villages on Vijayavada and Gannavaram taluks lying on the southern side of the railway line.

Nellore—The entire taluks of Nellore, Kovvur, Kavali, Gudur and Atmakur, and certain villages under Mopad Project in Udayagiri and Kanigiri taluks.

Guntur—Entire taluks of Tenali, Repalli and Bapatla.

Tanjore—All taluks.

The Nilgiris—All taluks.

This order applies to paddy, rice and also millets in the case of the Nilgiris district, and to paddy and rice alone in the case of other districts. Under this order, producers are required to deliver their surplus stocks of foodgrains as determined by the Collector or his subordinate staff to the Collector or to agents appointed and notified by him, within the days fixed by the Collector. In determining the surplus with the producer, the producer is allowed the necessary grain for all his bona fide requirements, viz., for seeds, for agricultural expenses, domestic consumption, which are prescribed in the order. A provision for the seizure and confiscation of the vehicles, animals, etc., used for transport of foodgrains in violation of provisions of this order, has been made in the order. Failure to comply with the provisions of this order or directions issued thereunder, will entail the seizure and disposal of stocks besides other punishments. This order also empowers Collectors to call for declaration of stocks from producers.

THE MADRAS FOODGRAINS (LEVY PROCUREMENT) ORDER, 1951

This order applies to the entire South Kanara district and to the delta areas of South Arcot, Madurai and Tiruchirappalli districts and to the specified areas irrigated under the Nagavalli and Vamsadhara rivers in Srikakulam district, in which the Levy System of Procurement is being worked in pursuance of the Revised Food Policy of the Government. The delta areas of the South Arcot, Madurai and Tiruchirappalli districts to which the order applies have been defined as large patches of wet lands irrigated under some river or channel systems (as opposed to what are generally known as precarious sources) on which crops have not failed this year. This order applies to paddy, rice and millets also in South Arcot district, and to paddy and rice alone in the remaining districts. This order requires producers to deliver to the Collector or agents appointed and notified by him foodgrains calculated at a scale of levy fixed for the district. The scale of levy is so fixed that it is easy and does not deprive the producer of his entire surplus. This order empowers the Collector to call for declaration of stocks from producers. The order also provides for seizure and confiscation of the vehicles, animals, etc., used for transporting foodgrains sold in contravention of the order. Failure to comply with the provisions of this order or directions issued thereunder will entail the seizure and disposal of stocks, besides other punishments.

SALT PRICE CONTROL ORDER, 1947

This order specifies the maximum ex-factory wholesale price of salt per imperial maund (exclusive of the cost of the gunny and cess) for each of the salt producing districts of the State. The prices vary between 12 annas to 15 annas per imperial maund. The Collectors of the districts have been empowered to fix the wholesale and retail prices of salt for each consuming area within their respective jurisdictions. The wholesale price fixed for each consuming area includes the ex-factory price, cost of the

gunny, transport charges, handling charges and wholesaler's profits of 6½ per cent. The retail price for each consuming area is fixed suitably on the basis of wholesale price fixed for that area. No producer, wholesaler or retailer, should sell salt at a price exceeding the notified price. Failure to comply with any of the instructions will render a dealer punishable in a court of law.

THE MADRAS RATIONING (PREPARATORY MEASURES) ORDER, 1947

This order enables Government to take the preliminary steps such as enumeration of householders, etc., for the introduction of statutory rationing in any area. In an area where this order has been extended with a view to the introduction of statutory rationing in that area, Government may authorize any person to collect information and statistics necessary for the rationing of foodstuffs. Every person of whom any question is asked by the enquiry officer authorised by the Government in connexion with the rationing of foodstuffs, is legally bound to answer such questions. Every person occupying any premises shall allow the numbering officer or enquiry officer such access thereto as may be required for the purpose.

THE MADRAS RATIONING ENQUIRY ORDER, 1947

This order enables the Government to call for the necessary particulars from establishments in an area where statutory rationing is proposed to be introduced. In an area where this order has been extended, every person owning or in charge of any establishment in that area shall furnish to the officer specified by the Government true and correct information relating to such establishments as may be required by the said officer if such establishment desires to obtain rationed articles for consumption after the rationing date.

THE MADRAS RATIONING ORDER, 1947

This order regulates the distribution of rationed articles to householders, establishments, retailers and wholesalers in the statutorily rationed areas.

The following is the list of offences under this rationing order:

1. It is illegal to transfer one's ration card to any other person.
2. It is illegal to use another person's ration card.
3. Defacing or destroying one's ration card is wrong. Further, a new card in place of a lost one can be got only on payment of a fine of two annas.
4. Every change in the members of a family owing to death or absence from the household for a period of not less than seven days shall be reported to the Rationing Officer within ten days in the case of death of a member and within 14 days in the case of absence of a member from the household.
5. Change of address of cardholders should be reported to the Rationing Officer within ten days from the date on which the change takes place.
6. Rations should not be drawn for a person who is not in the rationed area.

7. If a cardholder is leaving the rationed area permanently he should return the ration card to the Rationing Officer. If a cardholder is leaving the rationed area with his family temporarily for a period of not less than eight weeks he should surrender the ration card to the Rationing Officer.

8. Rations should not be drawn for the same person on more than one ration card.

9. Possession of more than one card is an offence.

10. Rationed articles should not be purchased from an unauthorized dealer and except on a ration card.

11. A landholder owning lands in a rationed area should intimate the date of harvest of his lands to the Rationing Officer and should obtain a permit from the Rationing Officer either for retaining the produce for his consumption or for transporting the quantity outside the rationed area or for selling the surplus grain with him.

12. A landholder in a rationed area who imports grain from his lands outside for personal consumption, etc., shall inform the Rationing Officer of the date of arrival of the consignment and the place of storage, and should keep account for the quantity spent.

THE ESSENTIAL ARTICLES RESTRICTED ACQUISITION ORDER, 1947

This order is in force throughout the State. Under this order no person shall acquire any essential articles, viz., paddy, rice, beaten rice, millets, wheat, maida, maize or rice flour, if by so doing the quantity thereof in his possession or under his control will exceed the normal quantity required for consumption in the household or establishment during the period of one month. This limit has since been increased to six months' requirements at the rate of 12 oz. per adult per day in respect of the rationed areas of deficit districts and the deficit taluks of surplus districts where intensive procurement has been abolished. The restrictions do not apply to the acquisition in the ordinary course of his business of any essential article by a person carrying on the business of a producer, dealer, manufacturer, carrier or warehouseman.

THE MADRAS FOOD (RESTRICTIONS ON SERVICE OF MEALS BY CATERING ESTABLISHMENT) ORDER, 1947

This applies to the whole of the State. Under this order no catering establishment shall supply or offer or attempt to supply for consumption and no person shall obtain or consume or attempt to obtain or consume at or in connexion with any catering establishment for purposes of any single meal more than three courses. The three courses shall consist of (a) one substantial dish, (b) one subsidiary dish and (c) one sweet dish or (a) two subsidiary dishes and (b) one sweet dish.

THE MADRAS GUEST CONTROL ORDER

This order, which came into force on 13th February 1951 and extends to the whole of the State of Madras, restricts the number of guests at marriage, funeral or other parties. Excluding the host and members of his household, no person shall provide food at any party other than a marriage party or a funeral party, for more than

24 persons, at any marriage party for more than two principal meals or for more than 50 persons at each such meal, at any funeral party for more than one meal or for more than 50 persons at such meal.

THE COTTON CROP (COMPULSORY GROWTH WITH CHILLIES) ORDER, 1950

This order extends to the whole of the State of Madras. According to this order no person can cultivate the rain-fed crop of chillies in any of the districts of Guntur, Krishna, East Godavari and West Godavari in the State of Madras except as a crop mixed with cotton in the proportion of not less than one line of cotton plant to every 14 lines of chilli plants.

THE MADRAS MANURE DEALERS' LICENSING ORDER, 1949

The Madras Manure Dealers' Licensing Order, 1947, has been re-issued as the Madras Manure Dealers' Licensing Order, 1949.

An amendment issued on November 25, 1950, lists the names under which manure materials are sold and the definitions implied in the sale of manure articles against those particular names, and notifies that the sale of an article under any of the defined names shall constitute a warrant that it accords with the implied definition. Further, the particulars of the implied definition should be marked on the manure bags, in addition to the name under which the manure is sold, the gross weight and the name of the manufacturers.

An amendment issued on December 29, 1950, gives the enhanced rates per annum of licence fees for the different classes of licensees.

Another amendment, dated December 29, 1950, explains that: (1) in cases where a mixing or millers' licence has been obtained, no other licence under the order is necessary; (2) mixing or millers' licence will have to be taken by the licensee in respect of each centre where mixing or crushing is carried on; and (3) in the case of manure mixtures, a non-recurring fee of Rs. 50 for each mixture shall be payable. If the analysis of any mixture is changed, it will be regarded as a new mixture for the purpose of this order and a fresh registration fee shall be payable.

An amendment issued on 24th January 1951 states:

"Every licence shall ordinarily be renewed before the expiry of its term; but applications for renewal will be received up to the 30th June of the financial year for which the renewal is applied for, on payment of the prescribed fee and in addition, a penalty of rupees two for each such application."

THE MADRAS OILCAKE (MOVEMENT CONTROL) ORDER, 1951

The Madras Oilcake (Movement Control), Order, 1943, re-issued as the Madras Oilcake (Movement Control) Order, 1949, has been annulled, and restrictions on the movement of oilcakes, both within and outside the State, have been removed.

THE MADRAS SUGAR (TRANSPORT CONTROL) ORDER, 1949

According to this order no sugar shall be transported or offered or accepted for transport whether by rail, road or water, or by any carrier or other person except under

and in accordance with the general or special permit issued by the Commissioner of Civil Supplies, Madras, or his nominee.

For the purpose of this order sugar means sugar manufactured by any process including sugar made in vacuum from factories, from sugarcane or gur or palmyra jaggery as well as khandasari sugar, sugarcandy (misry) and bura.

MADRAS FOODGRAINS CONTROL ORDER, 1947

This order exercises control on the purchase, sale or storage beyond a certain limit (10 maunds in the case of purchase and sale and 15 maunds in the case of storage) of the following foodgrains and the products thereof by a system of licensing:—

Wheat, paddy (rice in the husk), including fried paddy and parched paddy, rice (husked), including beaten rice, puffed rice and parched rice, cholam (jowar), cumbu (bajra), ragi, korra, meize (*Zea mays*) and rye. For the grant of a licence under this order for dealing in foodgrains, one must have been in the foodgrains trade at any time prior to 22nd June 1942, the date on which this order first came into force.

A licence fee of Rs. 24 per annum is chargeable for each licence or exemption certificate issued or to be issued under the order.

The Commissioner of Civil Supplies or an officer authorized by him in this behalf may in special cases condone any delay in the payment of the said fee up to any period specified by him on payment of a penalty of Rs. 2 in each such case.

Every applicant should produce satisfactory evidence to prove that he was in the foodgrains trade during the period prescribed. He should not also have been found guilty at any time of hoarding or black-marketing offences under the Control Orders or even strongly suspected of having indulged in anti-social activities. Harijans, co-operative societies, hand-pounding concerns, ex-abbkari contractors, ex-servicemen's associations, etc., are exempted in deserving cases from the conditions regarding the previous business standing.

MADRAS FOODGRAINS (MOVEMENT CONTROL) ORDER, 1947

This order controls the movement of foodgrains from places within the State of Madras to places outside it by a system of permits created in certain cases and under certain conditions specified in the order. Permits under the order are issued by the Commissioner of Civil Supplies, Madras. Small quantities of foodgrains forming part of the luggage of bona fide travellers, grains intended for seed purposes, etc., are exempted from the operation of the order.

This order has been extended to apply in the case of imports of foodgrains. A permit is necessary for the import of foodgrains into the State.

ORDER PROHIBITING THE FLYING OF MOTOR VEHICLES DURING NIGHTS

According to this order no driver, owner, or other person in charge of a motor vehicle for which a public carrier's permit or a private carrier's permit has been granted shall, when such vehicle carries foodgrains except Bengalgram, groundnut (shelled and non-shelled), drive it or



DIGGING TO SELF-SUFFICIENCY: Sri Jawaharlal Nehru, Prime Minister of India, lead a group of volunteers in digging a mile-long "nullah" (canal) at Hajratpur village (U.P.) The canal will drain away water from the low-lying areas during the rainy season, reclaiming land for Rabi and Kharif crops.

cause it to be driven between the hours of 7 p.m. and 6 a.m. on any road or land notified by the District Magistrate in the districts and by the Collector of Madras in Madras.

Foodgrains transported under Military Credit Notes are exempted.

THE MADRAS RICE MILLS LICENSING ORDER, 1947

This order is in force throughout the State. According to this order, millers in the State are required to take out a licence from the Collector of the district concerned and to abide by and carry out the conditions of the licence. For contravention of the provisions of this order, the Collector may suspend or cancel the licence. The Government may suspend or cancel the licence without assigning reasons.

A licensee is prohibited from increasing the hauling capacity of his mill by installing additional machinery or in any other manner except in accordance with the conditions of a permit issued in that behalf by the District Collector. Further, a licensee shall maintain accounts in respect of aforesaid business in such a manner as may be prescribed by the District Collector or his nominee.

THE MADRAS TAPIOCA (MOVEMENT) ORDER, 1948

This order prohibits the export of tapioca and its products except sago from the districts of Malabar, South Kanara,

the Nilgiris and Coimbatore except under and in accordance with a permit issued in that behalf by the Commissioner of Civil Supplies or the Collector concerned. This order does not apply to the export of tapioca under Military Credit Notes.

THE MADRAS FOODGRAINS (RESTRICTED PLEDGING WITH BANKS) ORDER, 1950

This order imposes certain restrictions on the pledging of the stocks with banks to the procuring agents in the State.

THE MADRAS DRUGS CONTROL ORDINANCE, 1949

In order to ensure that essential drugs continued to be sold at reasonable prices even after devaluation, the Madras Drugs Control Ordinance, 1949, was promulgated by the Government. The Ordinance provides for the control of the sale, supply and distribution of drugs in the Madras State.

The Ordinance has since been replaced by the Madras Drugs (Control) Act, 1949 (Madras Act XXX of 1949).

THE MADRAS FOODGRAINS PROCUREMENT ORDER, 1947

This order is in force in Malabar District only.

Under this order the quantity harvested in each holding is at the disposal of the Collector who, after allowing enough for the consumption and cultivation requirements of the holder can procure the surplus. The price of the surplus shall be determined in accordance with the provisions of the Madras Foodgrains Price Control Order, 1949.

THE MADRAS SUGAR DEALERS LICENCE ORDER, 1949

This order directs that wholesale dealers for sugar should be licensed and that permits either from the Commissioner of Civil Supplies or his nominee are necessary for removal of consignments of sugar arriving at railway stations and ports. The Collectors have been empowered to fix the wholesale and retail prices of sugar.

THE SUGAR STOCK (SALE TO GOVERNMENT OF MADRAS) ORDER, 1949

Two orders prohibiting that the manufacturers of confectionery, bura or sugarcandy should, take out licences to carry on the manufacture of those commodities have been issued.

GRAM CONTROL ORDER

Gram Control Orders in force in the State of Madras have been rescinded. The Government of India have decontrolled gram, but they have fixed the maximum prices of bengalgram at Rs. 16 per maund at which it has to be sold or purchased in this State.

SANCTION OF PROSECUTIONS AGAINST OFFENDERS

An order issued on 16th March 1951 specifies in each control order the officer who can sanction prosecutions for offences under that order.

MADRAS MANURE MOVEMENT CONTROL ORDER

By an order, dated 18th April 1951, restrictions on inter-State movement of fish-meal, fish guano, bones, bone super, bone-meal, hoofs, horn, hoof-meal or horn-meal have been removed.

(Continued on page 44)

Labour Welfare in the State

By SRI J. VISWANATHA REDDY, Additional Assistant Commissioner of Labour

Labour forms the backbone of society, and plays a leading part in contributing to society's prosperity. It is therefore imperative that the welfare of the worker should be its chief concern. Usually long hours of work, insufficient wages, bad living conditions, and indifference of the management to his grievances makes the life of the worker rather unhappy and miserable. Governments all over the world have always interfered to secure for the working class better conditions of living, shorter working hours, and a living wage by enacting various legislative measures. The International Labour Organization has been set up to co-ordinate these activities, to study and devise measures for the attainment of these objectives. Member countries undertake to adopt them by ratifying the conventions passed by the International Labour Organization.

The concept of labour welfare is very comprehensive and has assumed increasing importance in recent years. It can be defined broadly as the provision of various amenities in industrial undertakings to enable the employees to perform their duties in healthy and congenial surroundings conducive to their health, efficiency and morale. These also include rest and recreation facilities, creches, schools and arrangements for travel to and from work and housing accommodation. I shall now briefly attempt to trace the various labour welfare measures in our State enacted by Government to achieve their objective.

Factory Acts to curb Evils

With the advent of large-scale organization for production, vast social and economical changes followed in its wake giving rise to many complicated problems. Various evils were brought to light—such as bad working conditions, long hours of work, employment of young children. The series of Factory Acts starting with the Indian Factory Act, 1881, and culminating in the Factory Act, 1948, represent Government's efforts in grappling with these evils. Employment of children under fourteen, and women in the night is prohibited; holidays with wages at one day for every 20 days of work are provided; standards of sanitation, ventilation and lighting in factories are laid down and strictly enforced; provision of canteens, rest-sheds, and creches in big factories is insisted on; and above all, factories are brought under a system of licensing to give greater control to the Factories Department to enforce the provisions of the Act. Similar provisions as these are made for workers in mines under the Indian Mines Act, 1935.

In spite of provisions of safety guards and fencing for machinery laid down in the Factory Act, workmen are subject to the risk of accidents and other industrial diseases consequent to their working in or near machines or in occupations involving the manufacture of dangerous chemicals, etc. The Workmen's Compensation Act, 1923, provides for the payment of the compensation by the employer to the workman or his dependents in the event of his disablement or death on account of accidents during the course of his work. This has proved to be of considerable help to workmen.

Maternity benefits are also provided for by the Madras Maternity Benefits Act during the period of three weeks before and four weeks after pregnancy and is a source of great relief. In our State I am glad to say that employers have themselves voluntarily paid more than the statutory rate fixed, towards maternity benefit.

Minimum Wages and Shops Acts

The Minimum Wages Act, 1948, passed by the Union Legislature, was designed to fix a minimum wage to workmen in certain scheduled sweated industries and occupations like bidi, cigar-making, tobacco-curing, plantations, building operations, carpet-making, rice and oil mills, motor transport, and for agricultural workmen. Our Government have notified the minimum wage in respect of bidi and cigar making, tobacco-curing, rice and oil mills and motor transport. Committees have been constituted to fix minimum wages in respect of plantations, building operations, employees under local bodies and carpet and drugget manufacturing industry. With regard to agricultural workers in view of the magnitude of the problem, Government have sought for and obtained time till 1953 from the Legislature, to fix minimum wages.

The large class of employees in unorganized industries like hotels, cinemas, commercial establishments, etc., hitherto unnoticed, were provided for by the enactment and enforcement of the Madras Shops and Establishments Act, 1947. Hours of work are regulated, holidays with wages provided and dismissals without notice and without proper reasons prohibited by this Act.

Personnel Management

So far I have dealt with one aspect of the problem—the welfare aspect confined to the provision of physical comforts of workmen in industry by the State. I shall now touch on the other aspect of labour welfare—personnel management or the problem in dealing with industrial relations.

The welfare of the workers depends to a great extent on the good relations between the management and the workers. Differences between the two parties lead to strikes and lock-outs resulting in loss of production and a setback to economic progress and welfare of labour. To narrow down the differences between the workers and the management and to pave the way for the mutual goodwill and co-operation between the two parties, the Industrial Disputes Act, 1947, has been brought into force. This Act prohibits the occurrence of illegal strikes or lock-outs. It makes provision for settlement of differences between the two parties by means of the machinery set up by Government. If the disputes remain unsettled in spite of conciliation, then the matters will be referred to the Industrial Tribunals for adjudication and the awards of the Tribunals are made binding on both the parties.

The number of total disputes in our State in 1949-50 was 5,507. Out of this only 87 had to be referred to Industrial Tribunals. The other 5,420, i.e., 99 per cent of the total number of disputes, have been settled by conciliation. These figures point out in a convincing manner the efficacy of the Government conciliation machinery.

The formation of works committees in the industrial concerns is yet another measure in seeking to establish harmonious relations between the management and the workers. In these works committees there is representation both for the management and workers. Many matters of mutual importance are discussed in the meetings of these committees and opportunities are thus provided to iron out the differences between the two parties. These joint councils have an important role to perform and the degree of their success will entirely depend on the extent of co-operation and goodwill management and labour extend to it.

Amenities for Workers

It is gratifying to note that there has been considerable co-operation from the side of the managements in furthering the welfare of the workers. Good health and better conditions of living contribute to the efficiency of the workers. Many enlightened managements have realized this fact quite well. Thus in Coimbatore, Madurai and Madras and other places in the textile and other industries, various amenities are being provided to workers like clubs and cinemas, canteens, co-operative stores and housing accommodation. Medical facilities also are being provided

in many of the industries. To enable workers to maintain good health it is so very important that various recreation facilities are being provided to the workers. Educational facilities are provided in some of the bigger industries for the children of these workers.

Apart from these agencies, namely, the State and the employer, the workers themselves can help to increase the measure of social labour welfare by means of Trade Unions. Mere assertion of the rights of the workers does not constitute the main function of the Trade Unions. The Trade Unions have a duty to impress on its members, their obligations to society as well, and to enlighten the workmen on day to day problems.

I have attempted to give here a bird's eye view of the problem and Government's efforts to tackle it. Good progress in this direction no doubt has been achieved, but much more still remains to be done. The foundations have been well and truly laid. Let us hope that in the years to come with the co-operation and help and assistance of employers and workers a superstructure befitting our country will be built, ushering in an era of peace, plenty and prosperity.

—By courtesy, A.I.R., Madras.

Integration of Southern Railway: Facts and Figures

1. *Mileage*.—The route mileages of the three systems integrated into the Southern Railway on April 14, 1951, are distributed in the following manner: 1,754.65 miles of Broad Gauge of which M. & S.M. contributes 1,122.01 and the S.I. 632.64 miles; 4,142.55 miles of Meter Gauge consisting of 1,816.46 miles of M. & S.M., 1,716.62 miles of S.I. and 609.47 miles of Mysore. The Mysore Railway has a Narrow Gauge of 102.2 miles. The total mileage in the Southern is nearly 5,000.

2. *Power and Equipment*.—The mobile equipment of the three Railways consists of 2,326 locomotives, 20,431 wagons and 3,003 coaching vehicles.

3. *Earnings*.—The volume of traffic carried by the three railways and likely to be carried by the unified zonal system may be judged from the accompanying table: During 1949-50 the number of passengers carried was 270 millions; the passenger miles amounted to 7,268 millions; the volume of net freight was 18 million tons and the ton-miles were 2,988 millions; the total train miles run on the three Railways during 1949-50 added up to slightly below 33 millions.

The gross earnings of the three Railways during 1949-50 amounted to Rs. 41.72 crores. Working expenses including depreciation stood at Rs. 34.48 crores. The net earnings were thus Rs. 7.24 crores. The detailed figures may be seen from the following table:—

(Figures in thousands)			
	Gross earnings.	Working expenses.	Net earnings.
	RS.	RS.	RS.
M. & S.M.	22,25.43	18,41.87	3,83.56
S.I.	16,98.15	14,39.96	2,58.19
Mysore	2,48.77	1,65.96	82.81
Total	41,72.35	34,47.79	7,24.56

Benefits of a Great Reform

A round-up of specific instances of individuals and milles benefiting from the boon of Prohibition is presented below. The succinct summaries do bare justice to the great uprightness that has flooded our 'dry' tracts, but even casual observer cannot fail to remark the concrete evidence of economic and social development in the lives of former addicts.

East Godavari: K. Bullayya of Ramachandrapuram saved Rs. 1,000 and opened a bakery. R. Mahalakshmi of Narsapurapeta bought two bulls for agricultural purposes. K. Sateyya of Pasalapudi bought four tolas of gold.

Anantapur: Ramayya and Venkataswamy of Akulodu purchased ten acres of land each, and both are now enjoying an annual income of Rs. 1,000. Lakshesappa Hanungar of Banulapalli purchased five acres of dry land and a pair of bulls, worth Rs. 700. Chinnu Thimmappa of the same village bought cattle and jewellery, worth Rs. 1,300.

Tiruchirappalli: In Kulittalai Taluk, one ex-addict acquired 0.72 cents of landed property, while the value of cattle and movables rose from 100 to Rs. 200. In Lalugudi Taluk three ex-addict families acquired a house, worth Rs. 250, cattle for Rs. 400 and immovable property. In Perambalur Taluk, one family acquired six acres of dry land and four acres of garden land and another family added Rs. 350 worth of movable goods; both families considerably reduced their debts.

Cuddalore: Madiga Kammadu, a Harijan of Gopavaram, saved a sum of Rs. 450. Simon Titus of Mallur saved Rs. 520 and purchased a piece of land and a pair of buffaloes. In Pulivendla, I.P. Venkata Reddy purchased a pair of bulls and two acres of land, worth about Rs. 2,000, while G. Ganganna acquired 50 sheep and a house worth Rs. 1,500.

Chittoor: Gonram Thippiah of Pudukonda village, Palamaner Taluk, was a spendthrift youth given to drink. When Prohibition came he turned over a new leaf and returned to his family. He was assigned six acres of Government land for *shivajiana* cultivation. He has now built a house for Rs. 300, bought a site for Rs. 200, a pair of bulls for Rs. 200 and a cow for Rs. 200 out of his savings. He spent Rs. 300 on his marriage.

Tanjore: Kathayee of Tiruturaipundi village Harijan Colony, is the wife of an ex-addict who was the worst drunkard of the place. She says that after Prohibition her husband was actually able to save money. Result: she got a pair of earrings worth Rs. 100 and her husband purchased cattle for Rs. 300.

Belur: Kuruba Nagappa of Udegolam, Rayadrug Taluk, has wiped off all his debts and now owns a pair of bulls, a buffalo, a cow and small house. Ediga Hussainappa of Rayadrug has set up as a *Hunkar* (railway transport and booking agent). He now owns four carts and six bulls; he also cultivates 18 acres of Government land under *shivajiana*. Somalapuram Vannurappa of Udegolam now owns a cart and four bulls, and farms eight acres of *shivajiana* land. Muthyala Nagappa has reclaimed eight acres of forest waste land, bought a cart and pair of bulls and built a small house.

North Arcot: Typical cases of economic improvement are listed below. The position before Prohibition is given within brackets.

1. Perumal, Harijan of Thoranampathy, Tirupattur Taluk: dry three acres, two bulls, clothing Rs. 45, jewellery Rs. 100, savings Rs. 55 (dry one acre, one bull, clothing Rs. 10, debts Rs. 125).

2. Kannaswamy Nainar, Porikkal, Tiruvannamalai Taluk: Wet 4.52 acres, dry 16.04 acres, cattle Rs. 640, clothing Rs. 400, jewellery Rs. 710, debts Rs. 500 (wet 4.52 acres, dry 13.41 acres, cattle Rs. 540, clothing Rs. 340, jewellery Rs. 710, debts Rs. 950).

3. Chinnaswami Naidu, Enathavadi, Cheyyar Taluk: wet 0.50 acre, dry 3.51 acres, cattle Rs. 500, clothing Rs. 40, savings Rs. 200 (cattle Rs. 200, clothing Rs. 50, debts Rs. 200).

Madurai: Mayandi, Angamamangalam village, saved Rs. 500; he made jewels worth Rs. 300 and also performed his daughter's marriage. Santhanam of Sarithipatti in Periyakulam Taluk, had once sold all his cattle and sheep and the goods in his shop to buy liquor. He had borrowed heavily, and his family starved. Today he has repaid all his debts, and purchased jewellery worth Rs. 450. His children are going to school.

Lakshmana Naicker of Papinaickanvalasu village in Palni Taluk has purchased ten acres of land, valued at Rs. 4,000. His two sons attend the Local Aided School.

Ganganna Naicker cleared a debt of Rs. 2,000, bought land for Rs. 3,000 and jewellery for Rs. 800. He spent Rs. 1,000 on his son's marriage.

Achava Naicker was a litigant and drunkard. Now he has saved Rs. 1,000, spent Rs. 1,000 on his daughter's marriage and purchased jewellery worth Rs. 500. Thatha Naicker saved enough money to buy back his lands for Rs. 2,000 which he had once sold to satisfy his craving for drink.

Coimbatore: Ramana Gownder, son of Karuppa Gownder of Thandakaranpalayam, cleared a debt of Rs. 500, saved Rs. 2,000 and is now running a cycle shop.

Tirunelveli: Karuppiah Nadar of Pallakurichi is now reformed; he bought a piece of jewellery worth Rs. 200 and is now sending his son to school. Andi Sambam of the same place now earns Rs. 50 monthly and has built a house worth Rs. 400.

Mookandi Thevar of Tattanadam was a habitual drunkard who antagonized the entire village and sold his four marakals of land. He has now earned Rs. 1,000 in two years, purchased land worth Rs. 1,000 and now he sends his children to school. Arumugham, a Harijan of Varthagarareddipatti, has purchased land to the value of Rs. 300.

Mobile Dispensary for Nilgiris

The Government have sanctioned the establishment in the Nilgiris District, of a mobile dispensary, fully equipped for treating venereal diseases, malaria and other ailments common to the hill folk. The unit will move throughout the district, when required, for treatment of all sections of the population in general and Todas in particular.

Potentialities Of Palm Jaggery

By Sri GAJANAN NAIK, P. In Gur Adviser, Ministry of Food and Agriculture, New Delhi

Millions of palms are running to waste. They are Nature's gift. With a little effort it is possible to turn this waste into wealth. Even in Bengal and Madras all the available palms are not utilised. The palm jaggery is in a decaying stage. Those interested in village work should labour to improve it where it is already in vogue and introduce it where palms are available.

Jaggery is commonly supposed to be made from sugar-cane juice and many people will be surprised to know that one can make tasteful jaggery of attractive colour from the sweet juice of palm trees. So far as I know, jaggery can be made from the sweet juice of four varieties of the palm, viz., coconut, Palmyra, Sago and Date (wild Date). Usually an intoxicant drink, called toddy, is obtained by fermenting the sweet juice of these palms. It should be noted that jaggery can be made only from the sweet juice and not from the fermented stuff (toddy).

Excepting the coconut, which requires cultivation, palms of the other varieties grow wild in large numbers, and no human nursing is necessary for these trees. The Coconut, Palmyra and Sago thrive in the coastal regions while the date palm is scattered almost all over the country. The botanical terms for the palms are: *Cocos Nucifera* for Coconut tree, *Borassus Flabelliformis* for Palmyra, *Caryota* for Sago Palm, and *Phoenix Sylvestris* for Date Palm.

Tapping the Trees

The method of obtaining juice from these palms is known as tapping. Tapping is a delicate and complicated art, the details of which will be dealt with separately later on.

Men who are conversant with the art are found in the areas where the palms grow. They are called tappers who are mostly engaged in toddy drawing. The method of tapping the trees is the same for toddy and jaggery making. Some variations are required in Date Palm tapping. Toddy cannot be obtained directly from the trees in ready form. When the trees are tapped for toddy making, the juice that trickles down from the trees is sweet. It is turned into toddy by the process of fermentation which occurs in the collecting pots. Thus, it is the after-care of the juice that governs the resultant product. So, the skill of the local tappers can be utilized in getting sweet juice for jaggery-making. Where tappers are not already available, interested persons should learn tapping from the nearest training sources available.

Besides the knowledge of tapping, two more things are essential for palm jaggery making:

- (1) To obtain an exemption from the excise tax for the trees to be tapped where it is not already granted.
- (2) To know how to preserve the juice from fermentation and the process of making jaggery from it.

Preservation of Juice

As the juice does not flow but trickles from the trees, naturally a long time is required to collect a sufficient quantity of the juice from a tree. Usually the earthen pots tied to the trees are emptied twice a day, morning and evening. The juice is saccharine and is liable to get fermented if due precautions are not taken. Long experience of the villagers and prolonged trials made by scientists



SOUTHERN RAILWAY INAUGURATED:
Sri N. Gopalaswami Iyengar, Minister for Transport and Communications, Government of India, inaugurated recently in Madras the new Southern Railway, evolved by the integration of the three railway systems in the South, N. & S.M., S.I. and Mysore. Southern Railway will consist of 1,754.65 miles of Broad Gauge, 4,142.55 miles of Meter Gauge and 102.2 miles of Narrow Gauge.

Reservoir Projects in Malabar District

The Government have just sanctioned the Walayar and Mangalam Reservoir Projects in Malabar District.

The Walayar Reservoir Project comprises the formation of a reservoir of 520 m.c.ft. capacity on the Walayar River in Pudurseri village limits in Palghat Taluk, and the excavation of two canals, one a right side canal taking off directly from the reservoir and the other a left side canal taking off from the river above the Nallisseri ancient lower down the river, this left side canal being fed by a contour canal taking off from the reservoir on the right side. It is expected to benefit 6,500 acres in Palghat Taluk inclusive of 3,379 acres of existing double-crop wet lands. In addition, 1,000 acres of existing double-crop wet lands will be converted into triple-crop lands, and 200 acres into perennial crop lands. The project will ensure the optimum production of rice on the existing single and double-crop lands, from which the yield will be about 3,500 tons. It is also expected to produce 1,177 tons of rice extra annually.

The Mangalam Reservoir Project comprises the formation of a reservoir on the Cherukunnappuzha, a tributary of the Mangalam River about ten miles south of Vadakkancheri village in Palghat Taluk, the construction of a pick-up anicut three miles lower down, and excavation of a channel taking off from the left side of the anicut. The project is expected to benefit 3,280 acres of land in nine villages in Palghat Taluk, by providing an assured supply of water to 857 acres of single-crop land and 2,176 acres of double-crop land and facilitating the conversion of 857 acres of single-crop land into double-crop land, 750 acres of double-crop land into triple-crop land and 247 acres of dry land into single-crop wet land. It will ensure the production of 1,302 tons of rice on the existing single and double crop lands, and is also expected to produce 778 tons of rice extra annually.

have established the smearing with lime the inside of the earthen pots tied to the tree, is the choicest and best preservative. It is advisable to keep a double set of pots which should be cleaned daily with water immediately after taking out the juice. Just before tying the pot to the tree, lime made into a thick paste, about two tolas for each pot, is smeared on the inside of the pot with a village brush. The tappers carry the lime in a coconut shell with them when they climb the trees. The mouth of the tied pots should be properly covered, without disturbing the trickling of the juice, for preventing ants and insects from entering the pots; for they commonly do so and are drowned in the juice. Their dead bodies help fermentation to some extent. This will prevent the rain water also.

From the appearance and taste of the palm juice one can easily decide whether the juice is fermented. If fermented, it has a nasty smell, a sour taste and much foam on the surface; while the sweet juice is transparent like water with no smell or foam and has a saccharine taste. When sufficiently fermented it becomes milky-white. The sweet juice never gives intoxication, which comes only by toddy-drinking. So, none need suppose that the jaggery made from the sweet juice of any palm will be intoxicative. Chemical analysis of this jaggery has revealed that it has almost the same ingredients possessed by the jaggery made from sugarcane juice.

Tad Gud Khabar

State Compost Development Committee

Government have appointed Sri A. K. D. Balarama Raja of Rajapalayam to be the non-official Agriculturist Member of the State Compost Development Committee for a further term of one year from March 4, 1951.

EQUIPMENT AND EARNINGS: H.E. the Maharaja of Bhaunagar, Governor of Madras, addresses the gathering at the integration ceremony of Southern Railway. The mobile equipment of the three railways comprising the new system consists of 1,326 locomotives, 20,431 wagons and 3,003 coaching vehicles. The gross earnings of the three railways during 1949-50 amounted to Rs. 41.72 crores and the net earnings to Rs. 7.24 crores.



State Judicial Services

The Government of Madras have passed orders for the constitution of a new service called the State Higher Judicial Service, and for the integration of gazetted posts in the Subordinate Civil and Criminal Judiciary.

Consequent on the provincialization of the cadre of District Judges, previously "listed posts", it has become necessary for the Government to constitute a separate State Service for the posts of District Judges and to prescribe rules for recruitment and conditions of service to these posts. The opportunity has been taken to include in this Service certain isolated superior posts in the City of Madras which were hitherto governed by separate special rules. The Government have also been considering the question of giving effect to the decision taken in connexion with the implementation of the scheme of separation of the judiciary from the executive in regard to the integration of the civil and criminal judiciary. According to this decision there should be one combined cadre of officers in the gazetted grade for performing civil judicial and criminal judicial functions. The posts of Subdivisional Magistrates and Presidency Magistrates have accordingly been integrated with the posts of Sub-Judges and District Munsifs to form a single combined cadre of Judicial Officers. Separate provision has, however, been made for District Magistrates under the scheme of separation who do not correspond to any category of civil judicial officers and for whom a separate State Service has already been constituted.

The newly constituted Madras State Higher Judicial Service will consist of the District Judges, Grade I (two selection posts on Rs. 2,000 per mensem), District Judges, Grade II, Chief Judge, Court of Small Causes, Madras, Principal Judge, City Civil Court, Madras, and Chief Presidency Magistrate, Madras, all of them on Rs. 1,000—60—1,300—50—1,800.

Six of the posts in the Service except those of District Judges, Grade I, will be filled up or reserved to be filled up by direct recruitment from practising members of the Bar of not less than ten years standing who are not more than 45 years of age. The remaining posts will be filled up or reserved to be filled up by transfer from officers in the category of District Magistrates in the Madras Criminal Judicial Services.

The posts of District Munsifs, Subdivisional Magistrates, Presidency Magistrates and Subordinate Judges will be constituted into a separate service called the Madras State Judicial Service with the scale of pay Rs. 300—50/2/500—E.B. 50/2—700. Of these, the posts of Subordinate Judges will be filled up by senior officers in the category of District Munsifs, Sub-divisional Magistrates or Presidency Magistrates on grounds of seniority and merit.

Appointments to the posts of District Munsifs, Sub-divisional Magistrates or Presidency Magistrates will be made by direct recruitment from practising members of the Bar and also by transfer from the categories of officers in the Subordinate Services as:

Sub-Assistant Registrars, Managers, Bench Clerks, Head Clerks of the Administrative Department, Senior Depute Clerk of the Original Side and Appeal Examiners of the High Court; Sarishtadars and Head Clerks of District

Sari Courts; Sarishtadars of Subordinate Judge's Courts; Ma shtadar and the Head Clerk of the City Civil Court, Madras, and Deputy Registrar of the Court of Small Causes, Madras; Sub-Magistrates and Additional First-class Magistrates in the Madras Subordinate Magisterial Service; Assistant Public Prosecutors, I and II Grades, and Assistant State Prosecutors and Official Receivers; Superintendents in the Legal Department of the Secretariat.

All the foregoing categories of subordinate officers will form one group for purposes of recruitment by transfer. As nearly as possible, 45 per cent of the posts in the State Judicial Service should be filled up by transfer from persons in the subordinate services grouped above, leaving the balance to be filled up by direct recruitment from members of the Bar.

With the integration of the posts of Presidency Magistrates in the State Judicial Service, the cadre strength of the Madras Civil Service (Executive Branch) will be reduced correspondingly.

The existing incumbents in the posts of Presidency Magistrates will be regularized as members of the Madras State Judicial Service and will be given rank in the seniority list in relation to the pay they are actually drawing on the date of issue of these orders. They will, however, retain their present relative seniority among themselves.

Corruption among Government Servants

During the month of December 1950, corruption among Government servants was brought to notice against 323 persons including those against whom proceedings were pending at the end of the previous month. Of these, 23 persons were let off as charges against them were not proved and proceedings against 290 were pending at the end of the month. Corruption was successfully detected in the case of the remaining ten persons and they were suitably punished. Of these, two were awarded minor punishments. The names and designations of the eight persons who were awarded severe punishments are as follows:—

Chinnian, Constable, Tiruchirappalli District; A. Govindan, Overseer, Highways Department (Removed from service); Varadarajulu, Head Constable, Salem; N. Chidambaram and T. S. Pancharathinam, Peons of the Commercial Taxes Department; T. Narasimha Iyengar, Supervisor, Highways Department (Dismissed from service); M. K. Kumaran, Inspector of Excise, Tuticorin; Dr. (Kumari) V. Kalvani Ammal, L.M.P., Woman Assistant Surgeon, Class II (Compulsorily retired).

Detection of Dacoity Cases

In July 1949, there were several dacoities in Manapparai and Karur Circles of Tiruchirappalli District. Persons clad in khaki posed as Prohibition Police Officers, entered houses in villages in the limits of Lalapet, Thogamalai and Palaviduthi Police stations on the pretext of searching for contraband, used criminal force or assaulted the inmates and carried away properties. There was no clue leading to the detection of these cases. In October 1949 there was another series of road and house dacoities in similar *modus operandi* in the limits of Palaviduthi, Manapparai and Karur Taluk station limits. Again no clue was forthcoming.

On 11th December 1949, one Kannuswami Pillai of Karur, a taxi driver, noticed six strangers looking like Madurai Kallars moving about in Uppidamangalam shandy and watching the shops, where there were busy sales. When accosted by him, they stated that they had come there to purchase sheep. Since no sheep or goats are sold in this shandy he suspected their bona fides, informed the constables on beat duty there to watch them carefully, immediately proceeded to Karur in his car, and informed the Deputy Superintendent of Police, Karur, of the facts. The Deputy Superintendent of Police mustered a party of policemen and proceeded to the shandy immediately.

In the meanwhile, the beat constables, with the co-operation of the villagers, arrested three of the suspected persons at great personal risk, but the other three escaped. One of the escapees was arrested the next day by a Head-constable at Guziliamparai, with the help of villagers. A country-made pistol and live cartridges were recovered from this person and some cartridges were recovered from one of the other three persons. The remaining two persons were arrested in their native villages by the Inspector of Police, Periakulam (Madurai District).

Sustained Investigation

From the mere suspicion that these persons were concerned in dacoity cases, the police by their sustained investigation were able to get the criminals identified by the victims in the several cases, though no properties were recovered. Three cases in Palaviduthi Cr. Nos. 80 and 81/49 and Manapparai Cr. No. 245/49, Sections 395 and 397, I.P.C. were registered and all the cases were clubbed together. All the six persons were tried in the court of the Assistant Sessions Judge, Tiruchirappalli, who, in his S.C. No. 69/50, dated 26th October 1950, convicted and sentenced them to varying terms of imprisonment from three to four years rigorous imprisonment.

They were also charged in Karur Taluk Station Crime No. 173/49, Section 399, I.P.C. and tried by the Assistant Sessions Judge, Tiruchirappalli, who, in his S.C. No. 70/50, dated 31st October 1950, convicted them and sentenced them to two to three years rigorous imprisonment, the sentences in this case to run concurrently with the previous sentences. Two of the accused who were found in possession of pistol or cartridges were proceeded under the Arms Act and convicted.

The timely information given by the taxi driver in spotting the criminals and the willing co-operation of the villagers at the several stages led to the successful detection of the case.

Reservoir Project for Chingleput District

The Government of Madras have sanctioned the Araniar Reservoir Project in Chingleput District. Eleven thousand two hundred acres (5,500 acres under reservoir and 5,700 under anicut) of the potentially fertile but drought-stricken Tiruvallur and Ponneri Taluks of Chingleput District will be benefited by this project. In an extent of 3,600 acres under the reservoir and 1,945 acres under anicut, a second crop can also be raised. The additional quantity of foodgrains expected from this project is 4,000 tons per annum.

Irrigation in Tiruvallur and Ponneri Taluks of Chingleput District coming under Araniar reservoir basin is at present predominantly dependent on rainfed tanks. A few of these sources have supply channels, but without anicuts, supplies to these tanks have been precarious, resulting in widely varying yield of crops. The diversion of the waters of the Araniar, mainly for irrigation, had been a long-felt want and, as early as 1905, two proposals were considered but subsequently dropped. The scheme was revived by the present Government in 1946 and various alternative proposals were considered.

The project consists of the construction of a reservoir across the Araniar near Pisattur village in Tiruvallur Taluk of Chingleput District, with right and left side channels taking off from it and also a pick-up anicut at Suratpalle (11 miles below the reservoir site) with a channel 14 miles long (8 miles in Tiruvallur and 6 miles in Ponneri Taluk). In four years' time the project is expected to be completed but irrigation can be commenced at the end of two or three years, thus realizing partial benefits in advance.

Gift of Ambulance Cart

The Government have accepted with thanks the offer of Sri Gurukar Madappa, Member, Advisory Committee of the Government Hospital, Kollegal, of an ambulance cart with bulls to the Government Hospital, Kollegal, for the transport of sick patients from their houses in the town and villages to the hospital, when necessary.

Notice to Subscribers

Subscribers are reminded that all money orders and other payments towards subscription or renewal of *Madras Information* and its language counterparts should be sent to the Director of Information and Publicity, Fort St. George, Madras-9, and not to the Superintendent, Government Press.

The Director of Information and Publicity will not be responsible for non-receipt of copies in cases where subscription payments are misdirected to other addresses.

Electrical Installation Work

Rule 48 of the Indian Electricity Rules, 1937 stipulates that electrical installation work should be carried out—

(i) by an electrical contractor licensed by the State Government and

(ii) under the direct supervision of a person holding a certificate of competency issued by the State Government.

This rule is not in force in the Madras State but the question of its introduction is engaging the attention of Government. With the enforcement of this rule, all electrical installation work in the State should satisfy the provisions of the rule.

The five-year plan of electrical development initiated by the Government is expected to be completed by 1953. Thereafter, public demand for fresh services, both in the urban as well as in the rural areas, will be very great. It is therefore important in order to ensure the safety of persons and property and to prevent accidents due to poor standard of electrical installation work that electrical installations must be done satisfactorily by trained and competent men according to the provisions of the above Rule 48. In the circumstances, the Government have tentatively decided to enforce in the Madras State Rule 48 of the Indian Electricity Rules, 1937, with effect from 1st January 1953.

When the rule is enforced there should be enough qualified technical men to carry out all normal wiring work. At present the number of wiremen who can be granted licences and certificates of competency may not be sufficient to meet the needs of the public in this State and the immediate introduction of Rule 48 will not only hamper electrical installation work but also render it unduly costly. The Government consider that advance announcement of the date of introduction of the rule in this State as well as of the qualifications that may be prescribed for the grant of licence to persons, will enable the existing persons in the trade and those who wish to choose this line as career to acquire the qualifications early and accelerate the availability of qualified men in all parts of the State.

It is the intention of Government to group the licensed electrical contractors under two Grades—A and B. Contractors having under them trained Licentiates in Electrical Engineering or similar technically trained supervisors will be classified under Grade A and their services may be somewhat costly. Contractors having under them qualified wiremen will come under Grade B and their services may be comparatively cheaper. The work of the Grade B contractors will be confined to the ordinary house wiring for low pressure supply.

No person will be eligible to become wireman under Grade B unless he has passed the Electrical Wiring Competency examination conducted by the Central Polytechnic, Madras, which is open to all those who have not less than two years' practical experience in the electrical wiring trade. A two-year training class for students is also attached to the Central Polytechnic. The syllabus is extracted below and further details may be had of the Principal of that institution.

Electrical Wiring Syllabus

Electricity and its applications to domestic purposes. Dangers and precautions to be adopted in wiring work.

Tools used by wiremen. Handling of tools. Practice in their use. Materials and fittings, their names, uses and manipulation.

System of wiring, casing and capping system, practice in wiring, practice in plugging the wall. Correct methods of wiring to comply with Indian Electricity Rules. Fire Insurance Company and other Government regulations.

Connexions and joints. Jointing and soldering T Joints, straight through joints, etc. Practice in jointing and soldering. Practice in connecting up and installing cut-outs, ceiling roses, switches, distribution boards, etc.

Control of lights from different positions. Methods of carrying out bell test for circuits. Practice in wiring on cleats.

Practice in lead sheath wiring. Insulated conduits and iron pipes. Practice in pipe bending. Practice in wiring in conduits and pipes. Wires and cables and their carrying capacity. Rule of Thumb methods. Fuse wires and fuses. Fusing capacity.

Parallel and series connexions of lamps. Practice in wiring up fans and regulators, A.C. and D.C. meters, starters, bells, and telephones. Overhead lines and erection. Joints in bare copper conductors. Primary and secondary lines and erection. Joints in bare copper conductors. Primary and secondary batteries; charging of small accumulators. Earthing of meters and fittings.

Testing of circuits.—Megger test for house installations, bell test, etc., testing of earth resistance.

No person will be eligible to become an electrical supervisor under Grade A contracts unless he is in possession of a Diploma of L.E.E. issued by the Technological Diploma Examination Board, Madras, for which students are being trained in the various Polytechnic Schools in the Madras State.

Power Cut in the Hydro-electric Systems Reduced

The Government are glad to announce that due to the recent rains in the southern part of the State, the position in the hydro-electric reservoirs has slightly improved. As a result, it is now possible to reduce the power cut from 15 per cent to five per cent throughout the hydro-electric area. Instructions have accordingly been issued to the Superintending Engineers of Pykara, Mettur and Papanasam Electricity Systems to reduce the power cut from 15 per cent to five per cent with immediate effect.

It may be recalled that due to unsatisfactory water position in the hydro-electric reservoirs, a small power cut of 15 per cent is being enforced from 15th February 1951 in the hydro-electric area.

The other restrictions in the hydro-electric area, such as the staggering of holidays and recess hours of all industrial establishments supplied with high-tension power and grouping of rural loads into batches for power supply, have however, to continue until the position improves further.

"Private Information"

The modern counterpart of the classical "stolen fruits" which are said to be sweet, is what is called "private information" which like "stolen fruits" are expected to be sweet, but really can sometimes be very bitter indeed.

It was an instance of extreme bitterness experienced by a child which cured me of my thirst for "private information". Gloating on the "private information" which I had resourcefully gathered and vaguely proud of the importance I would gain as the purveyor of "private information", I thought of giving a pleasant surprise to a little niece of mine in an upcountry village and wrote to her that she had passed in all the parts of an examination for which she had appeared. I was mightily pleased with myself when I received a reply full of gratitude and admiration not only from the child but also from the child's parents.

The result of the examination appeared in the newspapers the next week. I took it for granted that my "private information" was correct and did not care to verify it from the results in the newspapers. Two or three days later I had a letter from the child. It was most pathetic. The child wrote:—

"I saw the results in the newspapers. What I saw confused my mind. My head is now in a whirl. Which am I to believe—my beloved uncle's information, which I am sure cannot be wrong, or what I see before me in black and white in the newspapers before me? I would not have been so sad if I was certain that I had failed in one part, for I did not do well in that part and I would not have been surprised if I had failed, but this uncertainty is killing. Do please let me know, uncle, which is the truth. I feel miserable and shall continue to be so until I have your reply."

The rest of the story needs no telling. I am not till this day sure if my apologies and profuse regrets comforted the child. Whether they did or not, she certainly passed through three days' agony, for which I could never forgive myself. But I learnt my lesson.

Upsetting the Children

Of course it does not turn out that all cases of "private information" are wrong. But any single case is liable to be wrong; and if it does turn out to be wrong, the misery the child suffers cannot be described. Elders can hardly understand how big a place the children, taught by ourselves, give to what we, after having taught them and changed our own scale of values, while theirs remain the same, consider as small matters.

Left to themselves, children in normal conditions, do not want "private information" in advance of their examination results. It is only after the idea is put into their heads by elders that they get interested in it. Their sense of values, originally more natural and therefore more realistic and sensible, becomes artificial. The change not only affects their natural development as children but it also brings suffering into their field of experience.

The seeking of "private information" when it was confined to a very minute proportion of the community

did not affect its character. But when the practice has spread, it cannot but be a taint on the standard of discipline in a community. We do still laugh and enjoy the sight on the stage or screen of a character in the play or picture peeping through a key-hole, and enjoy even more when the mother pushes aside the daughter who is peeping through a key-hole and herself takes that place, but we hardly realise that we are doing much nearly the same thing which we laugh at when we compete for "private information".

Queue or Stampede

When we are learning to realise the difference between a stampede and a queue and to appreciate how everything in its own due turn makes for the welfare of all, it would be indeed an irony if we go back to what is figuratively a stampede. Just as the order in a queue helps to speed up the service, so the self-discipline on the part of the community of resisting the temptation to seek "private information" must certainly help ultimately towards quicker and more efficient service, and elimination of mistakes.

Apart from the doubtful value of "private information", its very nature precludes it from being publicly used. There is thus no material benefit to be derived from whatever trouble may be taken in obtaining such information. In its ultimate analysis, the benefit seems to be nothing more than a kind of childish pleasure, often more for the adult than for the child itself and not very different from the pleasure of looking through a hole in a curtain or a door. Sometimes it may turn out to be no pleasure at all, but the opposite of pleasure.

Can we not forego this little doubtful pleasure, of not quite a dignified nature either, and contribute a few bricks to the structure of individual and communal discipline which we want so badly to build into our Society?

—By a member of the Publicity Committee,
Department of Public Instruction.

Hindi Lessons

A SHORT COURSE OF ABOUT TWELVE HINDI LESSONS IN ENGLISH

(Consisting of easy graded and interesting dialogues, essays, stories.)

Commences in the May 1951 issue of *Dakshini Hind*, the Hindi Monthly published by the Department of Information and Publicity, Government of Madras. Those desirous of learning Hindi may immediately become annual subscribers to *Dakshini Hind* by sending in advance Rupees four by Money Order to the following address:—

The Director of Information and Publicity,
Fort St. George, Madras.

The Adult Education Programme

By JANAB HUMAYUN KABIR, Joint Secretary, Ministry of Education, Government of India.

At the first Asian Seminar organized jointly by the Government of India and Unesco and held in 1949 at Mysore, when some 20 Asian and other nations participated to plan out a programme for eradicating the illiteracy which prevails in vast areas of this part of the world, it was rightly considered that, while a general discussion of the problems of education common to all Asian countries was a necessary first step, practical consequences of immediate application would follow only if the problems which are peculiar to a particular region are discussed and methods of approach settled in seminars at national and regional level. Last winter a National Seminar was held at Jubbulpore and in the South the first Regional Seminar in India was organized.

In a way, it is perhaps right and proper that the South Indian Adult Education Association should take the lead in this work. It is one of the oldest organizations in India which has devoted itself to the spread of mass literacy and education through voluntary and non-official effort. Many of its members have contributed so richly to the development of their services that the Government of Madras have accepted two of the members as Honorary Advisers to the Government.

Learning and Living

The General Secretary is also the Director of the present Seminar, and an important member of the Madras Cabinet. To my mind, it is fitting that the Minister for Food should be the Director of a Seminar of this type; for one of the points which has emerged as a result of the experience of adult education work in different parts of the world is that it seeks to create better human conditions not only through the imparting of knowledge but also through the raising of material standards of life. While plain living and high thinking is an ideal for which every one should work, one must be sure that at least the minimum essentials for a plain living are assured. There can be no thinking, high or low, unless the minimum demands of existence are met.

This is also the reason why in recent years the tendency has been to shift the emphasis from mere literacy programmes for the adult to programmes of complete education which touch every aspect of the adult's life. There was a time, particularly in the 19th century, when literacy was thought to be the panacea of all evils. Men and women of enlightenment throughout the world thought that if only all men and women were taught to read and write, problems of poverty, disease and ignorance would disappear and in the resulting improvement of human affairs, all conflicts between races and groups would be solved. The experience of two world wars in the course of barely 25 years has shattered many of those illusions. The faith in education cannot die, for that would also be the end of the hope for man. Also, the increasing control over the forces of nature and the growing condensation of the world compel a consideration of the problem of education on a global scale. Today, it is therefore recognized that education is more than mere literacy and it is only through education for peace that the threat of future conflicts and disaster to man may be averted.

Insurance Against Mass Hysteria

This is not to say that literacy is unimportant. In fact, no education can be complete and permanent, unless the minimum standards of literacy are attained. We have in our country the experience of an ancient civilization, where wisdom has permeated to the masses largely without the instrumentality of literacy. Many of us have come across instances where illiterate villagers display evidence of intelligence and even wisdom of a high order. At the same time, it has also been the unfortunate experience of most of us that in the absence of widespread literary education, there arise occasions when the traditional wisdom is forgotten and tides of passion overrule the dictates of reason. There is no denying that, in the absence of literacy and the check it exercises on first impulses, there is a danger of suggestion or hysteria sweeping masses off their feet. Literacy expands the experience of the individual, and by bringing to his notice the diverse reactions of different groups and individuals to similar situations, encourages a critical spirit which would weigh pros and cons before taking precipitate action. We should not, however, overstress the point, for literacy is not a complete insurance against mass hysteria, but there is no denying that it is a valuable check.

While the importance of literacy should never be overlooked, it is right and proper that the concept of adult education should give place to that of social education in our work among the masses. The change in name is an indication that the education which we seek to bring to our people comprises training in literacy and training in community living. This includes knowledge and practice of better standards of health, of improvement in home hygiene and economics, of social obligations and responsibilities and the provision of larger and more varied facilities for games and recreation. Our programme for social education is, therefore, a five pointed programme catering to improvement in literacy, health, economic conditions and community life. Better community life depends upon a keener consciousness of citizenship and enjoyment of a richer social life.

"We must Educate our Masters"

To an audience like the present one, it is hardly necessary to emphasise the importance of social education for the proper functioning of democracy in this country. Some 70 years ago, a great conservative statesman of the United Kingdom said: "We must educate our masters." What was true then is far truer today, for our masters are far more numerous and diverse. This diversity itself makes it the more necessary to provide for the education of the people. So long as a group is homogenous and its members conform to uniform beliefs and practices, conventions and customs may suffice, but when groups with different customs and beliefs come into contact, action must be guided by considerations of reason rather than tradition and faith. Otherwise, each group clinging to its own behalf and perhaps prejudices and suspicions—can lead only to clash and destruction.

It is a consciousness of the danger of democracy without proper education that has moved men and women of

wisdom to organise movements for adult education on a world-wide scale. Herein lies the significance of Unesco's insistence on Fundamental Education as a condition of peace and progress. Fundamental Education—which we call Basic Education in our country—stresses the urgency and immediate need of such programmes. I have referred to the traditional wisdom which has obtained in India for centuries, and commented on the fact that in spite of such traditions, occasions arise when all our wisdom, toleration and goodwill is lost in passionate frenzy. Have we tried to understand why this happens? Is it not due to the unquestioning credulity of our masses, which is the result of lack of acquaintance with differing conditions in different parts of the world?

In the past, when contacts between different parts of the country were few and remote, traditional wisdom may have sufficed. Today when contacts between different parts have increased and are increasing, traditional wisdom is not enough, as it does not prepare the mind for proper appreciation of customs, traditions and beliefs that are novel and strange. Further, the contacts today are not only among the different regions of the country but among the different regions of the world. People who have till now lived in sequestered areas are, therefore, brought face to face with strange modes of life, strange ways of thought and strange traditions. What wonder then that they at times react violently and even foolishly!

New Importance of Literacy

Literacy has, therefore, acquired a new importance in the context of the modern world, as only through literacy can our people have some acquaintance with ways of life different from ours. There are, no doubt, other ways of giving such knowledge. Where radios and films can be used on a large scale, a good deal of the content of such education can be brought to the people through such media. Plays, dramas, discussions and debates also help, and perhaps more quickly, to the same end, but it still remains true that the instrument of literacy, while its effects are slower and less perceptible, is cheaper and somewhat more lasting. For a poor country like ours, the provision of such knowledge through audio-visual aids will be difficult, if not almost impossible. The credulity which we often find among our people is a definite danger to the proper functioning of our democracy and it can, in our existing circumstances, be removed mainly through the use of the written word. From this point of view also, the importance of literacy in a programme of social education cannot be gainsaid.

I will make only a passing reference to the controversy which is at times raised between the relative importance of elementary or primary education and social or adult education. To my mind, such controversy is based on nothing but misunderstanding. If we want a programme of elementary education to be effective, the children must go to school. If all children came to school, even then it would take 15–20 years before an appreciable proportion of the adults in the country would become literate. On the other hand, without the willing co-operation of parents and guardians, there is the danger that during these 15–20 years compulsion may be more on paper than in fact. Unless guardians of the children recognise the importance of education and send their wards willingly to school, it is difficult for any State to enforce compulsion. In order therefore to make the programme of elementary



DISTINGUISHED DELEGATE; Miss Ella Griffin, UNESCO consultant to the Government of India on the preparation of literature for adult education, belongs to the Education Department of the U. S. Government. Draped in sari she attended the Adyar Seminar.

education successful, it is necessary to tackle the problem of the education of their guardians. Experience also shows that elementary education is far more effective whenever it has been accompanied by a drive for education among the adults. The English saying that when you teach a boy, you teach only a boy but when you teach a girl, you teach a family, is a recognition of this fact.

Programme for Children

While, therefore, primary education cannot flourish without the support of a drive for adult education, it must also be clearly realised that no programme of adult education which neglects the education of children can meet with success. There are some who place a greater emphasis upon programmes of adult education. The logic of their practice seems surprising, for after neglecting the children throughout the entire period when they would have received schooling, they seek to remedy the defect by arranging intensive courses of adult education extending for three months, six months or even a year! Such a policy is not only foolish but positively harmful.

For one thing, even a one year course of adult education cannot develop in the individual those habits of thought and action which you can instil in a child over a period of five or six years in the most impressionable period of his life. For another, no scheme of adult education, however ambitious, can wipe out illiteracy and ignorance if elementary education is neglected. To take the example of Madras State which, in my opinion, is one of the most progressive States in India in educational matters: the present organisation provides schooling for about 35 lakhs out of the 70 lakhs of children of school-going age in the State. If we take the number of children in all the age-groups to be roughly equal, this means that almost seven lakhs of children are every year entering the ranks of adult illiterates. No programme of education for the adult can cope successfully with this annual inflow of some seven lakhs in addition to the enormous number of adult illiterates already in Madras. Programmes of elementary and adult education must, therefore, proceed side by side if either is to succeed.

Need to Train Teachers and Workers

In fact, as it is hardly necessary to emphasise to the present audience, we cannot divide education into watertight compartments. Elementary education and adult education are important but if we are to have provision for them, we must have facilities for training the necessary teachers and workers. This means that there must be a programme of secondary education on a sufficiently extensive scale to supply us with the teachers and workers for elementary and adult education. Nor is this all. We cannot maintain the necessary scale of secondary education, if there is no provision for higher education to supply the teachers and leaders who can carry out effectively the programme of secondary education. Again, all our educational programmes would depend upon the material resources of the country and this depends upon what use we make of natural resources—human and material—that we possess. A programme of technical and scientific education would thus be necessary to create the industrial and commercial wealth which alone would sustain a programme of national education for a country. Thus, from whatever side we may approach the problem, the conclusion is the same. Education, if it is to be effective, must cater to the varying needs of the community and while there may be room for differences in emphasis in different aspects at different times, neglect of any aspect is detrimental to education as such, and therefore to the life of the community.

Education is a vital need of the community, and no progress can be achieved in any direction without a full realisation of this. Whatever programme we may have for the technical and industrial development of the country, whatever schemes we may draw up for improving communications, irrigation and agriculture, whatever objective in social and human welfare we may set before us, they would one and all depend upon the quality of our personnel. The best laid schemes and the finest equipment would be of little use without the man to work them to the fullest advantage. That is why western educationists have insisted, and rightly, that there is no country which is such is rich or poor: a country is what its men and women have made of it. We in India have after centuries become the masters of our fate. This is a tremendous challenge and a tremendous opportunity!

(Continued from page 32)

Development Department

THE MADRAS COTTON CONTROL ORDER, 1950

This order provides control over contracts relating to sale or purchase of cotton and oversale of cotton to specified persons at specified prices.

Rural Welfare Department

THE MADRAS KHADI DEVELOPMENT ORDER, 1949

The provisions of the order prohibit a person to carry on business as a producer or dealer of hand-spun yarn and Khadi in the State of Madras except under and in accordance with the terms and conditions of a licence issued to him for the purpose.

Further, the order states that no person who is a purchaser or a dealer in mill-made yarn or cloth woven out of such mill-made yarn shall carry on the business of a producer or a dealer in hand-spun yarn or Khadi. No hawker shall be licensed to deal in hand-spun yarn or Khadi. The sale price of Khadi should not exceed the aggregate of the cost of production of the cloth plus 15 per cent thereof.

No person shall weave cloth partly from hand-spun and partly from mill-made cotton yarn or sell or otherwise dispose of any cloth so woven. No person shall also spin by any yarn from mill-made cotton slivers or mill-waste cotton or otherwise dispose of any yarn so spun and no producer or dealer shall deal in such yarn.

Public Department

THE MADRAS BUILDINGS (LEASE AND RENT CONTROL) ACT, 1949

This Act seeks to regulate the letting of residential and non-residential buildings and to control the rent for such buildings and to prevent unreasonable eviction of tenants therefrom in the State of Madras, and applies to the City of Madras, all Municipalities within the State, and such other areas as may be notified in the Gazette by the Government of Madras from time to time.

To remove certain practical difficulties which were experienced in administering the Act, the Act has been amended in certain respects. The amendments have come into force from May 1951. The important amendments that have been made have been explained in Press Note No. 71 P.W. (I & P.) dated May 1951.

CEMENT CONTROL ORDER, 1949

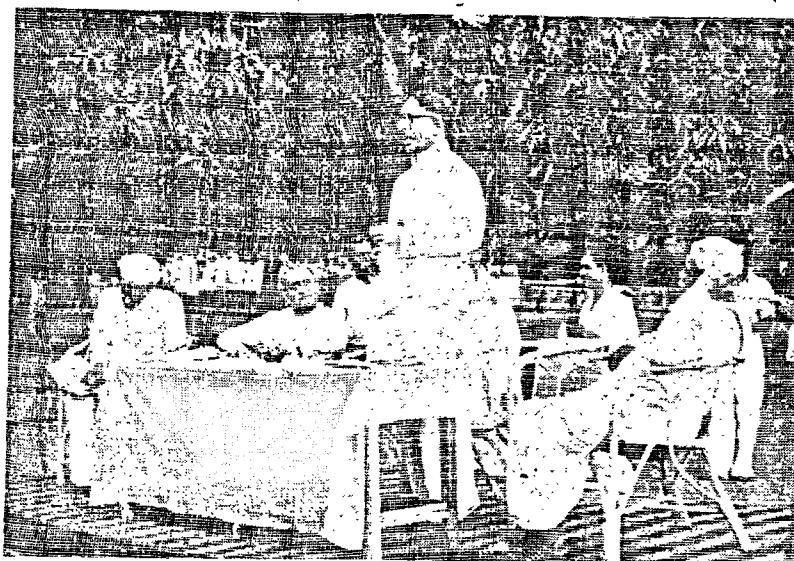
This order controls the sale of cement.

By an amendment issued on 3rd April 1951, licensed cement factories are authorized to sell up to one wagon load (not exceeding 25 tons) direct to each individual consumer without a permit, such sales not to exceed 20 per cent of their monthly production.

Another amendment issued on 3rd April 1951 requires licensees to submit particulars of such free sales of cement. Licensees shall not default in selling cement to permit holders.

RESETTLEMENT OF RELEASED ARMY PERSONNEL

An order, dated 12th April 1951, seeks to implement the Central Government suggestion that demobilised military personnel should be given every preference in all avenues of service. In every case where an ex-soldier is found *prima facie* suitable for employment under this Government, the relaxation of technical restrictions will be considered.

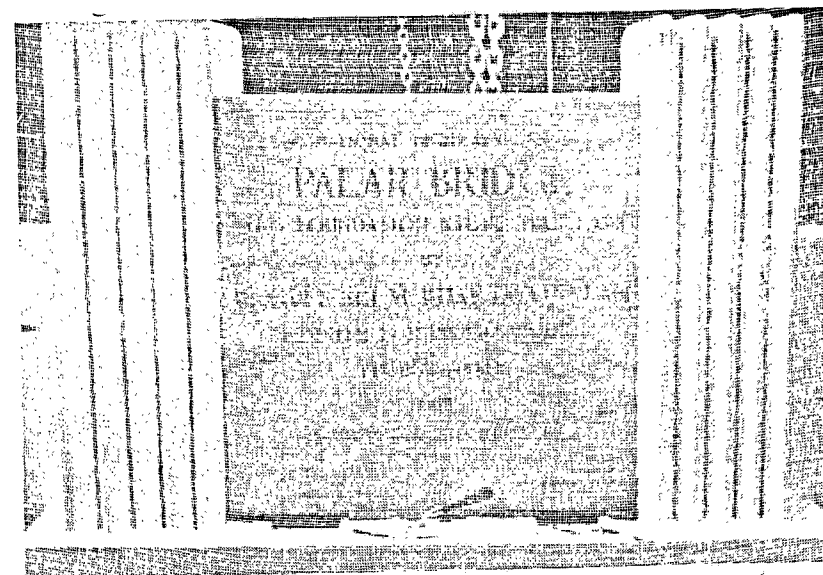


THE DRIVE AGAINST ILLITERACY

ADYAR SEMINAR Under the auspices of the South Indian Adult Education Association, the first Regional Seminar in the South for planning out a programme to eradicate illiteracy, was held in Adyar, Madras City. Janab Humayun Kabir, poet, novelist, philosopher and administrator, who inaugurated the Seminar, stressed the need for discussion of problems and settlement of methods of approach in seminars at national and regional level.

THE DIRECTOR: Sri J. L. P. Roche Victoria, Minister for Food and Fisheries, addressed the Adult Education workers. Janab Humayun Kabir remarked: "To my mind, it is fitting that the Minister for Food should be the Director of a Seminar of this type; for one of the points which has emerged as a result of the experience of adult education work in different parts of the world is that it seeks to create better human conditions not only through the imparting of knowledge but also through the raising of material standards of life."

DELEGATES: Some of the women delegates to the Adyar Seminar. The English saying goes that when you teach a boy, you teach only a boy, but when you teach a girl, you teach a family. The Adyar Seminar took note of the need for facilities for training the necessary teachers and workers. All educational programmes depend on the use we make of natural resources—human and material—that we possess.

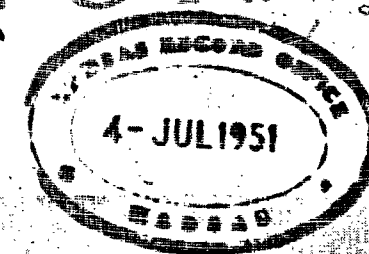


Registered No. M-4767.

BRIDGE ACROSS THE PALAR

The Great Southern Trunk Road or the Madras-Dindigul Road (National Highway No. 45) crosses the Palar River at mile 38/3.5, near Chingleput. As a road bridge at the site was considered necessary, it was included in the five-year programme of National Highways. Accordingly, an estimate amounting to Rs. 19'00 lakhs was forwarded to the Government of India, and their technical approval and financial sanction was duly obtained. Construction has been started. Sri M. Bhaktavatsalam, Minister for Public Works, laid the foundation stone for the bridge work. Photos show the Hon'ble Minister addressing the gathering at the foundation stone laying ceremony; a close-up of the foundation stone; and the site of the new bridge.

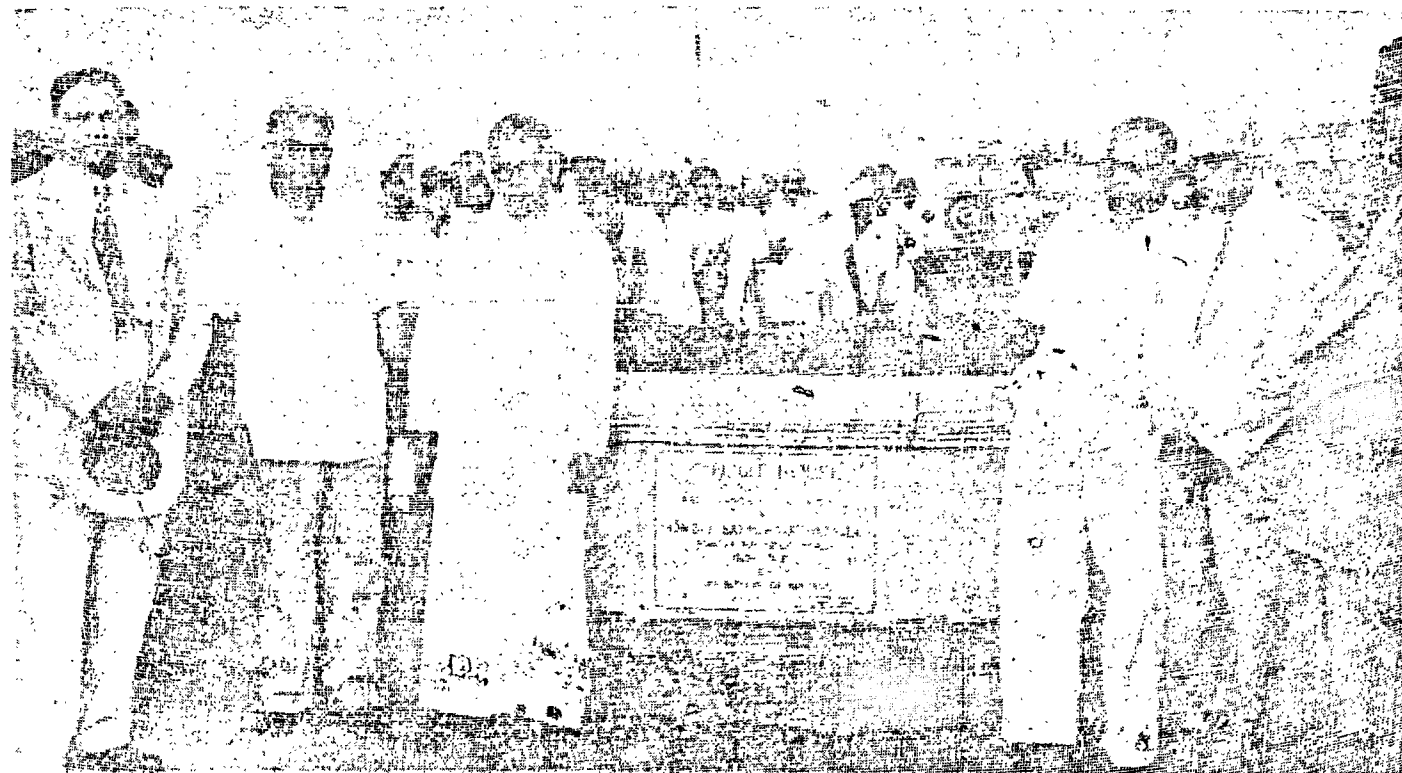
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Sri M. Bhaktavatsalam, Minister for Public Works, laid the foundation stone for the Circuit House at the Tungabhadra Dam on 16th May 1951. The Circuit House which is an indispensable need to visitors is located on the top of the hill at an elevation of 1,900 feet. It marks an important stage in the progress of construction of the Dam.



Sri M. S. Thirumale Iyengar, Chief Engineer, Tungabhadra Project, addressing the gathering on the occasion of the location ceremony.

IRRIGATION

MADRAS INFORMATION

The Tungabhadra Project

By SRI M. BHAKTAVATSALAM, Minister for Public Works.

The Tungabhadra Project is the first major postwar project taken up by the Madras Government as a joint undertaking by the Madras and Hyderabad States. This project will benefit that tract of barren country which has suffered in the past from frequent visitations of famine and where Governments have spent crores of rupees on famine relief. The completion of this project will usher in an era of prosperity in this part of the country. The canals on either side together command and protect nearly 2 million acres of land and by leading water on to this vast extent of land you will be giving succour to the people and establish in this part of the country a freedom from want which the Governments are pledged to give to the masses.

The great dam, as you are all aware, is one of the biggest ones undertaken in India. It will have an ultimate storage of 3.04 million acre feet that is about one and a half times the Mettur storage. The investigation and designs were made entirely by our Indian Engineers without any foreign help or advice and it is also being executed without any such aid. The United States Engineers that visited this dam in January 1951 have given a high testimony as regards this work.

I am informed that the labour strength just now is over 30,000 at this dam construction area. Incidentally that shows how our Engineers here have been alive to limit their mechanization to the minimum extent necessary while employing a large number of labourers where such could be employed with advantage. Thus is kept up the employment of large labour population who would otherwise be without employment if wholesale or unbalanced mechanization had been adopted. What further strikes me in this work is the construction of the dam in keeping with the ancient art that flourished centuries ago. The use of large sized stones reminiscent of the ancient constructions in this region and the attempts to retain the glory of the ancient Hampi Architecture are indeed praiseworthy.

I find this has not been lost sight of in the building that is proposed to be put up here. I see in the basement work already done the exhibition of the rare art. The verandah pillars will all be columns reminiscent of the ancient art and the over-all architecture of the building will maintain that dignity and beauty which will harmonize with the environments. I see from these heights at 1,900 elevation, the masonry dam coming up from flank to flank and it is hoped it will be completed by end of 1952 or early in 1953. It is a magnificent view and even as it is so, will the dam that rises out of it will be still more magnificent.

I wish to refer to one other aspect of this project which concerns a vast number of families that get displaced by submersion of their old homes and lands in the reservoir. One hundred and thirty-three square miles of land and several villages go under water. While I have full sympathy with their lot, it must be remembered that it is an inevitable consequence in all large development measures that aim at giving the greatest benefit to the greatest number, that some must suffer in the process to benefit much larger sections of the community. But it is our duty to see that those some that are affected, suffer only the

minimum. Whilst we cannot really compensate adequately for the sanctity and sentiment that their old places of living and life possess by virtue of their having lived there for centuries, at least it is in our power to help them to the utmost in rehabilitating them at new places of their choice. And these rehabilitation proposals of Government are very liberal in addition to compensation for lands and houses and exgratia payments. They are all given free house sites, free temporary lodgings to stay while they put up their permanent houses, free conveyance of personal effects and building materials salvaged from their old homes, some free timber, drinking water, wells, schools where required, dispensaries and five acres of dry land or 3 acres of dry and one acre of wet. There were about 5,000 families on the Madras side to be provided for and I believe almost an equal number on the Hyderabad side as well.

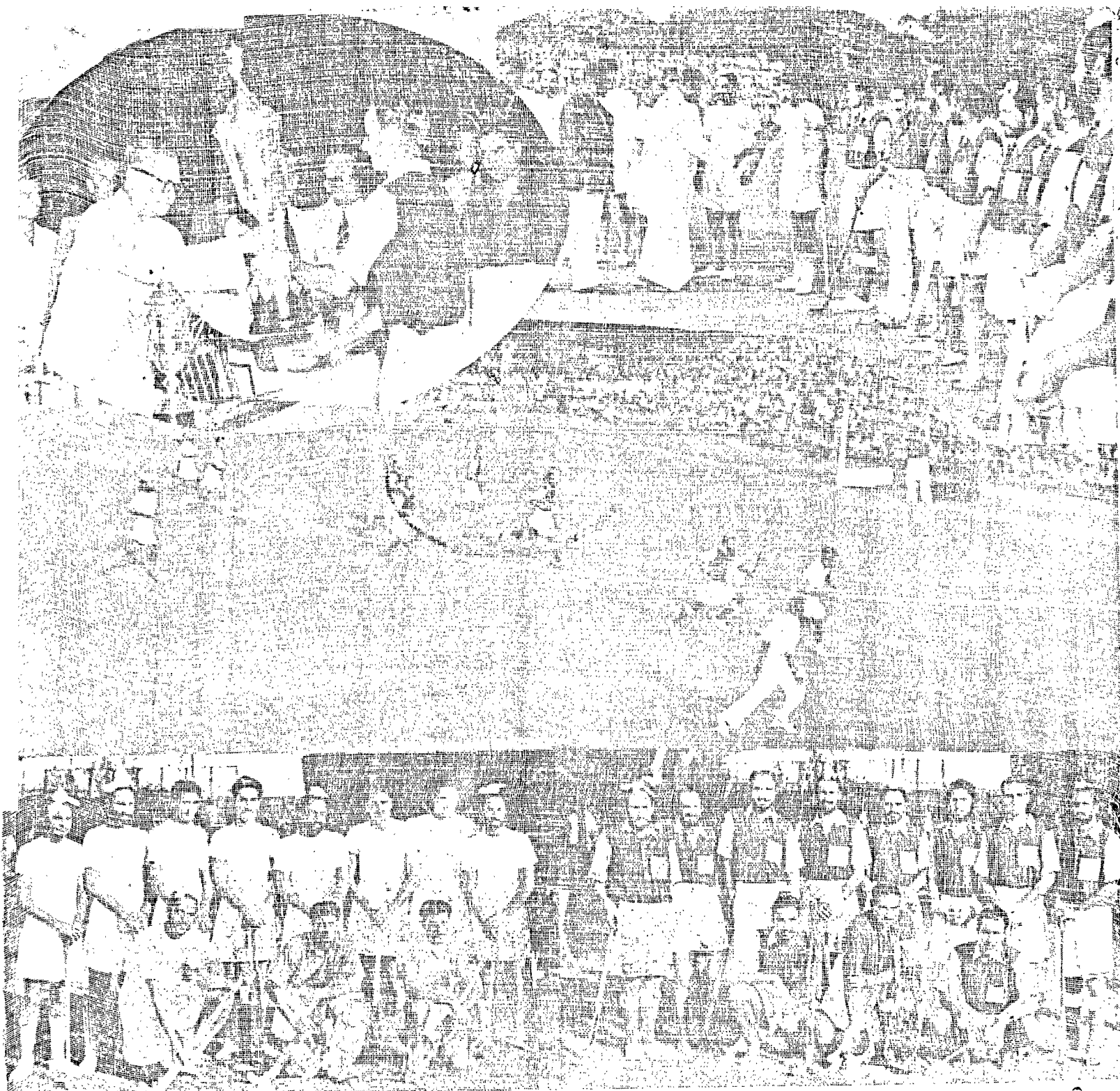
Apart from the long-term benefits that will accrue when the commanded areas under this project fully develop, what is most note-worthy and one of the great importance is the immediate prospect of producing more food from next year onwards in the shape of an additional crop over some part of the first crop irrigated land in the Kistna Valley.

Tungabhadra reservoir storage from 1952 will be available in part to raise a second crop in the Kistna Valley while lands under the new canals are not ready for development. The Central Planning Commission have laid great stress on completion of the irrigation projects that have already been taken up so that we may get the results as quickly as possible. So the earlier we can complete this dam and store waters, the better for us and the country.

(Adapted from the speech delivered on the occasion of laying foundation stone for the Circuit House at Tungabhadra Dam on 16th May 1951).

Official punished on charge of corruption

It was brought to the notice of the Government that Sri R. Sundaram Ayyar, Assistant Engineer (Highways), while he was at Srivaikuntam and Nagapattinam had received illegal gratification from certain contractors and also committed certain irregularities. The Assistant Engineer was placed under suspension with effect from 20th October 1948. Charges were framed against the Assistant Engineer and enquiries were held by the Tribunal for Disciplinary Proceedings. The Tribunal found that some of the instances of corruption were proved. The Government have accepted the findings of the Tribunal and the officer has been compulsorily retired from service with effect from 20th October 1948, the date on which he was placed under suspension.



NATIONAL HOCKEY CHAMPIONSHIP

Top (ocal) : Sri P. S. Kumaraswami (Raja, Chief Minister, presents the S. Rangaswami Iyengar Cup to Ram Swarup, captain of the Punjab team, winners of the National Hockey Championship conducted recently in Madras City.

Top (right) : Chief Minister meets the Punjab and Services players, the finalists.

(Centre) : Services attacks the Punjab as the backs rush to the rescue.

Bottom (left) : The Services XI. *Bottom (right) :* The Punjab team who won the championship for the third year in succession.

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Cover Page: G. T. M. 323, the new type, 42 seater diesel bus which is already on the City Roads.

The Tungabhadra Dam—Progress of Construction Works

By SRI M. S. THIRUMALE IYENGAR, Chief Engineer, Tungabhadra Project.

Though started in 1915, the Tungabhadra dam did not make any headway until the Hyderabad troubles ceased by end of 1948. It was only after this that progress of work got into a stride made fully possible by the unhampered and willing co-operation of the Hyderabad Engineers, without which we would ever have continued to remain plunged in uncertainty and suspicion. In April 1949, the first masonry was laid in the foundation trench and you now (in the middle of May 1951) see from these heights the magnificent view of the dam in the deep section of the river bed and the flanks risen to varying levels, pointing to the substantial progress made. This dam is of solid gravity type 6,000 feet long excluding composite section 2,000 feet long spanning the gaps in the left flank hills. The dam will rise to 160' above the deepest bed and will store 3.06 million acre feet of water ultimately. The flood spill is over the dam through 33 gate openings of 66' span and 20' high each.

We have done so far 9 million cubic feet of masonry. The total output today is in the order of 50,000 c. ft. While on the one hand we rejoice at the dam going up and up, our hearts on the other hand go in sympathy to the vast number of families that get uprooted in the reservoir submersion process. We cannot adequately compensate for the loss of sanctity and sentiment that are attached to the centuries old places of living and life. But we will rehabilitate them in the best manner possible. They must rest content with the best we can give and be proud of the sacrifices they are making to benefit large sections of humanity.

Next we have decided to manufacture the high head and spillway gates at the site here. We are getting the necessary steel and are assembling the machine tools required for the purpose. It is most unfortunate however that in a pioneering enterprise of this nature, our attempt to collect machine tools from out of reparations machinery stock and the "disposals" dumps, have invariably been an obstacle race. Special efforts were required at every stage to get a society passed on to this project which has been given a very high priority being a project likely to yield quick results in the matter of food. In this respect of acquisition of machine tools, we are still not out of the woods.

The heavy embedded metal castings for the sluices in the dam are already in the making and some are ready for being embedded. The 11 feet dia. penstocks that are to be embedded in the dam are being manufactured for us by the Indian Hume Pipe Co., at Jorh Falls. Some of the foreign firms who have been supplying these pipes, gates, and accessories to this country from time immemorial and who have even now secured orders from other projects under execution, are watching with interest how we are going to fare in this pioneering mechanical engineering industry. We will do our best and if we make some mistakes it does not matter. We learn by mistakes. Some day we must do everything ourselves and so we have started it when the opportunity has presented itself. I am confident of success in this undertaking.

A word about the canals. The irrigation canal has to go through hills for a few miles in the head reaches and the country traversed is such that great engineering skill is called for to locate the canal that will negotiate the difficult terrain successfully. We have to put up here minor dams across valleys, viaducts, high embankments, deep rock cuts, masonry side walling and tunnels. We hope to complete this joint undertaking in some time, so that by the end of next year we will have stored waters that will help growing more food in the Kistna valley through an extra crop on part of the existing cultivable land.

(From the speech delivered on the occasion of the location ceremony of the Circuit House at Tungabhadra Dam).

Market for Indian Goods in U.S.A.

The Consul-General of India, U.S.A., has written to say that the following is a list of articles which in his opinion can find a ready market in the U.S.A. by not necessarily in the form and manner in which these are produced at present:—

1. Baskets.
2. Bamboo rakes and ladders.
3. Costume jewellery.
4. Gift electric lamps.
5. Handloom cotton goods.
6. Silk and silk brocade.
7. Fishing nets.
8. Rattan or bentwood furniture.
9. Wicker cane furniture.
10. Shoes, sandals and slippers.
11. Ceramics, pottery and chinaware.
12. Screw-pine manufactures.
13. Perfumes.
14. Brushes.
15. Cotton, silk and linen embroideries.
16. Cotton and silk hand prints.
17. Brass, copper and iron ware.
18. Carved woodwork, lacquer ware and papier mache.

Some of these items have been finding their way into the North American markets in small quantities and would perhaps continue to sell intermittently in the future, but neither the extent of the sales of some of the items in the past nor the suggestion of the others can possibly measure the potentialities without conducting properly marketing research by the trade so as to include a survey of both indigenous and imported goods of competitive nature as well as local taste and requirements. Some traditional lines of Indian arts and crafts have already been sold and will continue to be sold more as articles of decoration or adornment rather than things of utility. If such designs could be used in the manufacture of articles of daily use they would help to develop lines of general commercial interest thereby enlarging sales.

Progress of the Lower Bhavani Project

The Madras State approved the execution of the Lower Bhavani Project very late in 1947. The project estimate technically consists of the construction of a dam 5½ miles long and the excavation of a new canal 120 miles long to irrigate 207,000 acres of new lands in the Coimbatore district.

Considerable progress has been made both in the construction of the dam as well as in the excavation of the new canal. Out of the 5½ miles of dam, 1,523 feet will be in stone masonry and the rest will be earth. The height of the masonry dam will be 204 feet at the deepest portion, and the earth dam a full 100 feet.

Masonry Dam.—The dam involves the construction of 1.30 lakhs of units of (of 100 cubic feet per unit) of masonry. Of this, about 60 per cent has been built to date. Further work is in progress. In this portion, nine sluices are to be constructed to meet the irrigation needs of the Tanjore Delta and another set of five sluices at a higher level for irrigating the new lands in the Coimbatore district.

Stilling Basin.—In order to safely discharge the flood waters, a spillway 396 feet long is provided at the river section of the masonry dam. Special devices are being adopted to dissipate the kinetic energy of the water that will be dropped by 1,132 feet. The special device consists of a stilling basin with reinforced concrete T-Blocks 7 feet 6 inches by 4 feet by 6 feet fixed at intervals of 15 feet arranged in such a way as to eliminate cavitation in the stilling basin while dissipating the kinetic energy. This new method for dissipating the kinetic energy of the falling sheet of water was evolved in the Poondi Irrigation Research Division, under the direction of Sri A. R. Venkatachari, Chief Engineer for Irrigation.

The spillway itself will be of stone masonry with an 'Ogee' face and it is designed to safely discharge a maximum flood of 122,000 cusecs of water. The spillway will be provided with radial gates 36 feet long and 20 feet high, so as to enable the extra storage of further 20 feet depth.

Four penstock pipe 8 feet diameter will also be laid in this portion of the dam, for the development of hydro-electric power.

The next phase of construction is the erection of the gates for the sluices and building in of the penstock pipes. The dam is expected to be completed in September 1952, more than a year in advance of the schedule.

Earth Dam.—The earth dam portion, which will incorporate all the modern developments in the science of Soil Mechanics in the construction of a dam, will be 100 feet high in the deepest portion. This will be the first earth dam in South India of such a height. The dam will be of the zoned type with a central impervious zone, enveloped by semi-pervious ones.

To minimize, if not altogether to prevent, the seepage of water through the junction between the original ground and the superstructure and also to ensure proper key between the embankments and the foundations, the usual precautions have been taken, namely, providing a cut-off trench, taken 10 feet into the rock, and with one or two cut-off wells. Further precaution has been taken to

providing grout curtain below the cut-off wells along the entire length of the earth dam by drilling holes 40 feet at 10 feet intervals and cement grouting them. To take care of any small amount of water that may seep still through the line of contact of the dam and the foundations, without any harm to the dam, the type of filters with graded materials usually adopted in the most advanced earth dam designs have been provided in the rear of the dam.

The earth dam involves 130 million cubic feet of earth work. Of this 50 million cubic feet or about 40 per cent has been done. The work on the earthen embankments is being carried on with the help of modern machinery, supplemented by manual labour.

This is the first earth dam in India where all the new types of machinery are seen at work together. Of the total length of 5½ miles, the earth dam has been complete to full designed levels for a length of two miles. Further work is in progress in other portions of the dam. A modern laboratory to carry out tests on soils used in the earth dam and also the cement mortar and concrete used in the masonry dam, has been established at Bhavanisagar, and helps to maintain the quality of work on both earthen and masonry sections.

Unlike the present practice of using machinery on a large scale in such big irrigation schemes, the project is being carried out by using just sufficient machinery which will not displace labour but would only supplement it by carrying out only those portions of the work which cannot be economically done by manual labour. The machinery employed is mostly for earth moving, transport of stone and sand and mixing concrete, while digging canals is done by manual labour. At the dam site, there are over 20,000 workmen now at work. To house the labourers and staff and their dependents working on the dam, an up-to-date colony incorporating all the modern ideas of town planning has been built. The colony is fully electrified and supplied with good filtered, chlorinated water.

Canals

The main canal which was originally to end with the Noyyal river with a length of about 90 miles has since been extended beyond Noyyal for 32 miles for the benefit of 25,000 acres in Dharapuram taluk, a famine affected area. Work in the canal area was started in January 1949 in charge of a separate Executive Engineer. The canal works consists of a main canal, earth-working excavating the canal and masonry works consisting of (a) bridges, (b) drainage crossings, (c) sluices and of distributaries with also these kinds of works.

Earth work.—The main canal has been dug and banks formed almost for its entire length in terms of quantity about two-thirds of work has been done. About 30,000 workmen are now working.

Bridges.—There are 60 bridges in the main canal, 50 of them have been built and the remaining 10 are in an advanced stage of progress. About 95 per cent of all bridges have been built.

(Continued on page 10)

Increasing Paddy Production in Madras

By SRI M. S. SIVARAMAN, I.C.S., Director of Agriculture.

The Madras State depends very largely for cereal supplies on about 12 million acres of millets and about 10 million acres of paddy. There is no immediate scope for any appreciable extension of the area under food-grains. Millets are mainly raised on rain-fod lands and the area in any year depends on seasonal factors and the price levels of competing crops. The chances of improving millet production by intensive cultivation are strictly limited. Paddy will therefore continue to be the mainstay of the State and fortunately paddy is the one cereal crop, the yield of which can be stepped up appreciably through simple means even with the existing agricultural set up.

The question of food shortage has been with us for some years and in spite of the urgent need to produce more food we have not so far succeeded in solving the problem fully. Some have laid stress on the vagaries of the monsoons, the inadequate supplies of oil cakes, farm-yard manure and fertilisers and even doubted whether the State can ever become self-sufficient, but to an agricultural scientist such pessimism is certainly unwarranted.

The problem is no doubt immense but the solution is simple if the vast potentialities of Nature are harnessed in our efforts to tackle it. A rigorous application to the land of known principles of successful cultivation already practised in isolated areas of different districts will revolutionise agriculture and transform the State from a deficit area to a land of plenty.

Instances are not lacking where phenomenal yields are obtained in South India by the systematic adoption of proper methods of cultivation; for instance, the yield of paddy from four to five thousand pounds to an acre, nearly not due to any inherent superiority of the land cultivated. The Tambraparni paddy area consists of largely of shallow soil but the ryot has applied heavy doses of organic manure mainly green leaves and farm-yard manure and systematically built up the productive

Glyricidia raised on paddy field bunds in Paddy Breeding Station, Coimbatore.



capacity of soils which are in no way better than those found elsewhere.

The yields obtained in many Government agricultural experimental stations in Madras are now double and sometimes three times of what they were when the stations were started. The problem of stepping up production by 10 per cent within a short time in order to make the State self-sufficient in respect of foodgrains is therefore not difficult to solve. We can succeed only if we tackle the soils and eliminate to the extent possible the factors which reduced the yield.

Lack of humus is the main fundamental drawback of Indian soils in general and South Indian soils in particular. Organic matter in the soil gets oxydised rapidly under tropical conditions thus making the soil deficient not merely in nitrogen as stressed by the Royal Commission of Agriculture but also in humus which goes to make the soil a living organism. There will be no general improvement in the level of fertility of the soil unless the deficiency of humus is made good. Under irrigated conditions this can be done by applying green leaves straight to the field as manure; but all plant materials will have to be composted into synthetic farm-yard manure for use on dry lands.

Experiments all over the Madras State have shown that the yield of irrigated paddy can be increased from 10 to 40 per cent in one year if 4,000 to 6,000 pounds of green leaves are puddled into the soil just before the transplantation of paddy. On an average every 15 pounds of green leaves when applied to the field will give one pound extra of paddy. The problem of increasing food production in Madras in the present emergency resolves itself into the problem of increasing the supply of available green leaves.

Large stretches of paddy fields are not accessible from roads or cart-tracks and transport of green leaves to the fields by carts is therefore extremely difficult after water is allowed on the fields. Unless green leaves are produced on the bunds of the fields or on the fields themselves wherever possible, green manuring will never be popular as a general measure. With a view to tackle this problem of production of leaves on the spot, various quick-growing shrubs like Glyricidia maculata, Calatropis gigantea, Adaphoda vasika, etc., were planted on some of the bunds of paddy fields in the Agricultural Research Stations in Madras in 1947. Glyricidia raised every six feet apart on half the total lengths of bunds of double-crop lands in the Paddy Breeding Station at Coimbatore (photo 1) have within two years produced nearly 4,000 pounds of leaves per acre. The bunds are 15" broad and 12" high. No adverse root or shade effect was noted from these plants and a study of the root system showed that the roots penetrate deep into the soil leaving the shallow paddy plants quite unaffected.

A paddy field divided into 10-cent plots contains over 500 yards of bunds in an acre and even allowing for the use of some of the bunds for walking and other purposes there will be enough length of bunds to produce the leaf

requirements in every acre. Coimbatore is a place of about 20" rainfall and what has been achieved there can be repeated all over the State. Glyricidia is a legume; it fixes nitrogen from the air and does not deplete the soil of its nitrogen. It should not be a difficult matter for any ryot to raise Glyricidia seedlings and transplant about 100 plants on the bunds every six feet apart at the time of transplantation of paddy from July to September as a more or less permanent solution to providing green manure on the spot for his paddy crop.

For this purpose about a week prior to transplantation of the Glyricidia seedlings pits about a span or more in diameter may be dug every six feet apart on the bund and filled in with a few handful of well decomposed farm-yard manure and any light soil like sand or sandy loam that can be got from the immediate neighbourhood. The pits are then well-watered so that the soil become more compact. Just before transplantation of the seedlings the soil in the pits is loosened and the seedlings about 2 or 3 weeks old are transplanted one in each pit, and watered. Great care should be taken to see that the seedlings are lifted carefully with a little clod of earth. Transplanted seedlings will not require to be watered for about four days and further watering may be regulated according to the weather and condition of the plant. The plants will grow beyond the reach of goats and cattle by the time the paddy is harvested. The branches may be lopped for the first time a year after the plants are established and thereafter whenever required.

Every pound of Glyricidia contains about 6,000 seeds of which nearly 75 per cent will germinate. Instances are known in Aduthurai Paddy Research Station where a single plant of Glyricidia planted along an irrigation channel bund has produced over 300 pounds of leaves from the third year. Thus it is even possible to develop the green leaves for three hundred acres of Glyricidia seeds provided the plants are systematically raised on suitable bunds. The rapid development of Glyricidia in the Province with a view to increase the production of available seeds was initiated in 1947 and already some of these plants have produced seeds last year. The collection and distribution of these seeds and further spread of this shrub will certainly achieve spectacular results in a short time.

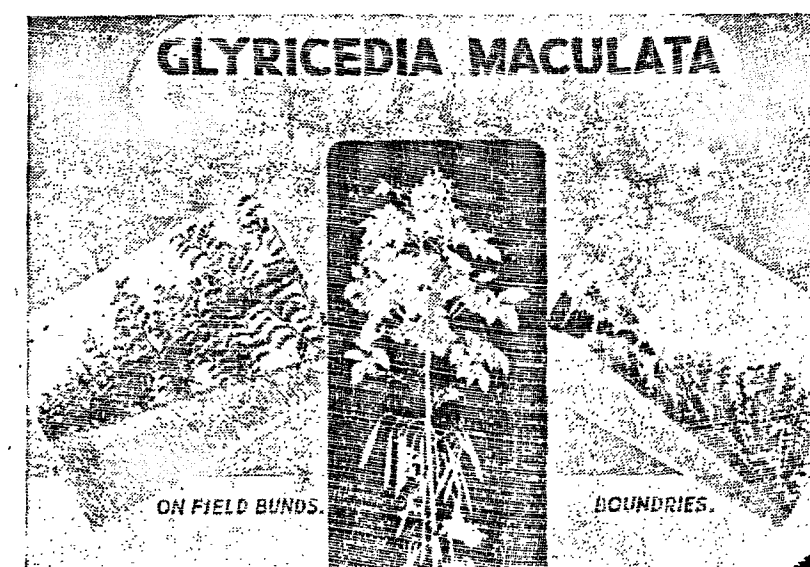
Glyricidia withstands frequent lopping and it is an ideal plant to grow on the bunds of paddy fields where two crops of paddy are raised in a year, as it will not be possible to raise any green manure crop on such lands during the short interval between the harvest of the second crop and the transplantation of the first crop. It deserves to be grown also on the bunds of all single-crop wet lands, for this will enable the ryot to utilize his land in the off season for raising a crop like cotton or groundnut with the help of a small well or a catch crop like pulses if no irrigation can be arranged.

Another rapid growing shrub which can be grown successfully is Calatropis gigantea, a common weed found all over India. Though Calatropis is generally found on the drier soils there was no difficulty in growing it at the Tirukuppam Paddy Research Station near Madras on the field bunds. A pod of Calatropis contains over 200 seeds nearly all of which will germinate. The plants get easily established and yield every year about 20 to 40 pounds of leaves after 18 months. Each pod can thus produce leaves

sufficient for two acres of paddy from the second year of planting and there is no dearth of seeds or place where Calatropis can be planted. Efforts should be made to collect Calatropis seeds in early summer by binding the pods with a length of plantain fibre when they are nearly mature so that the seeds may not fly off when the pod bursts.

On most single-crop wet lands, the raising of green manure crops like Grotolaria Juncea (sun-hemp), Sesbania Aculeata (dhaincha), Indigofera Tinctoria (indigo), etc., is possible depending on the type of soil and local factors; but so far only about two million acres are under such green manure crops in Madras and further progress is being made slowly. It is, however, possible to bring nearly six more million acres under green manure crops if seeds are made available and the factors that discourage the raising of green manure crops are rigorously eliminated. In due course the ryots may even be compelled to adopt green manuring of paddy as a necessary practice.

As seed supply is the most important bottle-neck the problem of producing green manure seeds on the bunds of the paddy fields while the paddy crop is growing was studied and it has been found that of all the green manure crops, Sesbania Speciosa is the most outstanding from the point of view of facility of production of seeds, comparative immunity from grazing, greater freedom from insect pests, the larger quantity of green manure than can be produced and comparative ease with which it decomposes in the puddle. Sesbania Speciosa can be raised along with the paddy crop by transplanting three-week old seedlings along the margins of the bund at the time of transplantation of paddy from July to September. A pound of Sesbania Speciosa contains over 32,000 seeds of which nearly 80 per cent will germinate and each plant may produce about a quarter pound of seeds when planted six feet apart. The seeds will be ready before the paddy is harvested and all that a ryot has to do is to collect the seeds from the plants growing along the bunds of his field and sow about 10 pounds of seeds per acre before the paddy is harvested. Under favourable conditions an acre of Sesbania Speciosa sown in January has been known to produce by July nearly a lakh of pounds of green manure sufficient to manure 20 acres. Sesbania Speciosa is highly drought resistant and thrives well on all types of paddy soils. The moisture in the paddy field in the early stages of its growth and the summer showers help to produce on an average about 30,000 to 50,000 pounds. The crop raised on one acre can therefore provide sufficient green manure for at least



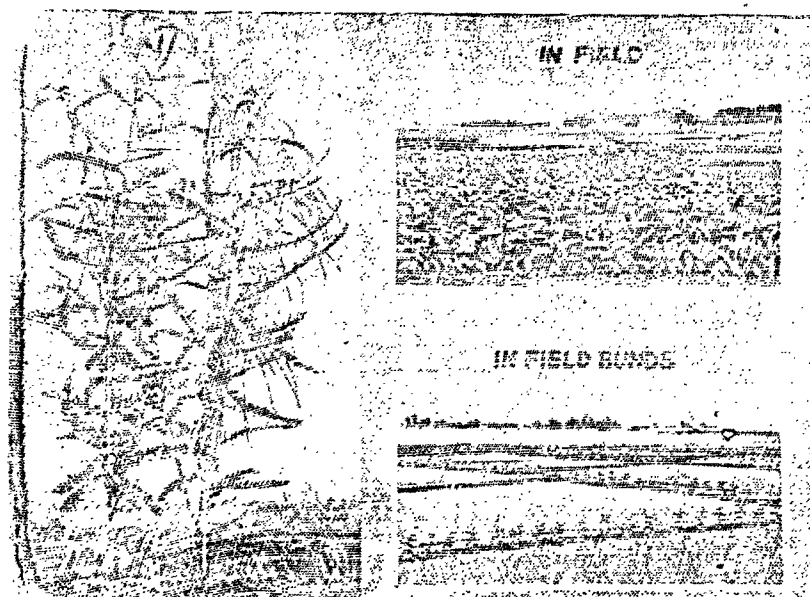
six acres. It will not therefore compete with the pulses which can still be raised on other lands. To green manure 6 million acres, *Sesbania Speciosa* should be raised on one million acres: 60 million plants will be more than sufficient to produce the seeds required for the purpose. If seedlings are raised from 2,400 lb. of seeds in July-August 1951 we should be in a position to provide the requisite seeds in January 1952 for raising the crop of a million acres.

The Madras Agricultural Department had in its possession a few pounds of seeds of *Sesbania Speciosa* in 1947 and active measures were taken to develop these seeds. It may not therefore be a difficult matter now to distribute a pound or two of seeds to one or two enterprising ryots in each wet acreage and insist on the plants being raised along the margins of the paddy fields in the village. The existence of this marvellous plant has to be brought home to all those who are interested in the Agricultural prosperity of the State. Plant in the compounds of public offices, schools, places of public resort, etc.

Until the ryot realises the need for and the advantages of raising quick-growing perennial shrubs on the bunds of wet lands it will be necessary to raise green manure crops on the field. But when once the ryots learn to obtain their green leaf requirements from the bunds, the cereal problem will be a thing of the past and the stage will be set for the next important step in the Agricultural development of the State, viz., the utilization of the paddy fields for the raising of commercial crops like cotton and groundnut as a second crop on single crop lands wherever possible during the fallow period without affecting the production of paddy. With very little extra effort every ryot can produce on the spot the green leaves required for manuring his paddy fields and if he can tap the underground water, he can utilize his land in summer to produce a commercial crop that is not so taxing as paddy in its water requirements.

Our goal should be to produce a balanced abundance in the State. The way to produce abundance is clear. The need to produce abundance is keenly felt. What is required is a concerted effort to translate ideas into practice. Given the will and necessary effort, Madras State, far from being a deficit area can even export cereals to other areas in the near future.

Sesbania Speciosa. New Green Manure.



Extension of the Well Subsidy Scheme for the year 1951-52

During recent weeks the Government have been receiving a number of representations from several districts requesting for the implementation of the New Well Subsidy Scheme, 1951-52, in their local areas. The Government desire to inform the public that the Well Subsidy Scheme during 1951-52 is not being worked on a large scale in all the districts of this State, as in the previous years, but that it is restricted and confined to select areas in a few districts. This restriction has been found necessary on the advice of the Government of India, Ministry of Food and Agriculture, who with reference to recent changes in their policy regarding financial assistance for Food Production Schemes, desired that the area of operation of the Well Subsidy Scheme during 1951-52 should be confined to a few chosen areas like the Central Districts where well irrigation is the only feasible and economical mode of irrigation and where the water table is comparatively high. Accordingly, after a careful examination of the relative conditions of all the areas in the State, the Government of Madras have sanctioned the scheme for operation in the selected areas mentioned below:—

- (1) The whole district of North Arcot excluding Chengam and Tirupattur taluks;
- (2) Cuddalore taluk excluding Kadampuliyur fika in South Arcot district;
- (3) The whole district of Chingleput;
- (4) Chandragiri, Chittoor, Timmittani, Puttur and Kalahasti taluks in Chittoor district;
- (5) Gudur, Subbarpet and Nellore taluks in Nellore district;
- (6) Tirunelveli, Tenkasi, Ambasamudram, Tiruchendur and Srivaikuntam taluks in Tirunelveli district;
- (7) Ramanathapuram, Paramakudi and Tiruvadanai taluks in Ramanathapuram district;
- (8) Melur, Periakulam and Madurai taluks in Madurai district, excluding the area south of Tiruparankundram in Madurai taluk;
- (9) Telkeli, Sompeta, Chipurupalli, Vizianagaram, Bobbili and Salur taluks in Srikakulam district;
- (10) Bhimuniapatnam, Visakhapatnam and Narasipatnam (Golconda) taluks in Visakhapatnam district.

As the continuance of the scheme has been sanctioned by the Government of India subject to the conditions specified earlier, the Government regret their inability to consider favourably representations from the public to include their areas also within the scope of the Scheme.

Report on Costs of Cultivation, Yield of Sugarcane, etc.

The Government constituted in January 1950 a Special Committee of the State Sugarcane Committee under the Chairmanship of Dr. T. S. Venkataraman to examine the technique of cultivation of sugarcane of varieties suitable for each of the sugar factory areas in this State and to suggest ways and means to improve the quality and yield of sugarcane and at the same time to bring about a reduction in the cost of cultivation. The Special Committee visited the several factory areas and submitted a report. Copies of the Report are now available at the Government Press, Madras.

Population and Land Utilization

By Sri M. TIRUMAL RAO, Deputy Minister for Food, Government of India:

While we are experiencing a shortage of food and essential raw materials like cotton and jute which vitally affect the general economy of the country, the agricultural and industrial development of the country as a whole depends upon the regular supply of essential raw materials. Maximum utility with minimum damage to the lasting capacity of land to produce has to be brought about on a planned system. So far no scientific data comprehensive enough to give a full picture of the country's possibilities in agriculture exists. But from the surveys made by the Central Government and the State Governments with the resources at their disposal we get a rough idea. The total geographical area according to the Surveyor-General of India in 1948-49 is about 810 million acres. Of this area, agricultural statistics are available for about 600 million acres. The land covered by forests is 83 million acres, current fallow is 63 million acres. Uncultivated land excluding current fallow is 102 million acres. Area not available for cultivation is 96 million acres, and net area sown is about 254 million acres.

Out of a total cultivated area of 254 million acres only one-fifth is under irrigation. The rest of the area has to depend on methods of dry cultivation and precarious rainfall. The total area covered by forests is about 84 million acres out of a total of 810 million acres which comes to 10 per cent. A balanced agricultural economy requires at least 25 per cent of the total land under forests.

Large forest areas in the lower Himalayas and in the southern forests are being denuded and converted into food producing plots. The fury of the Himalayan rivers can be checked and mitigated in the upper reaches by proper afforestation. The forest areas are mostly concentrated in the northern Himalayan regions and in the States of Madhya Pradesh, Coorg, Madras and Travancore. The rest of the country is not adequately served by forests. Rainfall of the country is not adequately served by forests. Rainfall of the country also depends on forests to some extent. A well-planned forest policy is needed. The recent conference of Forest Ministers and officers for forests held in Dehra Dun is attempting on an all-India forest policy, which will increase the total area under the forests in the country.

The question of erosion is the first problem that has to be tackled on a large scale. Continuous exploitation of the fertility of the soil without a commensurate replenishment by manuring and other methods has rendered our soil poor and anemic in a large part of the country. Crop planning, contour bunding, terracing and rotational crops will largely help in arresting this soil erosion. Apart from these, the replenishing of the soil by organic and inorganic manures must be constantly attended to on a large scale. The question of agricultural management comes next.

Let us examine the total availability of the water in this country and how much of it is being utilized for agricultural production. According to experts, the water that flows annually through all the rivers in India is nearly 1,350 million acre feet and constitutes 49 per cent of the mean annual rainfall. The plan drawn up by the Central Government in this behalf envisages an expenditure of

334 crores of rupees during the next six years in order to impound and harness the use of waters that flow through several rivers in this country from their sources to the sea. The three major projects of Bhakra-Nangal, Damodar and Hirakud which are already under construction, cost about Rs. 169 crores. The expenditure on the uncompleted schemes is expected to be about Rs. 46 crores a year for the next six years. By the year 1959-60, over 90 lakhs of acres of land under irrigation would produce an additional 30 lakhs tons of foodgrains. When all the schemes are completed, addition to the irrigated area is estimated to be 150 lakhs of acres giving additional production of about 50 lakhs tons of various grains. There are a number of other big schemes like Rama Pada Sagara on the river Godavari which is expected to bring under cultivation 27 lakhs of acres of land. If these schemes are successfully tackled and completed, it would add substantially to the solution of food problem of this country. Besides these multi-purpose projects, the various States are concentrating on small schemes, renovating tanks, constructing minor irrigation works, tube-wells and ordinary wells. This will again assure an unfailing quantity of water to those areas that depend on minor works for their agricultural operations. By a determined completion of these projects within the next ten years, the total deficit in our foodgrains will be wiped out. The country can be rendered surplus in its food.

The area that is definitely known to be culturable excluding the current fallows is estimated to be about 107 million acres, and if most of this area is gradually brought under cultivation, the total output of foodgrains will add substantially to our reserves. Besides providing additional water resources mentioned above, there is a programme for reclaiming land which is kans and shrub ridden. The Central Tractor Organization brought into existence by the Government of India with an estimated expenditure of Rs. 16 crores is put on the job. About 30 lakhs acres of land is fixed for the next six years, for which contiguous blocks of land are being provided by the Madhya Bharat, Uttar Pradesh, Madhya Pradesh, Bhopal and Vindhya Pradesh Governments. So far nearly 4 lakhs of acres have been reclaimed in Uttar Pradesh, Punjab, Bhopal, Madhya Pradesh and Madhya Bharat, for which a fleet of 370 tractors are working under Central Government. Besides these 30 lakhs acres, a total area of about 45 lakhs acres is expected to be brought under cultivation in the next decade.

An intensive cultivation programme is being prosecuted by the State Governments with the assistance of the Central Government. There is an assured source of water-supply in the States like Punjab, Uttar Pradesh, Orissa, Coastal Districts of Madras and West Bengal. Organic and inorganic manures are being supplied to the cultivators. Out of the requirements of about 5 lakhs tons per year of ammonium sulphate, 4 lakhs tons are being met by imports by the Central Government, and with the completion of the Sindri Fertiliser Factory, with a total production of about 3½ lakhs tons, the country is expected to meet its own demand. Phosphatic fertilisers are mostly

produced in the country. More than 31 lakhs tons of town and rural compost is expected to be prepared this year.

All the State Governments have been organizing seed production farms on their own lands and through cultivators themselves. With the proper supply of water manure and seeds the production is bound to go up. The Central Government has fostered intensive research schemes in every branch of the agricultural activity of the country. The Indian Council of Agricultural Research since its inception in 1929 has piloted 700 schemes. Twenty-nine research stations for the development of paddy, wheat, sugarcane, tobacco, lac, jute, cotton, potatoes, millets, pulses, animal husbandry and poultry are being run by the Central Government in every part of the country, besides the activities run by the State Governments. It now rests with us to translate these researches into actual fields of production. A high-power full qualified officer is entrusted with this work to organize it all over the country. The assistance of foreign experts is also being taken to push up this programme. To achieve results in a professedly democratic country like ours, Government should depend on persuasion and hard work. For example, the U.S. had to spend enormous sums of money on its huge department of Agriculture to spread its organization into far these corners of the country. Russian system which could press into service large numbers of people and produce results in a short time.

For food grains, I have already mentioned the long range programme as to how to meet the shortage. For the Grow More Food Campaign Rs. 62 crores so far has been given to the States for prosecuting this programme. It is true that the actual increase in production is not easily assessable. It will take some time when the crop cutting experiments will be carried on an extensive scale in all the States so that the approximate estimate as nearly correct as possible can be got from these experiments. It is estimated that there will be an extra production of about 30 lakhs of tons of foodgrains by the end of next year.

The need for making the country self-sufficient in cotton and jute is imperative. To meet our internal requirements as well as our external obligations and need for earning exchange can only be met by making the country self-sufficient in cotton and jute. Though a certain area of land has to be diverted from foodgrains to these two commodities, the loss in foodgrains in the long run, can be compensated by the general economic toning up which these two commodities give to the nation as a whole. In our target of self-sufficiency in cotton and jute we have to achieve 77 lakhs bales in cotton and 22 lakhs bales in jute in next two or three years.

Sugar is another crop which is expanding in its area and output. Generally the total area is somewhat stationary at about 36 lakhs of acres. But the research methods which enable an acre of land to produce on an average 25 to 30 tons will greatly help if brought into fruition by increasing the output of sugarcane without extending the area much.

Oil seeds also form an essential part of our foodgrains supplying fat content. The per capita consumption of fats is so low that the development of oil-seeds may also have to be fostered to a large extent.

Coffee and tea and tobacco are also earning foreign exchange for our country. They are more or less agricul-

tural industries which have to be maintained at a certain level.

The management of pasture land and cattle wealth is a big problem. The cattle population of our country is estimated to be about 270 millions. The Cattle Preservation and Development Committee in the year 1947, estimated that there are 26 lakhs of unserviceable cattle and 112 lakhs of unproductive cattle. A large number of unclaimed cattle that roam about in the cattle, especially Uttar Pradesh are responsible for destroying crops. This is a phenomenon that is eating into the vitals of our agricultural economy. There is no planning of pasture lands, and there is no balance between the extent of land under plough and the required pasture land. This requires a thorough investigation and an insistence on the part of the Government may be necessary that a particular proportion of pasture land must be reserved of the total cultivated land. Once the burden of uneconomic cattle is reduced the amount of efficiency will evolve itself along with other improvements.

Extensive and intensive cultivation, crop-planning and a wise distribution of foodgrains and industrial commodities over the entire extent of the country will help in building up an economy that will form the basis of our whole economic structure.

The present varied systems of land tenures and small holdings are standing obstacles to production. Abolition of Jagirdari and Zamindari is only the beginning. Integrated co-operative farming has to be brought about by law in the whole country.

A revolutionary urge among the mass of people and a purposeful drive from the Government with leadership and ability can only produce results and bring prosperity to this country.

—By courtesy, A.I.R., Madras.

Progress of the Lower Bhavani Project

(Continued from page 5)

Drainage crossings.—There are 113 of them in the main canal. Eight of these are major aqueducts costing over a lakh of rupees and all of them are in progress and the rest are under-tunnels or drainage culverts of varying sizes. Thirty-five of these have been completed, 60 of them are in varying stages of progress and work in the remaining 10 has yet to be started.

Extension canal.—Work in the extension canal was started in May 1950 as a famine relief measure. About two-thirds of earth work has been done in this area. Cross masonry works have just been taken up.

Distributaries.—The distributaries cover an aggregate length of about 400 miles. The Chennasamudram and Unjalur branches which are the two major distributaries having between them about 50,000 acres of ayacut have been taken up for excavation. Several small distributaries have also been dug. It is proposed to complete the work on the distributaries down to the 12th mile of the main canal with a view to extend the benefits of the project to a good portion in the head reach by about September 1952.

Ryots' Response to the Extensive Manuring Scheme

The Ryots have responded well to the Intensive Manuring Scheme in the deltaic districts. A substantial contribution towards achieving self-sufficiency in food-grains would be secured by adopting suitable application of manures to food crops. Salient features of the results of the manurial trials with paddy are given below:—

1. **Paddy crop.**—In Tanjore district, the manurial trials revealed that the response to a basal application of green leaf at 4,000—6,000 lb. per acre resulted in a marked increase in yield of grain while other forms of bulky organic manure like cattle manures and far-waste-compost were not so effective even with heavy doses. In general, the response to nitrogen, either in the form of cakes or ammonium sulphate was significant and striking, resulting in economically appreciable increases in grain and straw yields. It has been found out that an ideal prescription for obtaining both immediate and sustained increases in yield would be the basal dressing of 5,000 lb. of leaf and super or bonemeal at 20 lb. P_2O_5 per acre, followed by a top-dressing of 100 lb. of ammonium sulphate. With this method, it is definitely possible to build up and conserve the optimum crop value of the soil even against adverse water-supply and incidence of pests and diseases.

The manurial trials conducted at the Agricultural Research Station, Samalkot, revealed that manures applied at this time of transplantation were more effective than at other times except during periods of silver-shoot infestation.

The experiment conducted in 1940-41 season at the Paddy Breeding Station, Coimbatore, showed that any kind of manuring of the seed bed did not react on the final yield of the crop. On the contrary, manuring the bulk field showed definite increase in yield.

Supply of Hand-spun Yarn to Weavers

To consider whether the distress caused to weavers by the short supply of mill yarn could not at least be partly alleviated by producing and supplying hand-spun yarn, a conference was held at the Secretariat in the first week of June 1951. The Secretaries to Government in the Rural Welfare and Development Departments, the Registrar of Co-operative Societies, and the Director of Rural Welfare attended the conference.

It was suggested that the weavers and members of their families could take to hand-spinning which, though not be as remunerative as weaving yet would provide the next most suitable alternative employment during the period of their enforced idleness. The yarn they may produce this way will also go towards providing more work for the weavers on the looms.

Plans are being prepared with a view to implement this suggestion by providing facilities for hand-spinning, khadi weaving in the existing handloom co-operative societies.

Remissions to lands affected by adverse seasonal conditions

The Government have sanctioned the grant of wet and dry remissions for Fasli 1360 on a liberal scale to the notified areas affected by adverse seasonal conditions in the districts of Srikakulam, Visakhapatnam, Guntur, Kurnool, Nellore, Cuddapah, Anantapur, Bellary, Chittoor, Chingleput, North Arcot, South Arcot, Tiruchirappalli, Madurai, Ramanathapuram, Tirunelveli, Coimbatore and Salem. These remissions of land revenue will also be applicable to those estates taken over by the Government and which are in the affected areas.

Wet lands:

- Full remission on wet lands with an outturn of four annas and below.
- No remission for wet lands with outturn above four annas.

Dry lands:

- Food crops:** (i) Full remission for food crops with an outturn of four annas and below, (ii) half remission for food crops with an outturn of above four annas and below eight annas.

Note: (Food crops for the purpose of this order consist of cereals and pulses).

- Other Crops (Crops other than cereals and pulses):** (i) Full remission for crops with an outturn below four annas, (ii) no remission for crops with an outturn of four annas and above.

If two or more varieties of crops (e.g., Ragi, Cholam, Chillies, etc.) are raised on different parts of a field or subdivision the eligibility for remission of the field or subdivision will be determined with reference to the outturn of the main crop. The main crop will, ordinarily, be the crop occupying the largest portion of the field or subdivision. If however one-third or more of a field or a subdivision is cultivated with a non-food crop, the non-food crop will be treated as the main crop for purposes of remission.

Rural Reconstruction Work in Selected Areas

1. *South Kanara district.*—In Kumbha firka, three well works under the Rural Water Supply Scheme were completed during the month of March 1951. A Women's Welfare Centre was opened at Narayanamangalam. At Kumbha the foundation stone for a community centre was laid, the villagers' contribution for the building being Rs. 2,000. Fifty acres of III crop paddy were saved from destruction by paddy pest by the prompt action taken by the Agricultural Staff.

In Manjeshwar firka a study tour of ryots to the Coconut Research Station at Nileshwar was conducted.

2. *Tiruchirappalli district.*—Forty compost pits were opened during the month in Vellakoil firka. Mass sanitation drives and congregational spinning demonstrations were conducted.

Two bathrooms have been constructed by the Harijan Welfare Department, near the community well, at Myekudi village, Tirumangalam taluk, for the use of the villagers.



The clay assumes shape on a potter's wheel in full swing. Sitalmalai-patti village, Tirumangalam taluk, is noted for its earthen ware. A potter is seen here shaping a pot with ease and skill.



In Perambalur firka village committees were constituted to collect paddy and other foodgrains under Village Pool System. A spinning competition was held at Nergumam. Seventy-three charkas and 44 taklies were distributed to the spinners.

3. *South Arcot district.*—A spinning competition was held at Siravathur on 29th March 1951 and prizes were distributed to the winners.

4. *Bellary district.*—During the month, 26 works under discretionary grants, 4 works under Rural Water Supply and 1 under Village Communications were completed. Fourteen sanitation drives were conducted. 20 compost pits were formed and 22 charka demonstrations were held. A sum of Rs. 11,460 towards the works under discretionary grants, Rs. 4,851-9-0 towards Village Communications and Rs. 2,936-9-0 towards Rural Water Supply Scheme has been spent.

5. *Visakhapatnam district.*—In Pendurthi firka, 34 sanitation drives, 12 Adult Education classes, 10 magic lantern shows, 31 spinning demonstrations were conducted. Ninety-two manure and compost pits were dug and 705 books were distributed.

6. *West Godavari district.*—In Dendalur firka, two new libraries were opened and the villagers contributed Rs. 150 for each library towards the purchase of books. The villagers of Darnajigudem have commenced constructing a high school from their own collections.

In Pendurthi firka, 15 compost pits were dug and 56 tons of compost were manufactured during the month. Sixteen sanitation drives were conducted. Thirty-five cess pools were got constructed. Thirty-five new charkas were introduced. Several minor works were completed and an expenditure of Rs. 13,371-12-3 was incurred under this head during the month.

7. *Tanjore district.*—Three community wells were constructed in Vedaranyam firka. Books to the value of Rs. 950 were purchased for the libraries. Thirteen pot-max lights were purchased and distributed to the Adult Night Schools. Thirty-eight manure pits and 29 compost pits were dug. Sanitation drives were conducted.

8. *Guntur district.*—Mass and individual sanitation drives were conducted in all the firkas during the month. Four Adult Night classes were conducted in Ongole and Ammanabrolu firkas. Two cattle shows were organised in Guruvareddipalem centre and Doddavaram areas. Three spinning demonstrations were conducted. Two magic lantern shows were given.

9. *East Godavari district.*—Thirty-one sanitation drives, and 43 spinning demonstrations were conducted and 175 charkas were introduced.

10. *North Arcot district.*—Two open draw-wells were constructed. One-third of the value of the works was paid by the villagers. Three poultry units and one co-operative cattle-breeding society have been started.

11. *Cuddapah district.*—During the month, 15 sanitation drives were conducted, 35 cess pools were got constructed, 15 compost pits were dug, and 35 new charkas were introduced. A sum of Rs. 3,210 towards road works and Rs. 1,300 in respect of Village Communications was spent.

Geological Survey in Visakhapatnam District

Sri S. Krishnaswami, Geologist, Geological Survey of India, after re-examining certain occurrences of manganese ores in Visakhapatnam district, has submitted a report. The report covers the region that lies in and around Chipurupalli railway station. It is already known to be a manganese bearing area and is being worked.

The manganese ore bodies in this area are usually highly irregular both in shape and size with no recognizable dip or strike except in Garbham where well-bedded large bodies with measurable dip and strike are found. The Kodur group of occurrences is easily one of the largest in Visakhapatnam district.

Myekudi village in Tirumangalam taluk is famous for its baskets. The dextrous fingers are seen here busy with a set purpose.



Toy-making is one of the special handicrafts of the Madurai Polytechnic School at Madurai. The school provides training to youngsters in the art. Picture shows the class in progress.



Several minor works were executed at an expenditure of Rs. 13,371-12-3. As regards education, the villagers of Anantapuram gave a cash contribution of Rs. 500 for the construction of a school building and also a site for the building free of cost.

12. *Coimbatore district.*—In Tiruppur centre, a building to locate a public library is under construction at Papanakulam. Propaganda on village sanitation, soil conservation, compost making and small cottage industries was made in 12 villages with magic lantern and slides. One hundred and thirty-two charkas were introduced and 811 glyceridia cuttings were planted during the month.

In Vellakoil centre, two road works and three well works were taken up for execution. A short training camp for the constructive workers was held at Uthamelai in March. A latrine and a compost pit were provided for the Harijans of the cheri at Uthamelai. Street cleaning was done in all the villages with the help of the villagers themselves. A rural medical dispensary was opened in Vellakoil.

13. *Kurnool district.*—Forty-one sanitation drives were conducted, 100 encroachments in the lanes and streets of the villages were removed with the help of the public, 22 spinning demonstrations in Kurnool centre and 44 in Yerragondapalem centre were conducted, 61 manure pits in Kurnool centre and 84 in Yerragondapalem centre were set right, 2 compost and 19 soak pits were dug and 1,010 cattle were inoculated.

14. *Ramanathapuram district.*—During the month, khadi scheme made rapid strides and 548 charkas have so far been introduced in the district. The villagers have become khadi-minded. One thousand three hundred and fifty-six barks were spun by the spinners.

Thirty-five sweeping campaigns were conducted, 36 compost pits were dug and 16 trees were planted.

As regards rural water-supply, new wells have been sunk and old wells have been repaired.

15. *Nellore district.*—An agricultural and industrial and cattle show exhibition was held at Podalakur on 24th March 1951. Eighty cattle and 40 varieties of agricultural products, handicraft and general industrial exhibits were on show. Games and competitions were also held and prizes were distributed to the winners.

Eighty-eight spinning demonstrations and 67 sanitary drives were conducted.

16. *Tirunelveli district.*—In Pazhancottai firka, a sum of Rs. 7,027 under rural water-supply, Rs. 9,294 under communications and Rs. 772 under discretionary grants were spent during the month. In additional firkas, a sum of Rs. 3,958 under rural water-supply schemes, Rs. 2,301 under communications and Rs. 13,200 under discretionary grant were spent.

One hundred and four manure pits were dug and 348 charkas were sold to the public at half the cost.

Guest Control Order

The Government have ordered an amendment to the Madras Guest Control Order, 1951, by which it is clarified that "members of the household" of a person giving a party or "members of his household" means all persons residing permanently with him, but does not include any relative or other person who has come to the house temporarily to attend the party.

Wynaad Colonization Scheme

By SRI P. G. KURUP, B.Sc. (Agri.), Superintendent, Wynaad Colonization Scheme.

Wynaad is a taluk of Malabar. It is a hilly and forest region, adjoining Mysore, Coorg and the Nilgiris, with an elevation ranging from about 2,500 feet to about 3,500 feet above mean sea-level. There are a few peaks in this region which range from elevations of about 4,000 feet to over 6,600 feet above mean sea-level. The climate is mild, the mean maximum temperature being about 80°F. and the mean minimum temperature being about 66°F. The absolute minimum temperature seldom goes below 52°F., and the absolute maximum temperature above 95°F. The average annual rainfall of the region is about 100 inches, of which above 70 inches is received during the south-west monsoon.

The tract, which is about 821 square miles in area is very thinly populated, unlike the other parts of Malabar, and the population is estimated at about 115,000. The indigenous population consist of *Chetteys*, *Kurumas*, *Mopans*, *Naikkans*, *Kuruchiars*, *Uralies* and *Paniyas*. Some centuries back some families of *Gowders* (Jains) migrated to Wynaad from Mysore and made Wynaad their home. Among the above communities, *Chetteys* and *Gowders* are the main land owning and monied class of people. In spite of virulent malaria rampant in this region, on account of the availability of land very cheap, suitability of the region for growing various commercial and food crops, low labour charges and the inherent fertility of the land, a large number of adventurous people of various communities from the plains migrated to this region and settled in Wynaad during the past few decades, and many of these persons became large land-owners. In addition, a very large number of people from the plains have settled in Wynaad as labourers in the various plantations. At present, the majority of the population of Wynaad consists of people who have migrated to this tract, and the indigenous population is only a minority.

A wide range of commercial and food crops are grown in Wynaad. Tea, coffee, pepper, orange, ginger, rubber and cardamom are the more important commercial crops, while paddy, ragi, samai, tapioca, yam, colocassia, sweet potato and banana are the main food crops. Crops like chilli, turmeric, mustard, tobacco and arecanut are also grown on a very limited scale for domestic purposes. There are many tea plantations, owned by a few British firms, in this tract. Most of the coffee, pepper and orange plantations are owned by the people who have migrated from the plains and a few *Gowder* families, and only a very little of such plantations is in the hands of the indigenous population.

Only a very small percentage of the arable area of the tract is cultivated, and the major portion of the cultivable area is either grass slopes or thick jungle, containing valuable timber trees like *rose-wood*, *venga*, *iyiyini*, *marudu*, etc., and bamboo. The wet lands in Wynaad consist of low-lying valleys between ranges of hillocks, in which a fairly plentiful supply of water is available during the monsoon season and till January-February, in years of normal rainfall.

Objects of the Scheme

There are very large stretches of Government land, both, wet and dry, lying uncultivated in this tract and

prior to 1943, any person could occupy, cultivate and develop Government land by putting in a petition to the concerned revenue authority, and the land used to be assigned to the applicant in due course after the required formalities. This was a sort of passive encouragement to develop the region, adopted by the Government. In 1943, the Wynaad to give useful employment to Malabar, and the adjoining state and districts, who were to be 'demobilised' after the end of the World War II, and to other categories of people belonging to Malabar inclusive of the local residents and aboriginals, and thereby develop the large stretches of Government lands lying uncultivated in the tract. When this decision was taken, a ban on unauthorised occupation of Government land in Wynaad was notified by the Government.

Details of the Scheme

The Wynaad Colonisation Scheme comprises an area of about 33,800 acres (26,000 acres of dry land and 7,800 acres of wet land), in four villages, Muppainad, Kidanganad, Nulpuzha and Nenmeni, divided into six blocks. These four villages were selected for the scheme, as there was a very large and fairly compact area of Government land available in these villages. However, in addition to the 19,290 acres of unoccupied Government land, 7,496 acres of dry land and 7,014 acres of wet land were acquired by the Government for the scheme.

The total number of colonists to be settled in the scheme is about 3,700, consisting of different categories of people, in the undermentioned proportion.

Ex-servicemen, 62.5 per cent.
Local residents, aboriginals and sivaijamadars, 30.0 per cent.
Other civilians (lower middle class, landless poor, ex-tappers and political sufferers), 7.5 per cent.

Each settler in the scheme is to get five acres of dry land and two acres of wet land or ten acres of dry land. In addition to the lands to be given to each colonist for cultivation and development, separate areas have been set apart in each block for community purposes like, schools, playgrounds, grazing, developing forest belts, etc. Though in the early stages of the scheme, financial assistance in the nature of returnable loans was given to all the categories of colonists in addition to the free grant of land, due to financial stringency, it was later decided that only the ex-servicemen settled in the scheme are to get a grant of Rs. 1,900 each, from the Servicemen's Post-War Reconstruction Fund for developing their plots, as detailed below :—

	Rs.
For reclamation of dry land	500
For reclamation of wet land	200
For agricultural expenses like purchase of cattle, manure, seed, etc.	500
For constructing a dwelling place	250
For domestic expenses	350
For digging well and other miscellaneous purposes	100

In respect of plots which were previously developed by *sivaijamadars* and for which Government had to pay compensation to the occupants for eviction, the settlers to

whom such plots are allotted are to pay to the government, in ten equal instalments, the amount paid by the government to the original occupants who were evicted.

Working of the Scheme

The work in connexion with the scheme was started in 1944, and the various departments connected with the scheme are the Revenue, Agriculture, Public Works, Public Health, Medical and the Co-operative, though the last-mentioned department has not started functioning, to any appreciable extent, as yet. The initial work consisted of acquisition of land, surveying, preparing plans, demarcating plots to be allotted to each settler, development of communications by improving the old cart tracks and laying out new roads and anti-malarial operations to free the locality of malaria, which was rampant. By 1948, about 26 miles of pucca road was formed in the colonization scheme area and the locality was almost completely rid of malaria. After various experiments on malaria control measures, spraying all dwelling places with D.D.T. emulsion of 5.0 per cent strength at intervals of six weeks, beginning from the first week of December to the first week of June was found to be an efficient and cheap method of malaria control, costing only about one rupee per capita of the population in the areas. For medical aid to the settlers a dispensary with facilities for treating in-patients has been opened at Ambalavayal.

The settlement of colonists in the scheme was started from March 1948 and till the end of December 1950, the undermentioned numbers of persons of the different categories were settled in the scheme :—

Ex-servicemen	1,168
Ex-I.N.A. personnel	3
Local residents	740
Aboriginals	251
Land less civilians	6
Ex-tappers	5
Political sufferers	1

The Agricultural Research Station, Ambalavayal

With a view to improve agriculture in Wynaad in general, and the colonization scheme area in particular, an agricultural research station was opened in Ambalavayal within the colonization scheme area, in July 1945. The area of the station is 250 acres, comprising of 215 acres of dry land and 35 acres of wet land.

Reclamation, Laying out, etc.

The work in the station during the first nearly three years of its inception was mainly preparing the wet land and dry land for cultivation and for various field trials. The wet land attached to the station consisted of sloping land with irregular shaped plots, at the time of opening of the station. Therefore, to make the land suitable for cultivation and for various field trials, reclaiming the land and laying out into proper plots and levelling have been in progress, and an area of 25 acres has been reclaimed, levelled and laid out into proper plots with suitable irrigation and drainage channels. The dry land at the time of opening of the station was covered with thick growth of scrub jungle, bamboo and small and large-sized trees. Bringing the land into a condition for cultivation and for conducting field trials on different crops by removing the scrub jungle, bamboo clumps and the smaller-sized

trees, laying out, etc., were in progress, and 110 acres of dry land have thus been reclaimed and brought under cultivation of various perennial and seasonal crops.

Research

Various items of research on different crops has been in progress from 1948, and the results achieved in respect of each of these items of research are summarized below.

Paddy evolving high-yielding strains of local paddy varieties.—The local varieties of paddy contain an admixture of different types resulting in uneven quality of rice and uneven maturing of the crop. Therefore, work on evolving high-yielding strains of the local varieties by pure line selection was started in 1948, and as a result strains of six of the more important local varieties, Palthandi, Marathondi, Velunapala, Maranelli, Chettuvaiyan and Kethandan recording yields of over 3,000 lb. per acre have been evolved, and will be realized for district trial in 1951. These strains, have been found to give 10 per cent to 30 per cent increased yield over the local bulk to the trials carried out at the station.

Double cropping trials.—As the local practice is to raise only a single crop of paddy in a year in the entire wet land, even though water may be available in sufficient quantity for raising two crops of paddy in some of the plots in most of the valleys, trials were carried out to determine if two crops of paddy, in a year, can be economically raised in such plots in which sufficient supply of water for the purpose is available, from 1948. These trials have shown that two crops of paddy can be economically raised in a year in plots in which water is available and that the system of raising a medium to long-term crop in the first season from June to November-December, and a short-term crop in the second season from December to April is better than the system of raising a short-term crop in the first season from June to October and a long-term crop from October to March, as the former system has recorded an increased yield of about 1,000 lb. per acre over the latter system. Trials with different strains and varieties in the second season from December to April shown that the strains MEPU 3, Co. 13 and PED 10 and local variety Palthandi are suitable for cultivation in this season, as these strains and varieties have recorded yields of over 1,500 lb. per acre.

Fruit crops.—Trial of different kinds of varieties of fruits.—

With a view to select the kinds and varieties of fruits suited for extensive cultivation in Wynaad, in addition to the loose jacket orange which is already under extensive cultivation covering an area of nearly 10,000 acres, plants of various fruits, like anthugudi orange, Malta lemon, Seville lemon, amla tree, citron, pineapple, plum, peach, litchi, avocado, pear, mango-green, durian, rose-apple, cheeku-ger, custard-apple, bull's heart, pine-apple, passion-fruit, queenstand nut, cashewnut and a large number of banana varieties have been planted in a total area of about 20 acres from 1947. The study of the performance of these plants has already shown that Malta lemon, passion-fruit, pine-apple and banana varieties, Gros Michel, Mauritius, Chankadali, Sugandhi, Pedda Pacha Anantha Manna, Mysore papaya and neendran are suited for cultivation in Wynaad and work on popularizing the cultivation of these has already been started.

Spice crops.—Perennial spices.—To determine if spices like clove, nutmeg, cinnamon, and vanilla can be successfully grown in Wynaad, an area of about two acres has

been planted to these spices during 1950 and the performance of these is being studied.

Root crops—Tapioca.—Observational trials to determine the optimum spacing and the method of planting have been initiated.

Six varieties of tapioca have been introduced and the planting material of these are under multiplication for conducting comparative trials with the varieties already under cultivation in the tract, to select the varieties best suited for popularization.

Pulse crops.—Trials to assess the suitability of pulse crops, like, cowpea, horsegram, and redgram have been carried out, and it has been found that cowpea types, 'New Era' and C. 521 are suited for cultivation in the dry land, either as a pure crop or as an inter-crop in young orange plantations during the south-west monsoon season. These two types have recorded an yield of about 150 lb. of seed per acre when grown as an inter-crop. From trial of cowpea 'New Era' in high lying wet land, which is neither too moist nor too dry, during January to May, it is found that this crop can be profitably grown as a catch crop, as an yield of about 2,800 lb. of green pods per acre has been obtained within five months of sowing. Horsegram has been found to be suited for popularization in the dry land, if sown early in September, the crop having recorded an yield of about 300 lb. per acre. It is found that it can be grown in rotation with tapioca after the latter is harvested in August. Attapadi redgram has been found suitable for Wynaad, and multiplication of the seed of this variety is in progress. This crop can be profitably grown, either as a pure crop or as an inter-crop in young orange and coffee plantations and also along with ginger.

Vegetables.—Various vegetables like brinjal, cucumber, snake gourd, bitter gourd, ribbed gourd, pumpkin, ash gourd, beans, knol-knol, cabbage and cauliflower have been put under trial during different seasons to select the kinds best suited for cultivation. From a study of the performance of these vegetables, it has been found that snake gourd, bitter gourd, ribbed gourd, cucumber and amaranthus are suited for cultivation in the higher portions of wet land or the lower portions of the dry land where there is facility for watering during the summer season, pumpkin, ash gourd, and brinjal have been found suited for cultivation in the monsoon season, dwarf French beans, during the latter half of the monsoon season and knol-knol during the cold weather season. Cabbage and cauliflower have not been found suited for extensive cultivation, due to the fact the plants do not form 'heads' or 'curds' properly.

Two outstanding types of brinjal, 'Wynaad Giant White' and 'Wynaad Giant Purple Streak' and one type of pumpkin 'Wynaad Mammoth' have been selected from the local types and the seeds of these are being multiplied and distributed.

Perennial vegetables, chow-chow and Kovakkai (*dondakkai*) have been found exceedingly suited for cultivation in Wynaad, from their prolific bearing habit.

Oil-seed crops.—Trials have been carried out on the cultivation of groundnut and gingelly, to find out, if these crops are suited for the tract. It has been found that, while gingelly does not come up well, groundnut makes satisfactory growth and gives fairly economic yield. The latter has recorded an yield of 550 lb. of pods per acre in the trial carried out in 1950.

Sugarcane.—Trials have been carried out on the cultivation of sugarcane from 1946, and it has been established that sugarcane, Co. 419 can be very profitably grown in highlying wet land which is not marshy, as well as in the lower portions of dry land along the margins of valleys under purely rainfed conditions.

Plantation crops—Coffee.—Arabica coffee selections resistant to leaf disease obtained from the Coffee Research Station, Balehannur, have been planted in an area of one acre to study the performance of these and see if any of these selections prove suitable to Wynaad. Trials have been initiated to study the economics of growing robusta coffee as a pure plantation and as a mixed plantation with banana, orange and pepper.

Pepper.—Different varieties of pepper from Travancore have been introduced and those are being multiplied for comparative trials with the local varieties and to select those best suited for popularization.

Livestock improvement.—With a view to upgrade the local milch cattle, a pure Scindhi breeding bull is maintained at the Agricultural Research Station, and the local cows are being crossed by the Scindhi bull. In addition, four Scindhi cows are also being maintained in the station for rearing calves for distribution in the tract.

Pisciculture.—Mirror carp has been introduced in the tank attached to the station in 1949, and these have grown very well and started breeding. It is proposed to distribute the fingerlings to the settlers for rearing in small ponds in their holdings.

Demonstration and propaganda.—Demonstration and propaganda on proper cultivation and development of the holdings of the colonists are in progress among the colonists settled in the scheme, by the Agricultural staff attached to the scheme.

Total Expenditure and Receipts of the Station

The total expenditure incurred by the Agricultural department on the Scheme till the end of December 1950 is about Rs. 4,15,950. The total receipts of the Station inclusive of the value of articles transferred to other station is about Rs. 39,000.

The scheme in general has benefited the tract to a great extent, particularly in respect of improved agriculture, better communications, medical aid and freedom from malaria. An area of about 5,000 acres of dry land and about 600 acres of wet land lying uncultivated has been brought under cultivation resulting in considerably increased production of food and other crops.

Cotton Seed Movement Control Order

The Government have promulgated an order called, the Madras Cotton Seed (Movement) Control Order, 1951. This order extends to the districts of Bellary, Anantapur, Cuddapah and Kurnool. Under this order no person shall transport cotton seeds from any place within the limits of the Bellary, Anantapur, Cuddapah and Kurnool districts to any place in the State of Madras to outside the said districts by road, rail, river, canal or sea except under and in accordance with the conditions of a permit for transport issued by the Collector of Bellary, Anantapur, Cuddapah or Kurnool district as the case may be or an officer duly authorized by such Collector in this behalf.

New Grow More Food Schemes Sanctioned

The Government have sanctioned the following eight Grow More Food irrigation schemes :—

1. **Chingleput district.**—An estimate amounting to Rs. 25,600 for works or Rs. 33,308 inclusive of direct and indirect charges to construct a regulator or head sluice and a grade well in the abandoned supply channel to Senroyampalem-Allikuli Odai in Tiruvallur taluk. An additional extent of 250 acres will be brought under second crop cultivation, yielding a total additional production of 125 tons of rice per annum.

2. **Chittoor district.**—An estimate for Rs. 84,000 for works or Rs. 1,09,290 inclusive of direct and indirect charges for excavating a new supply channel from Kalinga river to feed kattoor and four other taluks in Kalahasti taluk. The gap of 62 acres between the registered ayacut and the extent now under cultivation will be brought under cultivation besides ensuring better supplies of water to an extent of 350 acres already under cultivation, yielding an additional production of 75 tons of rice per annum.

3. **Nellore district.**—An estimate for Rs. 25,866 for works or Rs. 33,654 inclusive of direct and indirect charges to carry out special repairs and improvements to the Kallur tank in Kallur village in Darsi taluk. An additional extent of 43 acres of dry land will be brought under cultivation besides ensuring sufficient supply to the existing ayacut of 171.50 acres, yielding an additional production of 22 tons of foodgrains per annum.

4. **Nellore district.**—An estimate for Rs. 34,900 for works or Rs. 45,400 inclusive of direct and indirect charges to carry out improvement works to the Chinnacheruvu tank in Peddili village of podili taluk. An additional extent of 139 acres of dry land will be brought under cultivation yielding an additional production of 82 tons of paddy per annum.

5. **East Godavari district.**—An estimate for Rs. 65,000 for works or Rs. 84,570 inclusive of direct and indirect charges to construct a regulator for Dabhakalna on the right bank of the river Yeleru in Kandrakota village, Peddapuram taluk. The improvements will stabilise irrigation on a total extent of 35,000 acres, yielding an additional production of 1,000 tons of foodgrains per annum.

6. **East Godavari district.**—An estimate for Rs. 26,000 for works or Rs. 35,828 inclusive of direct and indirect charges to remodel the Teki Branch channel in Teki village, Ramachandrapuram taluk. An additional extent of 441.47 acres will be brought under cultivation, yielding an annual production of 221 tons of rice per annum.

7. **West Godavari district.**—An estimate for Rs. 1,12,050 for works or Rs. 1,46,516 inclusive of direct and indirect charges to excavate a branch channel from Pipe No. 11 of Ramanapalem channel in Narasapur taluk. An additional extent of 1,172 acres of dry lands in Lingamboyancherla and Tirupatalu villages will be brought under cultivation yielding an additional production of 378 tons of rice per annum.

8. **North Arcot district.**—An estimate for Rs. 38,800 for works or Rs. 50,482 inclusive of direct and indirect charges to construct an anicut and carry out improvement

works to Odagathur channel in Odagathur village, Vellore taluk to augment supply from Agaram river. The improvements will bring the entire ayacut of 131 acres under wet cultivation, yielding an additional production of 66 tons of foodgrains per annum.

Agricultural Research Station at Satyamangalam

The Government have sanctioned the opening of an Agricultural Research Station in Satyamangalam in the Lower Bhavani Project area, with a view to studying the progressive changes in the soil conditions under irrigation and the selection of economically suitable crops for the area. The station would be placed under the control of the Government Agricultural Chemist, Coimbatore.

Fruit Plants at Concessional Rates

The Government have ordered the sale of 13,050 fruit plants and 2,600 coconut seedlings at half the normal selling price during the Tree Planting Week commencing from July 1, 1951.

It may be recalled that coconut seedlings were sold during the Vanamahotsava celebrations last year, at similar concessional rates.

Power Cut in Hydro-Electric Systems Complete Restoration Ordered

In continuation of the Press Release dated 24th April 1951, on account of a further improvement in the water position in the hydro-electric reservoirs, it is possible to restore the existing 5 per cent cut in consumption throughout the hydro-electric area with immediate effect.

Instructions have accordingly been issued to the Superintending Engineers of Pykara, Mettur and Papanasam Electricity Systems to restore the cut in consumption. The consumption will not, however, be unrestricted, but would be limited to the average of the three months prior to restrictions. The staggering and other peak load restrictions also will have to continue until the position improves further.

Prize for Best Mohwa Hand Decorticator

The Indian Central Oil Seeds Committee, New Delhi, announces that a prize of Rs. 2,000 will be awarded by the Committee to any person or body, who designs the best model of a hand-driven decorticator for Mohwa seed. Competitors should be prepared to demonstrate the working of the machine at such place and at such time, as directed by the Indian Central Oil Seeds Committee.

Further particulars and details in this regard can be had from the Secretary, Indian Central Oil Seeds Committee, Ministry of Food and Agriculture, Room No. 172, Jamnagar House, Man Singh Road, New Delhi.

Food Offences and Punishments Awarded

During the first fortnight of March 1951, 471 cases of prosecutions against food offences were disposed of in the State of Madras (except in East Godavari and Nellore districts). The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines ranging from Re. 1 to Rs. 500 and sentences of imprisonment up to six months were imposed.

In West Godavari district, Vendra Venkanna and B. Pataiah of Pennukonda were fined Rs. 500 and 200 respectively for hulling paddy without permit and Chakka Apparao was fined Rs. 400 for failure to issue receipts to persons who purchased rice.

For working a mill without possessing a licence, P. Venkataramiah, Proprietor, Sri Laxmi Rice Mill, Hussainpalem, Bander, Krishna district, was sentenced to pay a fine of Rs. 500.

A fine of Rs. 200 was imposed on Ganapathi in Salem district for failure to reduce rations.

T. P. Kunhiraman, Kizhahhuprom amsam, Malabar district, was fined Rs. 250 for failure to sell surplus paddy to the agent authorized by the Government and Hanifa Rowther, Pudunagaram amsam of the same district was fined Rs. 400 for illegal possession of paddy in excess of normal requirements.

In Guntur district, K. Sitaramayya and K. Gopalakrishna of Tenali were each fined Rs. 250 for failure to maintain correct accounts and Nockala Gopala Rao, driver of lorry of Bapatla was also fined Rs. 200 for transporting of rice from delta to upland area without permit.

For illicit purchase and transport of foodgrains Sellappa Gounder and Ramasamy Visundar of Tanjore district were each awarded a fine of Rs. 200. In the same district Murugavelu was fined Rs. 300 for feeding persons more than the scale fixed.

Voona Daliseti of Srikakulam was sentenced to pay a fine of Rs. 200 for illicit possession of foodgrains.

During the same fortnight other departmental punishments such as fines, warning, forfeiture and enhancement of security deposits, cancellation of retail and wholesale licences, etc., were also awarded in 222 cases.

During the second fortnight of March 1951, 975 cases of prosecutions were disposed of in respect of Food Offences. The accused persons were people of various degrees of social standing and most of them belonged to the poorer classes. Fines ranging from Re. 1 to Rs. 1,000 and imprisonment up to one year were imposed.

A fine of Rs. 1,000 was imposed on Kanniah Chetty, Shevapat, Salem district for illicit possession of wheat, in Srikakulam district, Bellala Sambamurthy was fined Rs. 200 for illicit transport of foodgrains in Gudla Krishnamurthy, merchant was fined Rs. 300 for failure to maintain stock accounts for dealing in foodgrains.

In Guntur district, K. Ranganayakulu and K. Venkateswarulu were each fined Rs. 200 for transport of foodgrains. K. Subramanian was fined Rs. 200 for possessing overpolished rice and non-maintenance of correct accounts and Kollapudi was fined Rs. 300 for selling rice in excess of controlled rate and non-maintenance of correct accounts.

Fines ranging from Rs. 200 to Rs. 500 were imposed on B. Sobhanadi Rao, Someswara Rao, R. Bulli Veerasamy and P. Viswanadham of Guntur district for storing paddy without licence or in an unauthorized godowns, hulling paddy without licence and failure to maintain correct accounts.

Chinna Goundar, Muthuswamy and Karuppannan of Tiruchirappalli district were each fined Rs. 300 and Nakappa Reddiar was fined Rs. 200 for illicit import and transport of foodgrains.

In East Godavari District, for incorrect maintenance of accounts relating to dealings in foodgrains P. Satyanarayana and S. Bapayya Naidu were each sentenced to pay a fine of Rs. 1,000 for illicit transport of paddy, Bobha Satyam was fined Rs. 400 for unauthorized sale of paddy, P. Shundera Rao was fined Rs. 200 for running rice mill without licence, K. Ganga Raju was fined Rs. 200.

M. Chenchiah and two others in Nellore district were each fined Rs. 200 for illicit transport of foodgrains.

Besides these punishments imposed in Courts, Departmental action such as warnings, fines, forfeiture and enhancement of security deposits, cancellation and suspension of retail and wholesale licences was taken in 212 cases.

Government's Efforts to Meet Yarn Shortage

Weavers' Agitation not Justified

The Madras Provincial Handloom Weavers' Congress, Nidubrolu, started a satyagraha in Madras City on 16th April and it is continuing even to-day. This satyagraha has been started due to an improper appreciation of the action taken by this Government in the matter.

The demands or suggestions made by the Weavers' Congress and the action taken by the Government thereon are set out below:—

(1) The first suggestion is that yarn required by handlooms should be a first charge on the yarn pool and that 29,780 bales of yarn per month should be supplied to the weavers of this State, as a first charge on yarn produced in this State.

If the suggestion is that even composite mills should get yarn for their weaving sections only after fully satisfying the needs of the handlooms, it cannot be accepted for the reason that if it is adopted, it will throw out of employment a large number of organized labourers, besides reducing the output of mill cloth to a considerable extent. This Government have already requested the Government of India to supply 29,780 bales exclusively for handlooms in this State besides 3,100 bales for other consumers. That Government are being repeatedly urged to make adequate allotments of yarn to this State, and have agreed to give an additional supply of 2,500 bales of yarn to this State over and above its equitable share calculated at 28.48 per cent. A census of looms is being taken in all States and as soon as the figures of this census are available, the percentage allocation to this State, will be revised on the basis of the new figures. Though this State is surplus in yarn, yet, this Government cannot afford to follow a policy of isolation, because for supplies of cotton, mill-cloth, etc., they have to depend on other States.

(2) The second suggestion is that Government must reserve certain varieties of cloth for production on handlooms, such reservation covering not less than two-thirds of their total production.

The Textile Commissioner, Bombay, has already reserved ten varieties of cloth for production exclusively by the handlooms. The question of addressing the Government of India to extend the field of reservation is under consideration. It may, however, be stated that this question of reservation is not a live issue now, as the problem of weavers, at present, is only that of getting the required yarn and not of marketing the finished product.

(3) The third suggestion is that all cases launched against handloom weavers should be withdrawn.

The request is too wide and general. Resort to arrest and prosecution is made only when a breach of peace is apprehended. Requests for the release in individual cases, if made, will be considered.

(4) The fourth suggestion is that the Madras Khadi Development Order should be abolished.

Genuineness of Khadi is a vital part of the production of Khadi and this is ensured by the Madras Khadi Development Order, 1949. Recently the Government of India have passed the Khadi (Name Protection) Act and have

requested the State Governments to enact a law to be placed on the Statute Book permanently under which dealers in Khadi will be required to obtain licences. When such permanent legislation is being contemplated, the request to repeal the existing Khadi Control Order cannot be considered.

(5) The fifth request is that Government should provide interest-free loans at Rs. 50 each to all weavers intending to join co-operative societies.

This Government have under active consideration a scheme to encourage weavers to join co-operative societies by advancing interest-free loans at Rs. 25 per head to enable them to pay their share capital. The scheme is to be tried on a limited scale in Guntur district in the first instance and if found successful it will be extended to other districts in course of time.

(6) The sixth suggestion is that Government must exempt cotton yarn and handloom cloth from the levy of sales tax.

Sales tax on cotton yarn in this State is levied at one stage only and that too at 1/2 per cent. The question as to what relief could be given to the handloom industry in the matter of levy of sales tax was fully examined recently and as a result, sales tax on handloom products which is also levied at one stage only has been reduced from 3 pias to 1½ pias per rupee with effect from 15th February 1951 at a loss of about Rs. 3.88 lakhs per annum to the Government. It is not possible to show any further concession at this stage without affecting the State's finances, and the balance of taxation.

The primary reason for the present yarn shortage is cotton shortage and other factors such as restricted power supply, labour troubles, etc. The question of how to conserve and increase supplies of yarn is already engaging the attention of the Government of India. They have banned exports and tightened their control over the disposal of yarn by mills. They have banned installation of new power looms. They have allowed free import of cotton yarn of 80s and higher counts from soft currency areas and also import of artificial silk yarn liberally. Prices of yarn have been increased recently with a view to induce mills to increase their yarn production. They are also encouraging production of staple fibre. They are also arranging supplies of cotton to the mills. This Government on their part have also tightened up the distribution machinery and issued instructions to see that there is no leakage or hold-up at any stage and that yarn moves as quickly as possible to the consumer. On the average 16,600 bales per month have been distributed to handlooms alone during the period from January to May 1951 and each loom would have got about 8 lb. per month. The question whether the weavers may not be encouraged to take up to some other cottage industries to give them full employment throughout the month is also engaging the Government's attention.

It may thus be seen that the Government are fully aware of the difficulties of the weavers and are doing what all is possible in the circumstances.

Reports of Lathi Charge totally false

The attention of the Government has been drawn to certain reports appearing in a section of the Press relating to a demonstration of the handloom weavers at Washermanpet on May 16, 1951, stating that a lathi charge was resorted to by the police. The Government have caused enquiries to be made in this connexion. It has been ascertained that there was no lathi charge whatsoever at that place; the injuries alleged to have been sustained by certain persons were caused by the pelting of stones resorted to by some persons in the crowd and not on account of a lathi charge by the police. This would be clear from the following facts relating to the incident:—

On the morning of May 16, 1951, a batch of 14 women gathered at the "camp office" of the "Madras Provincial Handloom Weavers' Congress," Washermanpet, and took out a procession carrying placards and shouting slogans in defiance of the prohibitory order in force. When the procession entered Tiruvottiyur High Road they were cordoned off by the police and the women processionists were removed, with the help of women warders, from the scene of incident in a lorry. After this, batches of

"volunteers" continued to take out unauthorised processions and these persons were also removed from the scene by the police and sent to different police stations in the City. A crowd began collecting and when the police requested them to disperse they seemed to be in no mood to do so. Consequently pickets had to be posted along the lanes and by-lanes to prevent more people collecting in the main road, obstructing traffic and creating disorder. The crowd was thus prevented from getting on to the main road; at this stage some of the people in the crowd began throwing stones from the lanes and by-lanes causing injury not only to the police officers but also to one of the women demonstrators. When the police tried to arrest the miscreants, the crowd ran helter-skelter; in the confusion that followed, two individuals tripped and fell and were trampled upon by the persons running. The police took into custody 21 persons and charged them under Section 75 of the City Police Act.

The police have throughout behaved with commendable restraint and patience and the reports of a lathi charge and use of violence by the police are totally false and mischievous.

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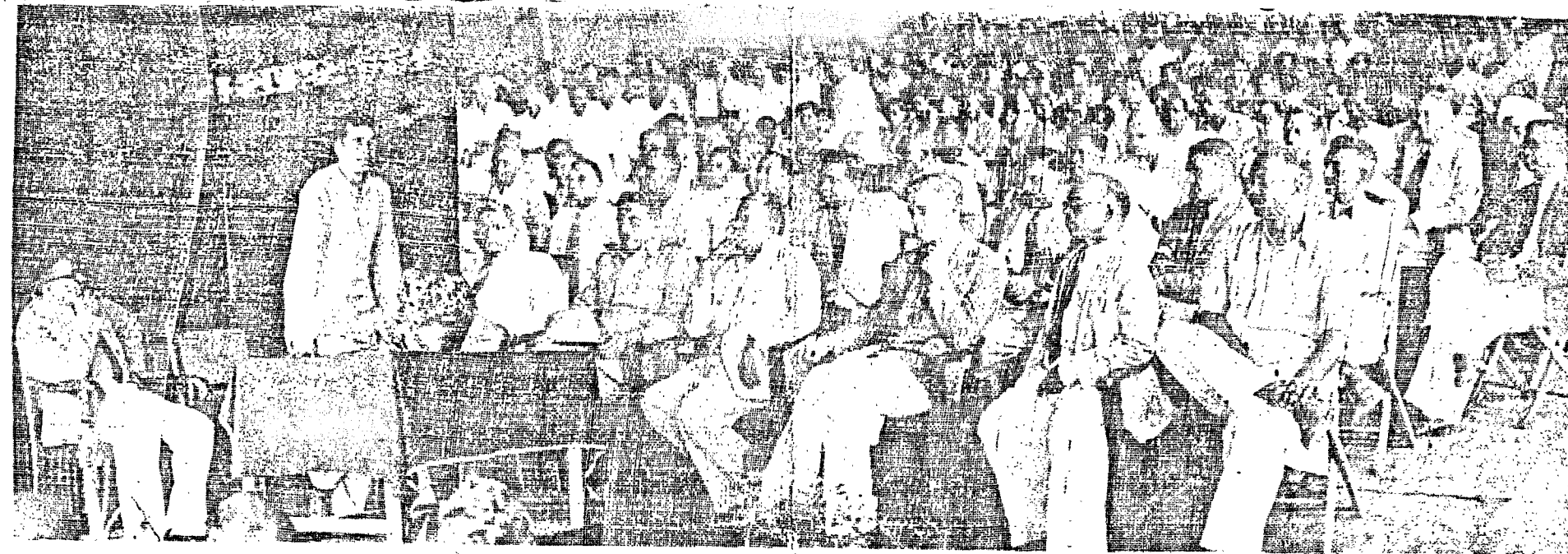


COLLEGE BOYS AT ADULT
EDUCATION WORK

Nine boys of the Government Arts College, Madras, spent their summer holidays at Thirukachur, Chingleput District, teaching adults of the village. The Adult Education Camp run by them was very popular and many villagers enlisted themselves as students and exhibited great enthusiasm in learning the alphabets.



"THE RED LADY" G. T. M. 323



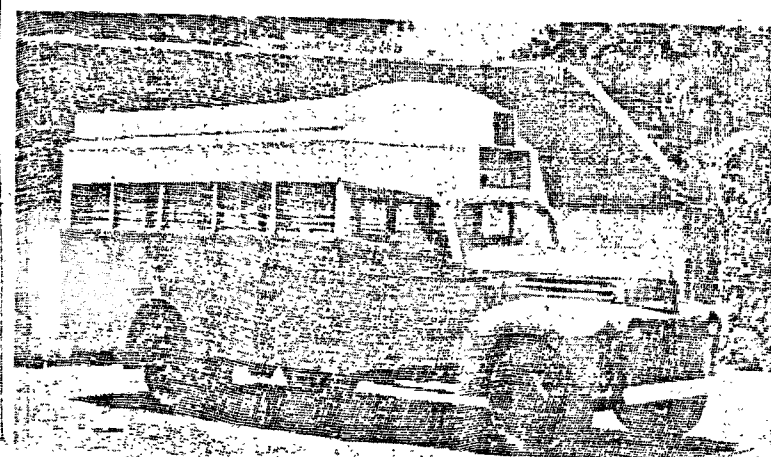
NEW TYPE BUS FOR THE CITY

(Top) : Sri B. Gopala Reddy, Minister for Transport, addressing the officials and the workers of the Government Transport Department on the occasion of putting the new type bus on the City road on 4th June.

(Left) : The new type diesel bus which is already on the City roads. It is the result of an incessant research and efforts on the part of the Government Transport Department to relieve the congestion of the passenger traffic and to solve the peak hour problem in particular in Madras City.

(Right) : Inside view of the new type bus. The seating arrangements are quite comfortable and pleasing. The bus has a carrying capacity of 42 passengers.

(Bottom) : Pictures at the bottom show various stages of improvement in the City Motor Transport. The picture at the left represents the typical 22 seater prenationalization bus. The picture in the centre shows the bigger type of bus on the roads after rationalization. The picture at the right shows the all-metal, spacious, diesel bus now converted to run on petrol.





RADIO SET FOR PERAMBAKKAM: (Top) The 1626th community radio receiving set which was switched on by the Hon'ble Sri M. Bhaktavatsalam, Minister for Public Works, at Perambakkam in Chingleput District on 4th June 1951 brings one more village nearer to progress. Perambakkam is a remote village on the borders of the Chingleput and is 34 miles from Madras. (Bottom) The villagers listening to the set.



TRANSPORT

21

MADRAS INFORMATION

G.T.M. 323

The Madras citizen, who, in his frantic hurry to be at his office in time might have missed the bus at 9-50 a.m., may have some unkind things to say against the bus transport system in the City, because he was not able to catch a bus the moment he came to the stand; equally annoyed may the luckier brother citizen who succeeded in getting a foot-hold and a hold on the hanger-strap, for he has no sitting accommodation. The "Peak Hour Problem" has been a headache not only to the citizen but to the Transport authorities who have spent sleepless nights over it. "Put more buses on the road", the public clamoured. But it was not such a simple affair. More buses had been put on the road during the past three years and since nationalization came. Before nationalization there were only 198 buses on the road; to-day there are 323. "Put more buses on the road", goes the cry still; for the "Peak Hour Problem" is still unsolved. But the roads must be able to bear the load! The pre-nationalization buses were 22 seaters. To-day 30 seaters have taken their place. More buses, more seating and standing capacity are now available—yet the "Peak Hour Problem" has not vanished! "Put more buses on the road" comes the chorus. But there is not only a peakload that roads can bear; there is a peakload for our finances too! More buses would mean more capital cost; the investment may solve the "Peak Hour Problem"; but at what cost, has to be examined. So our transport experts racked their brains trying to evolve the right solution for this difficult problem. Instead of crowding the roads with more number of buses, which would put up the capital cost and jam the roads with load which they are hardly meant to stand, it was considered desirable to introduce a *bigger* type of bus, with more carrying capacity.

Research had been going on to solve this "Peak Hour Problem". Trailers have been tried and double-deckers as used in Bombay have also been considered. But it has been found that Madras roads with its overhead lines and heavy congestion are most unsuited for such type of buses. Hence it was thought that the only other alternative would be to decide in favour of a type of bus which will have a larger capacity and with full forward control to give the maximum loading speed.

Experiments have disclosed that on grounds of operating economy diesel vehicles were more desirable. Further in view of the larger number of stops and the necessity to maintain a high average speed, the type of buses in Madras roads needs high torque and power output and also a fluid transmission and the pre-selection gear to reduce the weariness of frequent changing of gears of the driver. And thus was evolved the new bus embodying the researches and taking into consideration the difficulties experienced.

G.T.M. BUS No. 323 which is already on the City roads, from the 4th of June 1951, is the result of incessant research and effort to solve the problem. It is an experiment the Government have launched for augmenting the nationalized City bus transport system. The prototype bus which the Government propose to introduce and of which No. 323 is the first to be on trial is a possible solution to the problem. If the prototype proves successful in relieving the congestion of passenger traffic and in solving the peak hour problem, which it is expected to, the Government can well

be proud of another big step forward in improving the public utility service, thus giving the much needed relief to the bus traffic in the city. G.T.M. No. 323 which has gone into trial service on the city roads is the first in a series of prototype buses which are expected to follow in the coming months.

The all-metal body of this new transport vehicle was fabricated at the Hindustan Aircraft Factory, Bangalore, and the paint work and final finish executed at the Government Coach Building Factory, Chrompet. This 42 seater bus fitted with a six cylinder Gardner engine is capable of developing 105 H.P. The wheel base is 210 inches and the length of the bus is 29 feet long and width 8 feet. The bus which costs about Rs. 52,000 is expected to serve 10 or 12 years.

The new bus comprises all the essentials of a bus for a Madras road. It is entirely made up of materials which are economical and at the same time durable. Even the colour has been chosen not merely from an artistic point of view but after a thorough examination of the fading qualities of different paints and hues and the periods for which each colour may be expected to last under the weather conditions of Madras. The "Red Lady" as some employee of the Government Transport affectionately christened the new bus is now on the roads taking the test, and facing up a critical peripatetic audience. It is, of course for the passenger citizen to say if he approves of the, "Red Lady".

In another two months another bus of a different make will be put on the road. The suitability of the different components will be subjected to close study under the actual operating conditions.

By such continued and new experiments, it is hoped that a better type of bus will be evolved, satisfying all conditions until ultimately and in a short time even the most critical Madras citizen will be able to remark "Here it is at last! This is what I wanted all these days—a comfortable trip—without tears and sweat!"

Relief to Weavers

The Government have requested the municipal councils and panchayat boards to exempt handloom weavers, from house tax or property tax, as the case may be, with the sanction of the competent authority, for one half-year, viz., either the half ending March 31, 1951, or if the taxes due for that half-year have already been paid, the half-year ending September 30, 1951.

The Government have requested the municipalities to ensure that the concession allowed is uniform and is applied to all weavers paying less than a fixed sum of house tax or property tax, the limit being fixed by the panchayat board or municipal council concerned. The local bodies have also been asked not to give the exemption in case their finances do not warrant it.

Multipurpose Activities

The Kamalapuram Multipurpose Co-operative Rural Credit Society

The Society was registered on 1st November 1916 and started on its work on the same day. This is the 35th year of its working. The village Kamalapuram is situated at a distance of six miles from the Hospet Railway Station and has a population of about 6,000. Hampi, which was the capital of the famous Vizianagara Empire now in ruins is within the jurisdiction of the society. The place attracts large number of tourists from all parts of India and even from outside.

The society worked fairly well till 1939 by which time it had built up a Reserve Fund of nearly Rs. 3,000. From 1940 to 1946 it remained dormant, and it was revived in 1946 by which time the membership and share capital had fallen down to 37 and Rs. 435 respectively. After revival there has been a gradual increase in membership with the result that there are now 161 members with a paid up share capital of Rs. 4,996. The society has built up a Reserve Fund of Rs. 3,800-0-0 and a Bad Debts Reserve of Rs. 779-0-0. It has invested Rs. 3,000 in the shares of the Central Bank and Rs. 5 in the shares of the Marketing society. Rs. 3,365-2-9 out of Reserve Fund and Rs. 100-8-0 out of the Bad Debts Reserve are also invested in the Central Bank.

The maximum borrowing power is Rs. 60,000. The society borrowed Rs. 45,592 from the Hospet Central Bank during the year and now owes Rs. 46,310. The Central Bank has allowed cash credit to the society to the extent of Rs. 10,000, under the scheme of post-sanction of loans. The amount of loans outstanding against the members is Rs. 40,621. It is noteworthy feature that there are no overdues. The society has a scheme to finance the cultivation of sugarcane crop for supply of cane to the Sugar Factory at Hospet during the next crop season. Under the scheme 300 acres of land will be brought under sugarcane cultivation for which Rs. 75,000 will be advanced by the society. The society has submitted proposals to enhance the maximum borrowing power to Rs. 1,20,000 with a view to finance this scheme.

In addition to credit transactions the society has undertaken various multipurpose activities. It is dealing in iron and steel, chemical manures, oil cakes and agricultural implements. The volume of business transacted is given below :—

	RS.	A.	P.
Cart tyres	3,930	0	0
Ammonium sulphate	29,206	11	10
Superphosphate	559	2	8
Agricultural implements ..	532	12	0
	34,278	10	6

The society has also inculcated the habit of thrift among the members and has recently distributed hundi boxes. Recurring deposits are also encouraged. The total savings effected by the members amount to Rs. 444-8-0.

The society has formed an ameliorative committee which is subscribing to two journals, viz., (1) *Madras Journal of Co-operation* and (2) *The Madras Information*. The English daily *Hindu* is also made available by Sri B. Ramakrishnaachar one of the Panchayatdars, for the use of the society's reading room, where both members and non-members meet daily for reading the papers. The committee is also purchasing and distributing free "Paludrine" tablets to poor members suffering from malaria.

With a view to provide better marketing facilities for the produce of the members, the society has arranged for storage facilities. It is constructing a godown-cum-reading room at a cost of Rs. 9,000 on a site of 1.11 acres acquired from Government. Government have sanctioned a loan of Rs. 4,500 and a free grant of Rs. 4,500 for the construction of the building, which is expected to be completed by March 1951.

The Kodanagar Multipurpose Co-operative Credit Society

The Kodanagar Co-operative Credit Society (North Arcot District) was registered on 18th April 1916 and started on its work on 30th May, 1916. Consequent on the introduction of the reorganization scheme the society has suitably amended its by-laws converting its name into multipurpose co-operative society to enable the society to undertake various kinds of multipurpose activities. The necessary amendments to by-laws 2, 65, 2-B and 54 have also been registered on 15th May, 1950 to enable the society to undertake various kinds of social and other recreational activities consequent on the introduction of Prohibition in the State. This is one of the oldest societies in the district and this is affiliated to the Cheyyar Co-operative Union. The village is situated just a mile from taluk headquarters of the Cheyyar taluk. There are at present 81 members with a paid-up share capital of Rs. 682. It has built a Reserve Fund of Rs. 4,270-7-0 and a Common Good Fund of Rs. 56-12-0. The society, besides affording credit facilities to the ryots of the village, has also undertaken other multipurpose activities, such as construction of godown at a cost of Rs. 5,000 for storing the produce of the members for a better market under the 50 per cent subsidy scheme sanctioned by Government under one of the ameliorative schemes consequent on the introduction of Prohibition. The society with a view to derive the maximum benefit of the subsidy and to render the maximum help to the members has itself undertaken the construction of the building without engaging any contractor for the purpose. The construction is expected to be completed in the course of a month.

Besides this, the society has also undertaken the running of a relief shop from 4th March 1951 consequent on the abolition of rural rationing in the district. To meet the necessary funds for the purpose a short term loan of Rs. 2,000 was obtained from the Central Bank.

The society is also making necessary arrangements for the purchase of library books from the Common Good Fund and to open a library shortly. The panchayatdars

are taking a keen interest in the affairs of the society and there is a large scope for developing the multi-purpose activities of the society further by introducing the sale of iron implements and chemical manures.

The Velligallu Multipurpose Rural Credit Society

Velligallu is a revenue village situated 26 miles from Madanapalle on the Madanapalle and Peddamandiam road in Chittoor district. An ordinary rural credit society was organised in Velligallu village in the year 1916; and it was registered on 16th December 1916 and started on work on 27th January 1917 with 19 members and a paid-up share capital of Rs. 50. The society extends its area of operations to Velligallu village and its hamlets.

Working of the society.—The society has on roll 110 members with a paid-up share capital of Rs. 600 of whom 18 are ex-tappers. It has taken shares to the extent of Rs. 600 in the Central Bank, Chittoor, and a share of Rs. 10 in the Madanapalle Co-operative Loan and Sale Society. It obtained loans to the extent of Rs. 7,500 from the Central Bank, Chittoor, and issued short-term loans to its members during the co-operative year.

The society is also dealing in mill cloth. The Central Bank auctioned a cash credit accommodation of Rs. 2,000 for enabling the society to carry on its business in mill cloth. Mill cloth to the extent of Rs. 5,210 was sold and the number of members and non-members are benefited by this business was 962 during the co-operative year.

The society purchased agricultural implements such as plough shares and manti blades for Rs. 30 and distributed them among 40 of its members.

The society has introduced 10 hundi boxes to encourage thrift habit among its members and effected a collection of Rs. 136 through hundi boxes from July 1950 to November 1950.

Date trees are available in large numbers in and around the village and as such the society undertook date mat weaving as one of the multi-purpose activities so as to enable its ex-tapper members in the village to carry on a subsidiary occupation on a co-operative basis. Eighteen ex-tappers in the village who know date-weaving have joined the society and are engaged in the manufacture of date mats. The society took a lease of date leaves for Rs. 260 for the year 1949-50.

The cost of a date mat manufacture by co-operative society ranges from Rs. 3 to Rs. 4. The society manufactured and sold date mats worth Rs. 403-11-0 during 1949-50 thereby earning a profit of Rs. 109-12-0.

Distribution of Yarn in Madras

The total receipt of yarn during the month of April 1951 was 13,828½ bales. The reason for the short fall is the reduction of running allotment on the basis of the present low production. Out of 13,823½ bales received during April, 12,279½ bales were distributed to the handlooms and 1,549 bales to other consumers.

Correct Mode of Addressing

According to a statement made recently by the Postmaster-General, Madras, more than 15,000 articles intended for big towns are delayed every day in delivery by reason of their being not addressed properly. The Postmaster-General therefore, requests the public to observe the following points while addressing their postal articles to such big cities :—

(1) Addresses on articles for Madras, Bangalore, Mangalore and Calicut should contain the actual zonal number of the office of delivery such as Madras-5, Bangalore-3, Mangalore-1, Calicut-4, etc.

(2) In other large cities and towns there are several delivery post offices, but no zonal numbers have been assigned. In such cases the name of the actual delivery office should be given in the address. For instance, articles intended for delivery by the *Buckinghampet S.O.* in Vijayavada should be addressed to *Buckinghampet P.O.* and not to *Vijayavada P.O.* So also articles addressed to Cuddalore should indicate Cuddalore, Tirupapuliyur or Cuddalore O.T.

(3) The post box Number should also be given, where a box has been rented by the addressee.

(4) It would be advisable to indicate the sender's name and address on postal articles on the left hand bottom corner to facilitate their return to the senders in case of non-delivery.

(5) The address should preferably be written in English in all cases where regional vernaculars are different.

(6) The Postmaster-General also suggested that it will facilitate quick disposal if postage stamps are affixed on the right hand top corners of all articles.

Children Saved from the clutches of raiders

The vigilance and the presence of mind exhibited by an aged lady averted a serious calamity which might have befallen the inmates of a house raided by a gang of 30 or 40 persons, believed to be Communists.

On the night of March 24, armed with spears, lathis, guns and axes a party of raiders raided Nadipudi village in West Godavari district, after fording the river. The Village Defence Squad was taken by surprise and immobilized. The house of one Janardana Rao was raided and cash to the value of Rs. 10,000 was taken away. An aged lady in the house, with remarkable presence of mind, locked her two grandchildren and her daughter in a room when the raiders broke into her house.

As the party was leaving Ganiraju, a ferryman, attracted by the commotion created, gathered round him a few companions and attacked the gang boldly. A skirmish took place as a result of which Ganiraju received two severe injuries and later succumbed to them. The raiders, however, managed to escape.

The raiders were again met by another batch of villagers under the leadership of Narasanna. Narasanna bravely attacked them and gave a chase. But he also shared the same fate as Ganiraju.

Rural Housing

By SRI K. C. NAIK, Deputy Director of Agriculture (Research).

In most countries, the process of urbanisation has been synonymous with industrialisation. As the pace of industrialisation increased, the depletion of population in rural parts became the first visible result. Notwithstanding the powerful plea from many quarters against this progressive disappearance of "the peasantry, the country's pride," the lure of higher wages, assured all the year round employment and generally better amenities of life have all provided too strong an attraction to keep the peasants tied down to the fields and huts of his forebears in the village.

In the early part of the past decade, the drift from the rural to urban areas has been on an unprecedented scale. Madras has now a population of over 14.25 lakhs, while in 1941 the population was just about 7.75 lakhs and in 1921 about 5.25 lakhs only. This unparalleled increase in urban population cannot be explained away by the increasing tempo of industrialisation, though the last great war had certainly been a prime factor in drawing a bulk of humanity towards the city from the countryside. During this rapid increase in city population, the city's amenities such as water-supply, sewage systems, housing facilities, etc., failed to be developed to a proportionate extent, with the result that the tenor of urban life to the immigrants from villages could not be what it might have been under normal circumstances. The reports of lakhs of pavement dwellers in some of leading cities bears evidence to the fact that our urban areas are far from able to provide for each one of them the minimum shelter, let alone support all of them with any degree of comfort.

Why then do the village folk flock to the towns and cities, leaving behind the peaceful existence of villages and wide expanse of the rural side to the "congested, fettered, unhygienic and comfortless existence" of the City? The answer to this seems to lie in the economic factors that distinguish the village life from the urban life of to-day, rather than on the amenities offered. To the average Indian, life has long been a problem of bare existence with an unceasing battle to "keep the wolf out of door". A good and decent house to live in and to serve as a heaven of rest and recreation after daily toils, rarely figured in this scheme of things in the past. It is not that he had no appreciation to good things of life, but he had not the time to think or yearn for them, as all his attention and energies were centred on securing the bare means of sustenance for himself and his family. So long as poverty stares in the face of millions, the amenities of life are bound to be treated as of secondary value, if not relegated to the category of non-essentials.

Industrial labour of to-day being organized is, however, in a position to make its voice felt and secure for itself some amenities usually denied to the unorganised labour in the villages. Housing is one such amenity that is provided in several industrial areas and even to plantation labour. Where it is not provided the wage earning capacity of industrial and urban labour being far greater, there is always scope for compensating the lack of the

amenities to some extent. It is these facts that have led to a silent revolution in the countryside. Long past are the days when the rural rustic "nor ever have changed, nor wished to change his place." Service on distant fields of war on several continent, sojourns in cities and towns and contacts with urban folk of various strata of society have made a section of the villagers increasingly aware of their needs for a better and fuller life. If we are to stem the tide of drift to urban or industrial areas, the way lies therefore in improving the economic status of the villager on one hand, and the amenities of the village life on the other.

Divorced of the economic aspects of the question, there is no clash of interests between the urban and village life. With the rise in prices of agricultural commodities, an appreciable rise has also occurred in the recent past in the wage earning capacity of the rural labour. The village artisan too has experienced a brighter spell, though he along with everyone else in the country may have suffered at times by scarcities of essential goods. Inflation and high cost of luxury goods perhaps have not effected the lower economic groups in our villages to the same extent as the middle classes.

Most of the industrial and urban labour constitute essentially the floating population of the cities and industrial areas. They have their roots in the villages where they mostly have left behind their families and to which place they do return occasionally and also finally to spend their evenings of life. The more affluent of these bring some wealth with them to the villages, to be spent on acquiring some land or jewellery or to erect a new house or at least to renovate an old dwelling. A casual sojourn in villages would show new faces and new buildings, and if more of the latter are not appearing it is because of the general scarcity of building materials rather than due to the lack of desire for better housing. The pace of such changes in the village scene can never be the same everywhere, but it is there all the same.

From the dearth of houses in crowded cities and the great stress on civic amenities in the recent past, it would be wrong to infer that our villages come out by contrast as heavens of peace, ample accommodation, unlimited freedom and abodes of health. The idyllic village exists only in the poetic imagination. Frenzied pace, cramped living space, din and dust of the urban areas may not be the feature met with in the villages, but instead we have the equally avoidable evils as sluggishness or lethargy bred by lack of all the year round work, controlled waste of space and soil, ill-informed and unhygienic habits of village life. It will not be an exaggeration if we did some of our villages as no better than clumsy conglomerations of artificial constructions without any thought of health, economic or aesthetic requirements.

Adequate and proper housing is not merely an individual requirement, but is also a social necessity. In the planning of village houses, there is therefore both a public and private obligation. Just as agriculture can never be effectively improved without

tackling the agriculturist, so will the elevation of the farmer prove ineffective if the farmer's living conditions are not reckled simultaneously. The last one is yet an unaccomplished task in our country. There are many in our villages who do not own a place that is fit to be called as house, least of all a modern house. The provision of a suitable house to each family in the village or of improving the old dwellings to a condition fit for living, are tasks that call for serious attention sooner or later, sooner than later.

Village houses are of immemorable types as they are found to-day. From the palmyrah frond covered low huts used jointly by the village family and his cattle to the lofty roofed grass thatched mud structures in the West Coast villages, there are dwellings of myriads of shapes, sizes and structural components in this State. House design for each region, to suit each economic group, availing the material that is cheaply and plentifully available in the region, is one phase of investigation that has merited scant attention in the past. This could be included as a noteworthy item of social and economic welfare, to receive attention from our Engineers.

With the work on designs for village houses is connected the investigational work on the best methods of housing the cattle, location of the house in respect of the well that supplies drinking water, the grazing ground for livestock, facilities for sanitation and drainage, shelter for animals during summer and rainy seasons, and protection from wild animals and thieves. All these can well form the subjects for study through random surveys for gathering facts about the comforts and amenities that are now lacking in the villages and village houses of all types, and about those that need to be provided. Periodic surveys of this type should help in judging the prevailing levels of living in villages and indicating at the same time the need for betterment. Social and economic planning cannot be effective, if all aspects of housing and living and economic planning cannot be effective, if all aspects of housing and living conditions in our villages are not investigated systematically and scientifically.

Village housing cannot be treated as distinct from village landscape. Every landscape has a character and charm of its own. To preserve its characteristics and enhance its value, we have to understand the landscape from the view-point of plant sociology in relation to buildings and other permanent objects. The village roads should harmonize with the landscape as regards line, profile and planting. They should be made to remain unobstructive by raising avenues and protective plantings such as for reducing the effects of dust, or of sand or soil drifts or for fostering soil conservation, or again for water regulation along streams or rivers. A few pretty vistas created with an eye to bring out the best in the village buildings and landmarks, and to provide shelter and charm to the village life, make for happier villages, distinct from the squalid and unhygienic surroundings of blocks of mud huts where men and cattle live together and where the future hopes of the nation are to be reared. Villages designed with care can be a far more suitable cradle for the future than the atmosphere of din surrounding the blocks of masonry in urban areas.

The peace and charm of village life cannot be assessed from a brief sojourn in the village. One has to get into the currents of village life and drift in it for a time before

one can understand his or her reaction to the changing tides or pace of flow. For too many retired officers and businessmen from urban areas have shifted to the villages in search of pace in the evenings of their life, and most of these have learnt to their cost that village life is not all that appears on the surface. Any one who wishes to trial the same trucks as in the urban areas, will find that he is in the wrong place in a village. Despite the changes in village life as a result of almost perpetual streams of persons to and fro urban areas, the villages have retained their individuality, and it is not all urban residents who can find the village life suited to their temperament.

As long as village housing and village sanitation remain what it is, the drift from urban to rural areas cannot increase appreciably. On the other hand, the drift from the village to urban areas can be stemmed to a material extent with a vigorous twofold programme towards betterment of economic and living conditions in our villages.

—By courtesy, A.I.R., Madras.

Higher Initial Pay to School Assistants and Deputy Inspectors of Schools

The Government have passed orders granting School Assistants and Deputy Inspectors of Schools (Senior scale), II Grade, a personal pay of Rs. 15 per mensem in addition to the existing initial pay of Rs. 85 in the scale of Rs. 85—5—125—10—175, the personal pay being absorbed in future increments. Persons already in service and drawing a pay of less than Rs. 100 per mensem will also be granted, as personal pay an amount equal to the difference between Rs. 100 and their pay, the personal pay granted being absorbed in future increments.

This concession, which will not be extended to teachers in schools under local bodies and aided institutes, will be in force for three years from July 1, 1951.

Labour dispute settled

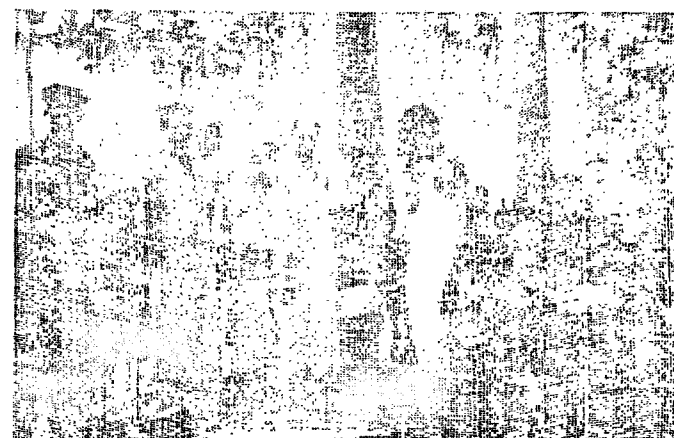
The Industrial Tribunal, Madurai, has sent an interim award in the dispute between the workers and the management of the Pudukkottai Textiles, Limited, Namana-samudram, referred for adjudication in February 1951. The following are the recommendations contained in the award:—The questions of basic wages and increased dearness allowance should be decided on an industry-cum-regional basis and the Textile Enquiry Committee which is to be constituted by the Government shortly, will deal with those questions. As a measure of interim relief all classes of workers in the mill whose basic wages are less than Rs. 26 per mensem should be paid increased wages amounting to Rs. 26 per mensem from 1st March 1951 and all workers should be paid dearness allowance at the rate of Rs. 27-8-0 per mensem from 1st March 1951. The workers who are now drawing dearness allowance at a higher rate will continue to draw it at that rate. The additional payments should be made by the management within one month after the publication of the award.

Role of Propaganda in Palm Gur Development Schemes

By SHRI GAJANAN NAIK.



A demonstration was conducted recently by palm gur instructors in Tirunelveli district on the improved methods of manufacturing jaggery. The picture shows the palm gur instructors deliming neera with superphosphate and feeding light fuels.



The production supervisor explains the gur stage (top) and the rad stage (bottom) to the tappers.



The successful progress of the Palm Gur Industry demands sustained propaganda. Those responsible for implementing Palm Gur Development schemes shall have to avail of every opportunity to impress the people with the great potentialities of the industry. The Palm Gur Organisers may try the following suggestions:—

(1) *Distribution of samples.*—Small cubes wrapped in gelatin paper with the stamp denoting "PALM GUR" in the regional language and the name of the production centre be invariably carried by all the touring members of the Palm Gur staff. The samples may be distributed to interested persons coming in their contact on the journey.

(2) *Leaflet.*—A leaflet in the regional language giving comprehensive idea of the industry and its potentialities may also be given along with the Gur samples.

(3) *Photos.*—A set of card size photos giving complete details of the practical process of tapping and Gur-making may also be carried by each touring worker.

(4) *Posters.*—Two dozen coloured posters (15"×12") depicting important aspects of the industry may be carried besides a few maps showing the development of the industry in the respective States. Small bottles (4"×2") containing samples of Palm Gur, syrup, sugar, candy, chemical, etc., may also be carried. Miniature models of tapping tools, pans, furnaces, etc., may also be included in the exhibit box. All these articles can be very useful for handy exhibition which can be set up in gatherings and meetings occurring on tour. In such functions, Gur samples need not be distributed gratis, but can be sold at Rs. 0-6-6 or Rs. 0-1-0 per packet of about 2 tolas (two rupees weight).

(5) *Magic Lantern.*—Every Organiser should have one magic lantern and at least 50 slides demonstrating various practical and ideological aspects of the industry. The arrangement be so made that the lantern is used every night all the year round. Either the Organiser or any other responsible staff member may deliver a talk on Palm Gur with the help of the lantern. In every State, if at least 200 such lantern lectures are delivered annually, the total for the Indian Union will come to about 4,000 which will be a grand contribution to the propaganda drive. The choice of the audience has to be carefully done. The function may be arranged with suitable variations in towns and villages; to officers of concerned departments, students, farmers, social workers, etc. Advantage of local fairs, social gatherings, weekly bazaars, local exhibition, etc., may be taken.

Dialogues, debates, dramas, etc., may also be arranged on appropriate occasions.

(6) *Household Agency.*—In the residence of every person employed under the development scheme and as far as possible the residence of the Palm Gur producers should have posters, placards, photo depicting the industry so that all relatives and social visitors can be acquainted with the potentialities of the industry. Small samples can be distributed, whenever possible.

Maternity Care and Child Welfare in the State

By SRIMATHI H. M. RAJMANIKKAM

Health services for the care of the mother and child should have the first place in any National Health Programme. It is an integral part of any comprehensive health service. The idea sought to be inculcated by a progressive Public Health department is that the efficiency of the individual at every stage of his existence affects not only his own progress through life, but also that of his family and progeny, and that this efficiency could and should be inherited, as much as it ought to be fostered through environment and wise living.

Infant mortality rate is the yardstick by which the health of a population is measured. It is also an indication of a low standard of new life in this country, nor in this State, where the birth rate is still very high, but the tragic waste of human life is appalling. Where better social conditions prevail, the loss of life is materially reduced. On an average for the last five years, 16 lakhs of infants are born in a year, but not all of them complete even the first year of life. In the year 1944, for every 1,000 babies that were born, 192 babies died even before they were a year old, and about 80,000 of them were still born. But during the last decade, however, there has been a progressive decline in this number and at the end of last year, it was reduced to 130.

Last year, nearly 10,500 mothers died alone of child-birth and diseases associated with pregnancy. Apart from this high death rate among pregnant mothers, there is the poor state of health after child-birth resulting in much suffering and chronic invalidism. It is estimated approximately that 30 out of every 100 mothers suffer from some disability or other after child-birth. This loss of life and ill-health caused during or after pregnancy reacts adversely on the home, leading to neglect of the household and lack of care of the surviving children.

(7) *The use of the badge.*—The Tad Gud Karyakartar badge should invariably be used by all ranks of Palm Gur workers without hesitation.

(8) *Local press.*—The Palm Gur Organisers ought to maintain contact with local news agencies and press representatives for securing adequate publicity to the Palm Gur development activities conducted in the State. The reporters may be persuaded to visit production and training centres.

(9) *Music.*—Popular songs pertaining to Palm Gur may be included in entertainments organized in public functions.

The Palm Gur Organisers and other workers can improve and add to these ideas, for fulfilling the object. Our main concern is to broadcast the potentialities of Palm Gur very extensively so as to enthuse the people for identifying themselves, with the industry.

Loss of life whether in an adult or among infants, is always a heart-rending spectacle and an irreparable domestic tragedy. I wish to point out to those in responsibility that this problem of maternal and infant mortality is not merely a matter of sentiment, but constitutes a grave economic problem which must be studied in all its bearings.

What are the causes of these high rates of death? There are several contributory factors which act adversely on mother and infant. The chief of these are illiteracy, ignorance, superstition, a low standard of living, bad housing, bad sanitation, overcrowding, overwork, poor and unbalanced diets, venereal diseases, early marriages, repeated pregnancies, inadequate care of the pregnant mother, lack of proper medical aid and insaui-tary and unscrupulous midwifery of the indigenous "Barber" midwife. These are only some of the numerous causes, but perhaps the chief is, the absence of a virile health conscience.

Maternal and Child Health is an integral part of Public Health. The Public Health authority cares for the health of the individual in his setting in the community and no single Public Health measure undertaken by a Government can in such a context be planned without reference to Public Health as a whole, a preventive health service for Mother and Child is the right of every woman and infant, and so far, Madras is the only State in India which has a Public Health Act under which provision for Maternity and Childcare exists. The State of "Maternity" must not be merely regarded as the ten months of pregnancy, the critical hours of labour and the six weeks after birth. Whatever happens in life, has a bearing on the mother, health habits, attitude, towards children and family, adjustments of parents to each other, and the economic background—all these will have to be taken into account.

A Tip to Palm Gur Workers

When super-phosphate added to Neera for neutralizing lime is allowed to remain in abnormal quantity, it gives a bad taste to the resultant jaggery. In this connection complaints have been made by many customers. Hence, Palm Gur Organizers are notified that sufficient attention be paid towards this fact. If only enough quantity of super-phosphate is added and the Neera is allowed to settle and decanted then there is less possibility of super-phosphate remaining in the jaggery. So also the allowing of lime to remain in Neera causes the gur to be charred. This has also to be avoided. Our finished product, i.e., the Gur is the final and only test of the manufactured goods and no pains should be spared to make the product an ideal thing.

when a baby is about to be born. The goal-to-day therefore includes health education and health supervision for all young people, that they may be fitted for child-bearing and child-rearing when they reach the proper age. Medical research has shown that many of the infant deaths are largely due to lack of care of the pregnant mother and the resultant birth of a weak infant; while malnutrition, insanitary conditions, poor housing, ignorance and superstition, are all contributory factors that affect the young mother particularly during pregnancy. "Maternity care" therefore has a broad significance, including care of the expectant and nursing mother. "Child Welfare" includes the physical and mental care of the child, and the prevention of diseases till school-age. "Care of the mother" is an essential prelude to the "care of the infant and child", both forming an integral part of a well-organized Public Health Programme.

The purpose of a Maternity and Child-Welfare programme is: (a) to make the villages or town a better place for mother and child, (b) to give adequate instruction to parents in taking care of their infants and children, (c) to look after the health of the mother and the child at every stage, and (d) to advise on wise and planned parenthood, etc. Such constant care and supervision helps systematic health measures, such as vaccination and registration of births. Apart from this, a modern Public Health department undertakes effective teaching of the principles and laws of health. The Maternity and Child-Welfare scheme that was initiated in 1931 from a group of 80 centres that were run by voluntary agencies then has resulted to-day, in the establishment of 468 Maternal and Child Health centres all functioning in this State; these are meant to cater to the 28 million population (approximately) of women and children. Two hundred and ninety are located in rural areas, while 178 centres are placed in urban areas respectively. Institutional care of pregnant mothers is also provided for as a part of this scheme. Maternity beds are provided in many of the rural centres for emergency deliveries while suitably designed maternity homes have been opened, to provide for sanitary environment during the "delivery and after delivery" period. Such maternity homes are intended mainly for normal deliveries, and when finances permit a free diet is provided. This hardly touches the fringe of the problem but our Government is doing its best under the circumstances to encourage local authorities and voluntary agencies to expand their programmes from year to year. A proportionate expenditure incurred on maintaining these centres by local bodies is met by Government, who also contribute 50 per cent towards building construction.

The main activities of any centre are—

1. Care and supervision of pregnant mothers.
2. Free services of midwives to conduct deliveries, whether domiciliary or institutional.
3. Care of the young infant and mother after delivery.
4. Supervision and care of the infant and pre-school child.
5. Teaching mothers on health matters collectively at the centres and individually, in their homes.
6. Sending in time to hospital all these cases which would benefit by hospital care and treatment.
7. Treatment of minor ailments to pregnant and nursing mothers and children till 5 years of age.

8. Free supply of milk, shark liver oil and multi-vitamin tablets to deserving nursing mothers, to infants and pre-school children.

The standard of services depends on the technical help and advice and direction available from the staff employed and from medical workers locally. There are Women Medical Officers (both Graduates and Licentiates), Health visitors and midwives, employed for technical and supervision. The Women Medical Officers are appointed to be in charge of the work under the administrative control of the Health Officer. There are 108 sanctioned posts of Women Medical Officers and they are responsible for carrying on Maternity and Child-Welfare work on a scientific basis; every aspect of work, clinical, educative, preventive all relating to the care of the pregnant mother and normal development of infant and pre-school child, and health education of girls is done in girls' schools and of mothers, individually at homes, and collectively at centres; all receiving their personal attention. Every pregnant mother that attends the centre is medically examined and definite advice given to her with regard to care before and during labour; any abnormality or complication detected is at once referred to a hospital and the case is followed up, as to the nature of the treatment; and when this mother is discharged from the hospital she is followed up at home, and notes are made in the specified registers and records. The work of midwives who conduct deliveries, at home, is also supervised by these Women Medical Officers.

The work of a Health Visitor of which there are 120 in the State is mainly to teach; she is the liaison between the Maternity Centre and the home; her duties are chiefly to contact the pregnant mothers with infants and young children at home, and to teach them individually how to care for themselves during the period of pregnancy. Thus a Health Visitor gives talks on diet, exercise, sleep, etc., and "How to care for the infant-son after birth." She also collects these pregnant mothers and infants at the centre on the days of the doctor's visit and in the absence of the doctor may herself examine them. She is responsible for seeing that all the instructions that are given by the Woman Medical Officer to mothers as regards their children and themselves are carried out in their homes. She herself takes all complicated cases of pregnancy to hospitals or to other medical institutions. Health instructions and health talks are also given by her in Elementary Schools. In short the Health Visitor is the most important "Health Publicity" agent in the Maternity and Child-Welfare, as she is closely connected with nearly all the members of the family in any home. She is responsible therefore for ably interpreting the value of these services to the public. All infectious diseases that occur in a home are notified by her to the Health department.

The place of the midwife in maternity and child health is considered to be the most important in the field. Without her, an entry into the home would be almost impossible; even at this state in the development of health education, it may be stated that the services of the Maternity and Child Health staff would hardly be availed of but for the free midwifery services rendered. Each midwife is located in a suitable village, or municipal area and in the case of rural centres she attends to all labour cases from these villages that lie within a radius of 3 miles from the centres. She makes house to house visits, registering all pregnant mothers, conducts the delivery, looks after the

mother and infant after delivery for ten days, while the infant is followed up from thence onwards till five years of age by the Health Visitors. It will therefore be seen that as many pregnant mothers as possible are cared for, right from the very early stages of conception to the period of delivery and after delivery, so that any abnormality may be detected early and the necessary treatment given to them in time.

The indigenous hereditary "Barber midwife", however, still continues to practice her own methods of insanitary midwifery in the rural areas. Experience has shown that she can render valuable service if she is given a simple practical training in modern methods, and her work supervised by adequately trained staff who would not interfere with her practice and income, but would assist her.

Very often there is a mistaken notion that Maternity and Child-Welfare centres are dispensaries for families and children. Such a notion will detract from the value of the care and attention of the education given here to a pregnant mother and her child.

A scheme for extension and development of Maternity and Child-Welfare work already exists and is in the progress of being developed, e.g., primary and secondary centres and also in relation to Firka Development.

In all planning, notice has to be taken of the Public Health Act. Under its regulations, enough scope exists for establishment and expansion of Maternity and Child-Welfare as a part of a General Health Programme.

Voluntary organizations have been from the start pioneers in this field of work, and have done splendidly. It should not be difficult to adjust work between these organizations and Government. Their contribution to Maternity and Child Health services has been to supplement programmes of work already initiated by official agencies, for example, the development of special Maternity and Child Health Programmes for families of industrial workers, miners, railway employees and the development of ancillary institutions such as child-guidance clinics, creches, nurseries, etc. Such welfare work in particular is suited to them, their efforts including a recreational programme as well. The Maternity and Child-Welfare centres with the co-ordinated activities of voluntary bodies, are regarded, both as a Health and Recreational centres for women and children, a pivot of all social activities, an example of which we have in Madras in the "Ashok Vihar".

The general review of Health Services for "Maternity care and child-welfare" that has just been given, would reveal that a beginning has been made, and that the field for the improvement and expansion of the services is enormous. The thorough and continuous care that is given to a pregnant mother from the very early stages of conception right up to the period of the birth of her child, and the care of the child till five years age—is one single and tremendous effort at a particularly vulnerable point, where the large numbers of deaths that occur in these two groups of population are reduced.

Much credit goes to the women Public Health staff who in the present conditions and set up, are subject to several handicaps. Our society has not yet fully accepted them, with the courtesy due to them, while rendering free services for the care of mothers and children. The Women Medical Officer who is the hub of the whole service works under the most difficult circumstances which call for a

missionary zeal and spirit of service. Pioneers among them have suffered greatly hardships in reaching centres, remote and inaccessible. Notwithstanding these difficulties they have pressed on and have achieved remarkable progress.

Public awakening to the importance of this service has been growing. Several philanthropists in the rural areas of the State villages and towns for contributing generously towards new buildings and equipment. Efforts are being made to take advantage of other advanced countries in this field and to utilize their valuable assistance through the various international organizations, such as the World Health Organizations and the UNICEF. The free supply of milk powder by the UNICEF has been greatly appreciated by the women and children at all Maternity and Child Welfare centres.

—By courtesy—A.I.R., Madras.

Scheme to improve Poultry Farming

A comprehensive scheme for intensifying poultry production in the selected firkas and centres has been sanctioned by the Government.

The general features of this scheme will be the augmentation of the production, of improved breeds of poultry and eggs in villages, organization of improved methods of poultry farming and management, and fostering the development of poultry industry along the right lines by means of propaganda, demonstration, exhibition, etc. For this purpose a special staff consisting of one poultry fieldman, one poultry maistri, one watchman and one boy coolie has been sanctioned for each centre, where a small farm consisting of two cocks and ten hens of exotic breed will be established. The poultry fieldman will be in charge of the farm and do the hatching operations, rearing of chickens, etc. He will arrange to distribute the improved birds and eggs to the required villagers. He will maintain registers and keep accounts of all transactions of the Poultry Farm. The poultry maistri will go round the village, contact poultry-keepers and distribute the improved eggs and birds to selected individuals.

The scheme is being introduced in the first instance in three firkas, viz., Dardalur firka (West Godavari district), Tirumangalam firka (Madurai district) and Kumbala firka (South Kanara district).

Graphite in East Godavari

Graphite occurs as small specks, streaks or lines or as small thin intercalations near the villages of Marripalem, Ramavaram and Puligogulapadu in Ellavaram Taluk of East Godavari district, says Sri S. Krishnaswami, Geologist, Geological Survey of India, in his recent report. He states that there are occurrences of veins of this mineral at about 2½ furlongs south of Ramavaram on the cart-track to Gangaram along the lower eastern slopes of the western spur of Marrimetta, and that it is worthwhile prospecting this area by sinking pits 15 feet deep at intervals of 100 feet in the direction of the strike of country rocks.

Improving livestock in the State

The main functions of the Animal Husbandry Department in the States are: Treatment of sick animals; Prevention of outbreaks of epidemics of cattle disease; and improvement of livestock in the Province.

Treatment of sick animals

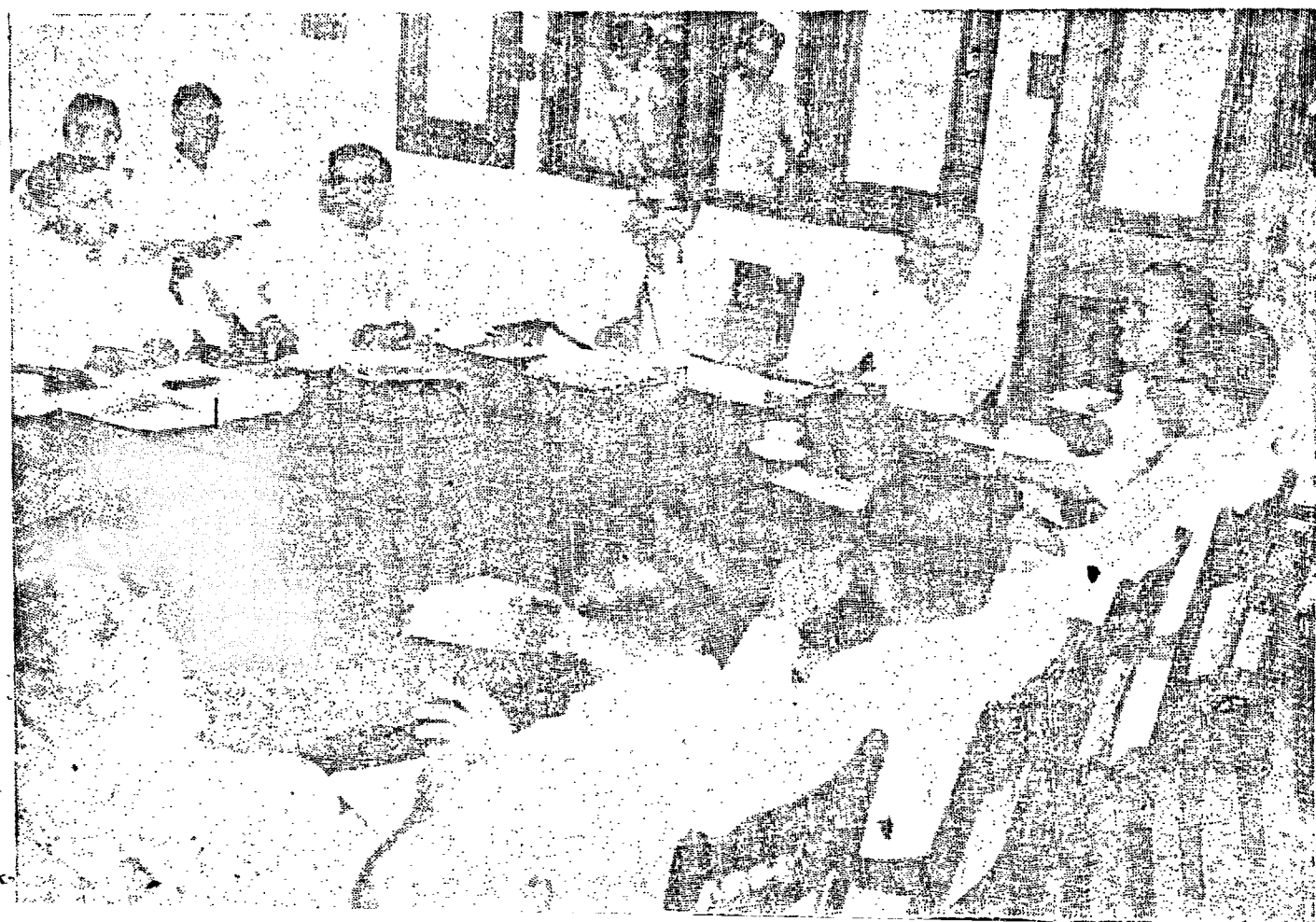
There are at present 167 touring billets and 146 veterinary institutions in the State with a qualified Veterinary Assistant Surgeon in charge of each. Stockmen compounders are attached to a few touring billets for assisting the veterinary assistant surgeons. Animals are ordinarily treated in hospitals and dispensaries. The main work of the touring assistants is to tour constantly within their jurisdiction and render veterinary aid to the animals of the ryots. They also control the spread of contagious diseases, such as rinderpest, anthrax, etc., by preventive inoculations, perform castrations of animals, and do propaganda work among the ryots. With a view to afford better facilities for the touring veterinary assistant surgeons to treat animals while at headquarters, the Government sanctioned in 1950 a scheme for the opening of minor dispensaries by providing them with buildings and equipments for the purpose.

Veterinary institutions are opened only in places where they are required most, based on the cattle population of the area and the distance of an already existing veterinary institution. Proposals for veterinary institutions are

considered if the local bodies or large land owners in whose areas they are needed ordinarily, agree to contribute not less than 50 per cent of the initial and recurring cost of the institution. In cases where local bodies or large landholders are not able to contribute 50 per cent of the expenditure a smaller contribution is accepted and in exceptional cases the entire contribution is waived for special reasons, each case being considered on its merits.

The ultimate aim of the Animal Husbandry Department is to provide a veterinary institution for each taluk. In order to overcome the paucity of Veterinarians in the State, steps have been taken to increase the number of students admitted to the B.V.Sc. course in the Madras Veterinary College and make the course more attractive by the grant of scholarships. The Madras Veterinary College was started in 1903 and the number of students admitted was 50 a year. The number of admission has been increased from time to time and the number of students at present admitted is 80 a year. A course of training for persons possessing lower educational qualification (viz., Veterinary and Livestock Inspectors' course) has also been introduced. In pursuance of a postwar scheme to provide each touring billet with a stockman compounder for assisting the Veterinary Assistant Surgeons in their work, stockman compounders have been employed. In future, the stockman compounders will be replaced by Veterinary and Livestock Inspectors. At present each Touring

Sri A. B. Shetty, Minister for Agriculture presided over the Conference of the officers of the Madras Animal Husbandry Department at the Secretariat on 29th May 1951. A number of problems relating to the livestock improvement schemes were discussed.



Veterinary Assistant Surgeon has vast jurisdiction with the result he is not able to move to the disease outbreak spot quickly and attend to outbreaks of cattle disease promptly. Touring Veterinary Surgeons have therefore been made eligible for a conveyance allowance for possessing a motor cycle in order that they may be able to move quickly to the outbreak spot. In order to afford better facilities to the Veterinary Assistant Surgeons in charge of touring billets for treating animals at headquarters a scheme was sanctioned last year for establishing minor veterinary dispensaries. So far 120 minor veterinary dispensaries have been established in place of touring billets. In order to combat contagious diseases promptly and to conduct mass inoculation of cattle, the Government have provided four motor mobile veterinary units with special staff so that these units can move to the outbreak spot quickly and conduct inoculation.

Prevention of outbreaks of epidemics of cattle disease

The contagious diseases that claim a heavy toll in this State are rinderpest, haemorrhagic septicemia, black quarter, anthrax, foot and mouth disease, etc. Rinderpest is the most formidable. A great part of the time, work and finance of the department has been utilized during the past few years in combating outbreaks of the disease by immunising all healthy cattle in the affected villages by preventive inoculations. A scheme is in force for inoculation against rinderpest in Visakhapatnam on a mass scale. The present system of inoculation against rinderpest is the 'Serum simultaneous' method by which the disease and the protective serum are given at the same time as a result of which each animal manufactures its own immunity of an active type. This immunity is probably life long and has been tested up to 10 years. Inoculation by this method is the policy of the Department at present. Goat virus method of inoculation is also adopted for rinderpest. Vaccines are also used for combating other diseases such as black quarter, anthrax, etc. The spread of cattle disease is also checked by the extension of the provisions of the Madras Cattle disease Act and the Madras Rinderpest Act to the affected areas.

Improvement of cattle

The policy of the Government is to provide as many breeding bulls as possible for improving the cattle in the State and several schemes are being worked for this purpose.

A new venture has been made by this State during the year 1949-50 by the introduction of the village livestock improvement scheme with a view to obliterate the paucity of approved bulls in the State which is the serious problem confronting the ryots. The scheme which may be called in other words as 'Village Cattle Farms' has been introduced in 4 selected firkas in the first instance, viz., Ongole, Palladam, Alur and Saliamangalam, the first 2 being run by the Co-operative Department and the other 2 being managed by the Animal Husbandry Department. The scheme has been implemented in Alur and Saliamangalam firkas in Bellary and Tirunelveli districts in January 1951. The general features of the scheme are to select a village or villages in the firkas consisting of 300 cows of breeding age, to castrate all the scrub bulls in the area, to locate 3 good pedigree breeding bulls in the area, to tattoo the cows and the progeny and to maintain all necessary records with regard to pedigree, breeding, etc.

In order to induce the ryots not to sell their heifer calves and to maintain them well, a subsidy of Rs. 5 per mensem per heifer calf should be paid for a period of 2 years from the 7th month, which should however be confined to 50 heifer calves only per centre. The subsidy should be continued until the 4th generation when it should be stopped and then, as in the case of breeding tracts, assurance may be given to the breeders for the purchase of all suitable male stock. The results of the schemes are being watched.

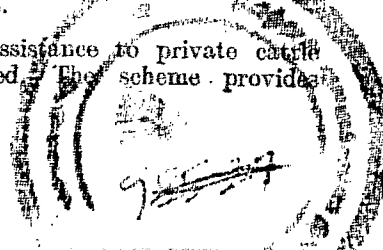
The work on improvement of the livestock is being done in the Livestock Research Stations. There are Livestock Research Stations at Hosur and Lam. Several heads of cattle are maintained in those stations and bulls are supplied to those who need them from the Livestock Station at Hosur. With a view to conduct breeding experiments the purchase of 50 Tharparkar cows and two bulls at a cost of Rs. 65,000 has been sanctioned in the current year. The Military Dairy-cum-Bull Farm at Visakhapatnam has been taken over by this Government and a Dairy-cum-Bull Farm has been established there. A combined cattle and sheep breeding farm has been opened at Kurikuppi. Two livestock farms, one in Malabar and the other in South Kanara District are being established. In South Kanara, the local people evince keen interest in the working of the farm. They have formed a Committee called the South Kanara Livestock Improvement Association. This Committee made arrangements and celebrated the opening function of the farm at Koila in April last. A Post Office has recently been opened in the farm and some farm buildings have also been completed.

The policy of the Government is to open livestock station in each district at the rate of two per year. The scheme could not be fully implemented on account of the financial stringency. The question of opening new farms was however pursued and the matter was discussed at the Livestock Improvement Board meeting held at Koila in April last and it was resolved that opening few farms on regional basis should be considered, and that Madurai should be given priority in the matter of opening of a cattle farm.

In order to prevent cows of Madras City from being slaughtered during their dry period, schemes for the salvages of dry cows and she-buffaloes have been sanctioned and are functioning. The dry cows are salvaged at the dry stock farm at Kambakkam Reserved Forest of Ponneri taluk, and the dry she-buffaloes are being sent to the dry stock farm at Vattambedu in Nellore District. There were 211 cows at the end of 1950-51 at Kambakkam, Kanche. The management of Vattambedu salvage farm has since been transferred to the Madras Co-operative Milk Union and the progress of work is being watched.

In order to overcome the paucity of good breeding bulls, a scheme for artificial insemination of cattle has been sanctioned. It is in operation in the main centre at the Madras Veterinary College in charge of a special officer and at two sub-centres at Coimbatore and Guntur. The Government have sanctioned the opening of two more centres one in the Anamalais, and the other in Ootacamund during 1951-52. The result obtained so far is reported to be encouraging. The conception rate is reported to be 72 per cent.

A scheme for rendering assistance to private cattle breeders has been sanctioned. The scheme provides



for grant of subsidies and loans to the private cattle dealers. The subsidy is limited to 15 farms, the original sanction was for the grant of subsidy to 30 farms, but it was subsequently restricted to 15 as a measure of economy with a maximum strength of 25 pure bred animals of Kangayam, Ongole, Sindhi, Hallikar, and Umbalacheri breeds, and will be paid on the basis of calves at the rate of Rs. 60 per calf six months after birth, subject to a maximum of Rs. 2,000 to any one breeder. Loans will be given on suitable security which may include cattle maintained at the farm up to 30 per cent of their value subject to the rules and conditions framed for the purpose. The scheme also provides for the grant of other concessions such as grant of free lease for raising fodder crops, exemption from water rates and free grazing in reserved forests.

Breeding rams are purchased by the Government and distributed to ryots for improving their stock of sheep. Schemes for the purchase and distribution of Bikhanir rams for improving the woolly types of sheep in the Bellary District and for the development of the woolly sheep on the Nilgiris, whose wool is considered to be the finest in the country, have been sanctioned. There were two Sheep Demonstration Units with special staff, which move in the villages and demonstrate improved methods of shearing, dipping and cleaning wool to the ryots. The Government have sanctioned the formation of six such units in the current year.

The Provincial Livestock Improvement Board consisting of some Officers of the Animal Husbandry Co-operative and Agricultural Departments, and also non-officials with experience in livestock meets about once in a quarter and advise the Government on measures for the improvement of livestock.

Poultry farming

In addition to the livestock, the Animal Husbandry Department deals with poultry improvements. There is a Poultry research station in Madras and birds of exotic breed are also maintained at the Livestock Research Farm at Hosur and Lam. Three District Poultry Farms at Cannanore, Chittoor and Cuddapah have been opened. Poultry Demonstration Units are attached to several veterinary institutions. Steps are being taken to establish Poultry Demonstration Units in such of these veterinary institutions where facilities exist, but not opened so far. The American Arcot Mission at Katpadi is working a scheme for the improvement of poultry in and around Katpadi. Contributions are paid to the American Arcot Mission.

One of the greatest impediments to poultry improvement in the State is a contagious disease known as Ranikhet disease. A vaccine to combat the disease is being manufactured at the Veterinary College under the supervision of an officer specially trained for the purpose at the Indian Veterinary Research Institute, Mukteswar. A scheme has been sanctioned by the Government to facilitate the immunization of poultry against this disease.

Propaganda

Demonstration and propaganda are also important activities of the Animal Husbandry Department. Talks on the improvement of livestock and poultry, their disease and the means to combat them, etc., are broadcast through the All-India Radio. Instructions have

also been issued to the subordinate officers to conduct talks on these matters during cattle shows, exhibitions, etc., in order to educate the ryots.

Land Armies

The census has revealed an unprecedented increase in the urban population. The drift to towns has been further accentuated by two other factors, the failure of crops, and the derationing of food in rural areas. In Madras City, the Mayor has been alarmed by the constant influx for which the housing and sanitary arrangements are totally inadequate. Many people live on the streets and the average per house, including huts exceeds 14 persons. There is no employment available, as the tendency is rather towards retrenchment, while starvation and beggary are increasingly in evidence. The economic and social loss from a large unemployed population is fraught also with dangerous consequences.

At the same time, there are Government projects for which labour is short, waste land, particularly in the Agency tracts, capable of cultivation and many individuals and enterprises requiring labour at reasonable rates. This maladjustment between supply and demand appears to have arisen from different causes. In the first place labour is not aware of Employment Exchanges, at least is not conscious of their utility. To some extent the same is true also of employers. One step, very simple but of clinching importance, is to link the Employment organization with the Rationing system. No rationing cards should be issued until the newcomers show registration for employment or evidence that they are already employed. The rationing card may be valid for a stated period, say one month, during which the newcomers accept or find employment or return to their original residence.

Work in Development Programmes

The question is whether the Employment Exchanges can find employment for all. There is a saturation point as far as Public Works Projects and private enterprises are concerned. This is where Land Armies can be formed. The objection to these has been first that there are no schemes for their employment, second, no finances, or rather the danger of inflation, and third, the experience of employing ex-servicemen in such armies has not been encouraging, as little work was done. Schemes could be ready easily in the Agency, Rayalaseema, Ramanathapuram and Malnad where development programmes are being prepared. The danger of inflation may be avoided by paying in kind as far as possible. The grain required would soon be available from the schemes and in any case would be consumed elsewhere by the same labour. To secure the interest of labour, it may be offered rights in some of the land reclaimed after a stated period of service.

If they succeed, Land Armies are capable of being used on other development projects in due course. To the extent the labour is treated as an army, being disciplined, fed and clothed as such, it will possess mobility and may even have some of the attractions of service in the army. There will be positions in it, which the more able and educated could fill. A beginning deserves to be made at least in Madras where the problem of the large and continuous drift is threatening the administration of the Corporation.

Tiger in the Class

Teaching the young to appreciate wild life

By Lt.-Col. R. W. BURTON

It is less than thirty years ago that the people of the world began to seriously think about the need for the conservation of wild life and its value to mankind. It is natural, for you children especially, to be curious about the meaning and purpose of all you see and hear about in the world in which you live, and to ask the question, what do you mean by wild life? The answer is that wild life includes not only wild birds and wild animals of all kinds, and all creeping and crawling creatures such as lizards, snakes, frogs, fish, ants and butterflies, but also the forests, trees, bamboos, creepers, grasses without which there could be not life at all. Also you have to think of the living soil without which nothing on this earth could exist, not even yourselves. All life depends on the soil and the things which grow in it. So when you think of wild life you should have in mind all living things, both animal and vegetable, and the soil on which all life depends. No soil no plants, no plants no life. That is quite true and easy to understand and remember.

How do we Preserve Wild Life?

Now that we know something about wild life the question which follows is, what have we to do to preserve it? The very first and most important step is to cultivate in your minds an interest in wild life. Without real interest there can be little proper knowledge. You all know that in your school work. Some of you like one subject better than another. Those, for instance, who have an interest in geography become good at it; those who are not fond of history are backward in that subject. Learning about geography, history, mathematics and other things like that is much more difficult than learning about wild life because it is naturally easy to have an interest in all the marvels of Nature that are unfolded to your eyes and intelligence as you begin to learn something about them.

Nature always at work

Nature has been busy all through the ages trying out all sorts of experiments, evolution that is called such, for instance, as adapting shape, colour, bills, feet, feathers of birds to suit their way of living; of senses and habits of animals to fit them for their lives in the forests of trees and their requirements, for they also have to struggle for existence. At the same time, while evolving all that there is in wild life, Nature has had in mind the needs of mankind, so you will not find it easy to say right away that this bird or that animal is harmful to the interests of man. All that you should leave to the learned men to decide, the scientists who make such matters the study of their lives. What you children have to do is to learn to destroy nothing and preserve and conserve all wild life, even the tiger!

Tiger in the Class

Now comes the tiger. In very early days there were no tigers in India. That was when the climate in parts of Asia

beyond the mighty Himalayan Mountains was very different to what it is at the present time. Where there is now sand and desert there were then great forests and grass lands which supported many kinds of animals no longer found there. Unless you children learn to take care of your forests, trees and living soil this beautiful country of India—your India—may become like that, deserts which cannot support life. Anyway, for one reason or another, the tiger and his near relative the panther found they could no longer live as they used to do and migrated to India. First came the panther, we know that because he got to Ceylon, now separated from India by the sea, and the tiger did not. By the time the tiger reached South India, Ceylon had become separated from the mainland.

There are still tigers in some parts of Asia east of where their ancestors used to live. They are larger than the tigers of India and have longer fur because they inhabit the colder climates of Amurland, Manchuria, Mongolia, Eastern Siberia and Korea where the fighting is now taking place. It is likely that those tigers, and the few remaining in Persia also, will before long have disappeared from those countries. Here, in India, the tiger will have to be given sanctuary in the reserved forests or he too will disappear. The place of the tiger in nature is to act as a check on the undue increase of the larger kinds of deer such as sambar and chital, also wild buffaloes, bison and wild pigs. This pig-control duty they share with the panthers which have also to keep the monkey population from becoming too numerous. If all the tigers and panthers are killed off, the deer, pig and monkeys will so greatly increase as to a terrible menace to mankind and his food crops.

More about Tigers

Ordinarily mother tiger has three or four cubs. As many as seven have been known, but only about three, seldom four, live to grow up. It is more often that two survive to be seen with their mother learning all about how to get their prey in the forests and all the rest they have to know in course of their existence. All the cats, great or small, are members of one family and the foremost of all beasts of prey. They have claws just right for catching and holding creatures on which they prey, and large caning teeth with which to speedily kill the beast when caught, and other teeth with which to tear the flesh when eating and crack the larger bones. With their six front (incisor) teeth they are able to gnaw off the meat, and with their rough tongues they can rasp all the flesh from the bones and also keep themselves clean, you can watch your house cat and see how it does all these things just as the tiger does.

After mankind and the apes, cats are the most intelligent of all wild animals. Their hearing and sight far exceeds that of man, and as to scenting power some people say they are not much better than man, but there is yet much to be learned about that. Cats have five toes on the forefeet and four in the hind. The spoor shows only four toes as

the very powerful claw which corresponds to our thumb is set high up on the foot so does not touch the ground. When stalking or moving in stealth along a path or nala the hind foot is placed exactly where the forefoot has been. This tends to silence in approach. At other times the track will show all four feet. Study the tracks of your house-cat and you will see this is how he walks and stalks.

Colouration

The young of tigers and lions and some others of the big cats are spotted when very young, so it can be said that the panther is older in evolution than the other large cats. Perhaps none of you will have yet learned Latin which is the language of Science, but some day you may as well know now that scientists have now given the name *Panthera pardus* to the panther and *Panthera tigris* and *Panthera leo* to the tiger and lion to show he is the senior of the big cats in the scheme of nature. Mostly, cats have a tawny background on which is laid the various patterns of their colouring. Some of these patterns are every beautiful, and all tend to give necessary concealment in their surroundings. At night these markings, so conspicuous to our eyes in daytime, give a universal grey appearance which is very invisible in the lights and shadows of the night and aids hunting.

Growing Up

By the time the tiger is two years' old he begins to hunt by himself, though he will not be wholly leaving his mother until she begins to have another family. By the time he is five, he will think of starting a family of his own. He is now a very formidable beast and fears nothing in the jungles except another tiger bigger than himself. That is the main reason why he is so cautious in approaching his "kill" he fears he may have to fight with a bigger fellow than he is. When is fully grown and in good condition he will weigh about 420 to 450 lb., and in some of the northern parts of India has been known to weigh close on 600 lb. That is when he has lots of food and has become fat and lazy. You see the same among human beings! The game-killing tiger of the hilly forests will not exceed 420 lb. Tigrisses are from 280 to 350 lb. in weight.

In the forests all animals give way to the tiger, but there is one brave beast which is not afraid of him or of anything else. That is the full-grown wild bear. Sometimes they fight, and the victory may be with either of them, or it may be with neither for they may both die of their wounds, as has been known to happen.

Usually tigers hunt during the hours of darkness, but during the rains and cold weather they may be wandering about during the mornings and late afternoons. When deer have been killed off by people in the forests, tigers are known to take almost wholly to daylight hunting being forced to seek buffaloes and cows among the grazing herds. Tigers are good swimmers and readily take to water, so even wide rivers are no obstacle to them. They do not often climb trees but are able to do so. A young tiger has been known to climb 60 feet up a tree, and a full-grown one climbed 45 feet to get at men in a tree-machan, but they are not as agile as panthers which run up a tree as easily as your house-cat.

Eyes and Whiskers

Cats have large eyes, larger than the eyes of other kinds of flesh-eating animals. They are able to contract the

pupil in bright light to protect the eye from glare. In the smaller cats the pupil contract to a narrow, perpendicular slit; in the tiger, lion and panther the pupil contracts to a small circular opening. In the dark the pupils dilate to allow as much light as possible to enter the eyes. The whiskers of cats and many other species of carnivorous animals are of much use as "feelers" at all times, but especially at night when moving in cover.

You can now understand how Nature has gradually brought the cat tribe to great perfection to the end that they should be wholly fitted to fulfil their place in the struggle for life. And so it is with all creatures.

Educational Concessions to Ex-servicemen

The Government have directed the withdrawal of the benefits of the further education scheme from ex-service personnel who stay for more than one year in one and the same class. The benefits will, however, be re-granted on their promotion to the next higher class. The head of the institution with the approval of the Director of Public Instruction may continue the concession for another year in the same class where failure to secure promotion is due to extraordinary reasons like illness, change of residence, want of term days, due to illness, etc., in respect of those who are studying in institutions under the control of the Director of Public Instruction and with the approval of the Surgeon-General or the Director of Animal Husbandry or the Director of Agriculture in respect of institutions under their control.

Shooting of Peafowl and Antelope (Blackbuck) Prohibited

It is brought to the notice of Government that the Indian blackbuck usually found in open rural areas in the districts of Chittoor, Bellary, etc., and the peacock found in large numbers in the district of Bellary and especially in the Sandur area are being ruthlessly decimated in numbers of reckless shooting of premature males and pregnant females. With a view to prevent this reckless shooting of these vanishing species, the Government of Madras have under the powers vested on them by Section 3 of the Wild Birds and Wild Animals Protection Act, 1912 (Central Act VIII of 1912), declared the whole year to be a close time throughout the State for Peafowl (which includes peacock and peahen) and antelope (blackbuck).

Growing of Fuel and Fodder Trees

Fuel and fodder seeds, will, in future, be supplied free of cost to land colonisation co-operative societies also. These are now being supplied free of cost only to bona-fide poor ryots for ensuring the growth of quick fuel plantations and the provision of fuel for cultivators as well as grazing land for cattle. The Government have directed that in supplying the fuel and fodder seeds free of cost to these co-operative societies, the condition that their request should be recommended by the Deputy Registrar of Co-operative Societies and the condition that the amount spent should not exceed Rs. 15 per district should be fulfilled. The Agricultural Department will render necessary technical assistance to the societies in raising fuel and fodder trees.

Machkund Hydro Electric Scheme

Tunnelling at Machkund.

Machkund Project, which is a Hydro-Electric Scheme, is one of the biggest electricity schemes under the five-year plan sponsored by this State. This is a joint scheme undertaken by the Madras and Orissa States, as the Machkund river which is to be harnessed, forms the boundary of the two States and hence both the Governments have rights in the waters. As the State has a major share in the capital investment on the scheme, the Madras Electricity department is executing the project proper, for power generation and the respective Governments are constructing their own transmission lines for taking power to their respective territories. The project, when completed, will supply power to the Andhra districts, replacing the existing thermal stations which will then be kept as a standby. The cost of the project, excluding the transmission lines, is about Rs. 820 lakhs.

This scheme is intended to produce about one lakh kilowatt of power ultimately, utilizing the Duduma Falls in the Machkund river, which is about 120 miles from Visakhapatnam on the western slopes of the eastern ghats.

The scheme is designed to store about 25,000 million cubic feet of water in the Machkund river at a place called Jalaput. The regulation flow will be diverted by another small dam, about 14 miles down, and about a mile above the falls, into a canal. After passing through the canal the water runs through two tunnels with a pond in the middle, known as 'Tunnel Pond Dam'.

The tunnel works are executed by Messrs. John Mowlem and Company, an English firm of repute. The artisans and labourer totalling about 700 intended for this special work, have been recruited locally, with a few European staff for supervision. One of the tunnels about 3,000 feet

long is completed and the other tunnel which is about 4,000 feet long is just started.

The most important items of work that constitute tunnelling with modern equipments and machinery are described briefly below:—

(a) Preliminary survey, to fix up the correct alignment of the tunnel, requires experienced surveyors, and the use of accurate survey instruments. This enables us to predetermine the exact length and alignment of tunnel.

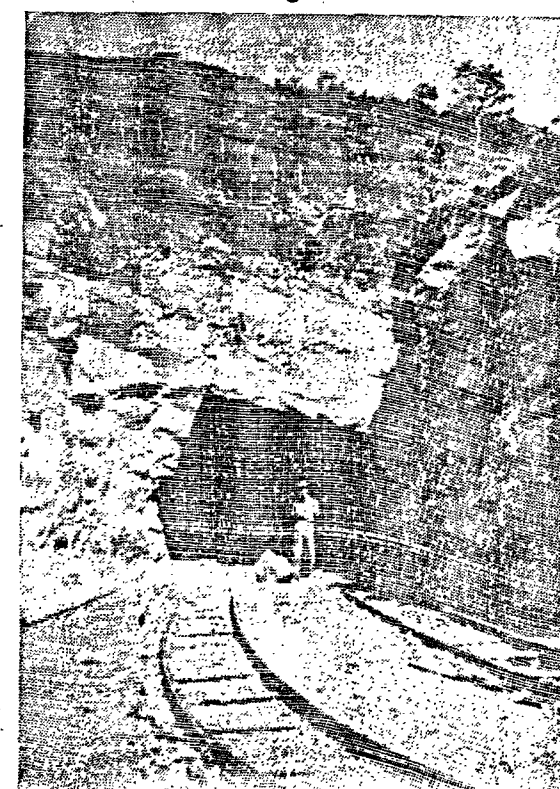
(b) The next operation is drilling holes with jumper rods and filling the holes with explosives and blasting. At Machkund, Jack hammers operated by air compressors, with special cutting bits are used, for drilling holes in the hard rock. About 420 feet length of hole is drilled on an average by a set of two men in a day. If these machines are not resorted to only about 10 feet of holes could be driven. Powerful type of explosive, called gelignite, is used for blasting. Ignition is by electric current switched on from outside the tunnel. To get the maximum effect the holes on the face are blasted in a certain order as shown in the sketch attached. Powerful exhaust fans are provided for sucking off the blast fumes, which are injurious to health and if not removed quickly will retard progress by delaying the entry of men.

(c) The blasted rock has to be removed soon after the blasting operation and dumped away from the tunnel. For leading away the spoil, special mechanical leaders, work as showels to load into tipping trucks. These trucks are hauled by locomotives running on rails with narrow gauge lines. These blasted materials are carried well away from tunnel mouth and dumped at convenient places.

(d) The sides of the tunnel thus driven have to be trimmed and given a lining of concrete. Since enough quantity of good river sand is not available at site, a mixture of river sand and sand obtained by crushing the stones is used for the concrete required for the lining.

The experience gained in the work will stand in good stead for the department to take up such works in future. The average cost for the present tunnel is estimated to be about Rs. 1,000 per running foot of about 200 square feet cross section, complete with concrete lining.

General view of the tunnel exit.



Removing excavated rock in slip wagons hauled by a diesel loco.



Control Orders in Force on 18th May 1951

THE MADRAS FOODGRAINS LEVY PROCUREMENT ORDER, 1951

This order has been issued in G.O. Ms. No. 1048, Food and Agriculture, dated 16th May 1951, and has come into force from that date. It extends to the entire South Kanara district and to delta areas of Madurai, Tiruchirappalli and South Arcot districts, and to the Channel-fed areas under the Nagavathi and Vansadhara rivers in Srikakulam district which are specified in Schedule I to the Order. The Order applies to paddy and rice only in all the above districts, except in the South Arcot district where it applies to paddy, rice and millets also. The Order provides the statutory basis for the levy scheme of procurement now being worked in the above areas in pursuance of the revised Food Policy of the Government.

AMENDMENT TO THE MADRAS FOODGRAINS PROCUREMENT ORDER, 1947

In G.O. Ms. No. 1045, Food and Agriculture, dated 17th May 1951 an amendment has been issued to the effect that the expression notified foodgrains in clause 5 of the Madras Foodgrains Procurement Order, 1947, shall include any of its products.

MADRAS RICE MILLS LICENSING ORDER, 1951

(G.O. Ms. No. 804, Food and Agriculture, 19th April 1951.)

In exercise of the powers conferred by section 3 (1) and (2) (a), (i) and (j) of the Essential Supplies (Temporary Powers) Act, 1946 (Central Act XXIV of 1946), read with the Notification of the Government of India, Department of Food, No. PY. 603 (2)-1, dated the 21st October 1946, and section 17 (2) of the said Act, and with the concurrence of the Government of India and in supersession of the Madras Rice Mills Licensing Order, 1947, published with the late Food Department notification, dated the 22nd May 1947, at pages 105-106 of the Rules Supplement to Part II of the *Fort St. George Gazette*, dated the 24th June 1947, as subsequently amended, His Excellency the Governor of Madras hereby makes the following Order:—

ORDER.

1. (1) This order may be called the Madras Rice Mills Licensing Order, 1951.

(2) It extends to the whole of the State of Madras.

(3) It shall come into force on the 19th April 1951.

2. (1) No person shall mill rice or hull paddy by power driven machinery except under and in accordance with the terms and conditions of a licence issued in that behalf by the District Collector.

(2) In the matter of issuing or refusing to issue a licence, the District Collector shall be guided by such general or special orders as the State Government may, from time to time, issue to him in this behalf.

3. Applications for licences under this Order shall be made in Form I in the Schedule to this Order.

4. Licences issued under this Order shall be in Form II in the Schedule to this Order.

5. No person who is the holder of a licence under this Order shall increase the hulling capacity of his mill by

installing additional machinery or in any other manner, except under and in accordance with the conditions of a permit issued in that behalf by the District Collector, who shall be guided by such general or special orders, as the State Government may, from time to time, issue to him in this behalf.

6. (1) All licences issued or deemed to be issued under the Madras Rice Mills Licensing Order, 1947, and in force on the date on which this Order comes into force shall be deemed to have been valid only for the year ending with the 31st March 1951 and thereafter may be renewed from year to year.

(2) Every licence issued under clause 4 shall be valid for the year specified therein and thereafter may be renewed from year to year.

(3) (a) A fee of Rs. 24 shall be levied for every licence and for every renewal thereof.

(b) The fee payable for a licence referred to in sub-clause (1) shall be paid on or before the date fixed in this behalf by the Commissioner of Civil Supplies, Madras.

(c) The State Government may, in special cases, exempt any person or class of persons from the payment of any fee under this clause.

(4) The fee for a licence or for a renewal thereof shall be paid in advance and a treasury receipt for payment shall be sent along with the application for the licence or for the renewal thereof.

Explanation.—In this clause, 'year' means the period commencing on the 1st April and ending with the 31st March immediately following.

Note.—The fee payable under this clause will be levied in full even though a part of the year for which it is levied may have elapsed at the time of the issue of the licence.

7. No person who is the holder of a licence issued under this Order shall contravene any of the provisions of this Order or any of the conditions of the licence. If any such person contravenes any of the provisions of this Order or any of the conditions of the licence, then, without prejudice to any other action that may be taken against him, his licence may be cancelled or suspended by the Commissioner of Civil Supplies, Madras, or any other officer authorized by him in this behalf.

8. The licensee shall maintain accounts in respect of the aforesaid business in such manner, as may be prescribed, from time to time by the District Collector or any other Officer authorized by him in this behalf by a general or special order.

9. The licensee shall deposit with the District Collector such sum as may be specified by him for the due performance of his duties as a licensee under the said Order. The District Collector shall have power to order the forfeiture of the deposit mentioned above, either in whole or in part for breach of any of the provisions of this Order or any of the conditions of the licence, without prejudice to any other action that may be taken against the licensee.

10. Any person authorized by the Commissioner of Civil Supplies, Madras, or by the District Collector may enter upon and inspect any premises in which he has reason to believe that the milling of rice is taking place.

11. Every person who is the holder of a licence issued under this Order shall comply with any directions that may be given to him by the District Collector or any other officer authorized by him in this behalf in regard to repairs or adjustments to the machinery or in regard to the milling or remilling of rice.

12. Notwithstanding anything contained in clause 7, the State Government may, in special circumstances, without giving any previous notice or without assigning any reason, suspend or cancel a licence issued under this Order.

13. If any person, who is the holder of a licence issued under this Order or his agent or servant or any other person who can reasonably be presumed to have been acting on his behalf contravenes any of the provisions of this Order or any of the conditions of the licence, then, without prejudice to any other punishment to which the holder of the licence or his agent or servant or other person may be liable, any Court trying such contravention may direct that any packages, coverings or receptacles in which any rice, in respect of which the Court is satisfied that any such provision has been contravened, is found, and the animals, vehicles, vessels or other conveyances used in carrying such rice, shall be forfeited to the State Government.

14. No person shall be prosecuted for contravening any of the provisions of this Order, except with the previous sanction of the District Collector concerned.

15. (1) All proceedings commenced or deemed to have been commenced and all action taken or deemed to have been taken under the Madras Rice Mills Licensing Order, 1947, shall be deemed to have been commenced or taken under the corresponding provision, if any, of this Order and shall, so far as may be, be continued accordingly.

(2) All licences issued or deemed to have been issued under the said Order and in force immediately before the commencement of this Order shall be deemed for all the purposes of this Order to be licences issued under this Order.

THE MADRAS FOODGRAINS INTENSIVE PROCUREMENT ORDER, 1951

1. The Madras Foodgrains Intensive Procurement Order, 1951, has been issued in G.O. Ms. No. 913, Food and Agriculture, dated 7th May 1951. This Order supersedes the Madras Foodgrains Intensive Procurement Order, 1950. The New Order applies to the following areas in which intensive procurement scheme is being continued in pursuance of the Revised Food Policy of the Government.

(1) *West Godavari District.*—Entire taluks of Tanuku, Bhimavaram and Narsapur and some delta villages in Kovvuru, Eluru and Tadepalligudem taluks.

(2) *East Godavari District.*—Entire taluks of Kakinada, Amalapuram, Razole and Ramachandrapuram.

(3) *Krishna District.*—Entire taluks of Gudivada, Bandar, Kaikalur and Divi and all the villages in Vijayavada and Gannavaram taluks lying on the southern side of the M. & S.M. Railway line.

(4) *Nellore District.*—Entire taluks of Nellore, Kovuru, Kavali, Gudur and Atmakur. Forty specified villages in Sullurpet taluk and some villages in Udayagiri and Kanigiri taluks under Mopad Project.

(5) *Guntur District.*—Entire taluks of Repalli, Tenali and Bapatla.

(6) *Tanjore District.*—All taluks.

(7) *The Nilgiris District.*—All taluks.

II. The Order issued in G.O. Ms. No. 1360, Food, dated 23rd December 1947, providing powers to Collectors to requisition stocks of foodgrains from any person has been extended to the Sandur State merged with Bellary District by a notification issued in G.O. Ms. No. 987, Food and Agriculture, dated 14th May 1951.

DRUG FROM DRUMSTICKS

The Indian Institute of Sciences, Bangalore, has extracted a substance from the roots of the common drumstick tree which is an effective antidote to the growth of various micro-organisms that cause typhoid, pneumonia, dysentery, tuberculosis, etc. The substance is non-toxic when given to experimental animals and in this and some other aspects it resembles penicillin closely. It is hoped that the discovery will prove invaluable along with streptomycin and para-amino salicylic acid in effectively combating various manifestations of T.B.

DETECTING ADULTERATION OF MILK

In the Indian Dairy Research Institute, Bangalore, a method of detecting the extent of adulteration of milk with water which is widely practised in India, has been evolved. The Institute has found that the determination of freezing point of milk offers a reliable criterion for detecting the addition of even small quantities of water (as low as four per cent) to milk of any species of animal. Based on extensive analysis of samples of milk the application of the freezing point for examining market milk has been standardised.

A standardised procedure for the manufacture of casein from skim milk has also been evolved in the Dairy Research Institute. Economical disposal of skim milk which is produced in large quantities in India is of considerable importance to the dairy industry. One of the methods of disposal of this by-product is by its conversion into lactic casein which has a commercial value in glue making. The method of manufacture of casein in certain parts of the country is crude and consequently the by-product fetches a low price. Under the new method it is hoped that production of union good grade material will be ensured. The Institute has also evolved a simple method for the conversion of skim milk into rennet casein which is used in the manufacture of plastics.

MANURIAL EXPERIMENTS

Experiments have been undertaken in the various central institutes to test the efficacy of nitrogenous manures as compared to other forms of artificial fertilisers. In the Central Rice Research Institute, Cuttack, it has been found that application of ammonium sulphate in dry conditions, two to three weeks before water is let in for puddling, is superior to the customary practice of applying the fertilisers after transplanting. For the same quantity of nitrogen applied, i.e., 20 lb. per acre, an increase in yield of 80 lb. per acre was obtained in favour of the dry method in medium soils.

The response of short duration paddy varieties from Japan, China and Russia as also local varieties to the application of nitrogenous manure was also studied in the Institute. In a trial where a maximum dose of 60 lb.

of nitrogen was applied per acre, while all the varieties responded to manuring the local variety, *benibhog*, showed the highest yield of 1,410 lb. per acre as compared to 900 lb. of the Japanese and Russian varieties. A Chinese variety of even shorter duration than the above varieties recorded a yield of 1,048 lb. per acre with an application of 30 lb. of Nitrogen.

The comparative efficiency of the usual practice of surface application of ammonium sulphate and the deep layering of the fertiliser was further studied in the Institute. The results indicated that 20 lb. of nitrogen deep-layered gave as good a result as 40 lb. nitrogen surface applied showing that the availability of nitrogen to the crop is better under deep-layered conditions.

WRAPPER TOBACCO

In the Central Tobacco Research Institute manuring trials undertaken showed that nitrogenous manuring have highly pronounced effect on the tobacco crop. The phosphatic and potassic manures did not contribute anything either to the yield or to the colour of the cured leaves.

Application of nitrogenous fertilisers to potato crop tried in the Central Potato Research Institute has also produced good results. Manurial trials undertaken in the Institute have indicated that nitrogen applied to the extent of 4 cwt. per acre produces vigorous growth with rich foliage in potato plants. The effect of phosphates is much less pronounced and that of potash not noticeable on growth.

The Central Tobacco Research Institute has successfully grown wrapper tobacco at the experimental farm of the Institute. Wrapper tobacco is used for manufacturing of cigars. India is an important cigar-manufacturing country but she has to depend on foreign imports for supply of wrapper tobacco. Prior to Partition, Rangpur, now in East Pakistan, was meeting a part of the requirements in regard to low grade wrapper. After Partition this source of internal supply is also not assured. Experiments undertaken at the Institute now show that good quantity wrapper tobacco may be successfully grown in India.

SEED DRILL

A seed drill which is an improvement over the ordinary seed tubes has worked satisfactorily in the Indian Agricultural Research Institute, New Delhi. The drill, besides making the sowing regular and preventing the seed from getting bruised, can be worked by the ploughman himself without any extra help.

SUBSTITUTE FOR WATTLE BARK

The Forest Research Institute, Dehra Dun, which has been experimenting on the production of vegetable tanning materials in India has found Karada bark (*Cleistanthus Collinus*) as a likely substitute for wattle bark. With the cessation of trade relations with South Africa, India was faced with an acute shortage of vegetable tanning materials. This problem has been tackled both from the point of view of self-sufficiency as well as meeting minimum requirements. Experiments on barks, fruits and leaves of certain indigenous trees known to possess tanning properties but not in use in the tanning industry are being carried out in the Institute. The promising results obtained from Karada bark are now being further tested to ascertain their applicability to commercial conditions.

EPHEDRINE

In the Lehoul area in Kulu, plants rich in ephedrine have been collected by the Forest Research Institute. The samples were found to contain a high percentage of ephedrine comparable with the best from Baluchistan which was the main source of supply of this important drug before Partition.

The Institute has also undertaken experiments for finding a suitable colour for hydrogenated fatty oils so as to prevent adulteration of ghee. These experiments have shown that colorization of oils with 0.1 per cent chlorophyll, the green edible colouring matter found in leaves of plants, is an effective remedy.

Use of School Buildings and Premises

It has been brought to the notice of the Government that, with reference to the recent amendment to Rule 81 of the Madras Educational Rules regarding the use of school buildings and premises, a certain amount of misapprehension has been caused in the minds of the public in the Madras City, due to the interpretation given to the amendment by the Madras Corporation. The amendment related to the restriction on the use of the buildings and premises for public functions, and the Government have clarified the position in a communication to the Corporation sent early in April, pointing out that the night schools, adult education classes, etc., conducted hitherto under the auspices of recognized associations in the Corporation school buildings could be continued there, subject to the Commissioner, Corporation of Madras, satisfying himself that the permission accorded will not be misused. The Associations concerned may therefore approach the Commissioner, Corporation of Madras, for the required permission.

Reorganisation of State Medical Libraries

A scheme for a thorough reorganization of the Medical Libraries in the Madras, Stanley and Andhra Medical Colleges and in the King Institute, Guindy, has been sanctioned by the Government.

It was brought to the notice of the Government that most of the books in the libraries of the three medical colleges and the King Institute were obsolete and worn out by constant use for a long period and that these libraries should be thoroughly overhauled, especially to meet the needs of the large number of post-graduate students undergoing training in several subjects and also the heavy demand for books arising out of the increase in the number of students. Having these in view, the Government have sanctioned the reorganization of these libraries on up-to-date lines.

Free Sale by Cement Factories

The Government have directed that such of the Cement factories as may be licensed under paragraph 2 of the Order relating to the sale of cement be authorized to sell cement up to a wagon load, that is, not exceeding 25 tons direct to each individual consumer who has not obtained a permit, instead of through the stockists or the Honorary Cement Controllers, provided that such sales do not exceed 20 per cent of their production in any one month in the aggregate.

Madras Medical Service

The Government have passed orders for the unification of the cadres of Civil Assistant Surgeons, Classes I and II, with effect from April 1, 1951. The scale of pay for the unified cadre will be Rs. 150—25/2—400 and medical graduates will be started on Rs. 200 in the scale.

One of the reasons that weighed with the Government to take up this decision was the fact that the scales of pay for Civil Assistant Surgeons, Class II, were not sufficiently attractive to graduates who are only available for such appointments consequent on the abolition of the licentiate course in medicine in this State in 1939. Further, it has been found that in view of the large number of posts in both classes I and II, much administrative inconvenience is caused.

Sales Tax on Tractors

The Government have exempted the sale of all varieties of tractors from the tax payable under Section 3 (2) of the General Sales Tax Act. The tax payable under Section 3 (1) of the Act will, however, continue.

Sales Tax on Hides and Skins

The Government have exempted from the Sales Tax, exporters in hides and skins in respect of their turnover of untanned hides and skins which were purchased by them from licensed tanners during the years 1947-48, 1948-49 and 1949-50 provided that the tanners had already paid the tax on such untanned hides and skins at the stage of purchase.

The owners of single chekkus dealing exclusively in the produce of their own chekkus have also been exempted from liability to sales tax for a further period of one year from April 1, 1951, subject to their taking out a licence on payment of a fee of Rs. 6.

Leprosy Relief Work in Kumbala Firka

The Government have approved of a scheme for the organization of leprosy prevention and relief in the Kumbala firka in South Kanara District. The scheme was prepared by Sri T. N. Jagadisan, Honorary Leprosy Prevention and Relief Organizer for the Rural Welfare Department, appointed to draw up a comprehensive and detailed plan for the organization of leprosy prevention and relief in the firkas and centres selected for Intensive Rural Reconstruction Work.

The scheme for the Kumbala firka envisages the setting up of a leprosy clinic at Perdal village in charge of a medical practitioner. The medical practitioner will operate the clinic and do preventive propaganda with the assistance of a special staff.

Export of Monkeys to Foreign Countries

One of the suggestions of the Government of India to combat the nuisance from wild animals causing damages to crops, plantations, etc., is to destroy the monkeys and if it is not considered desirable to destroy them, it should be possible to capture and export them to other countries where there may be a demand for them. In the Madras State public sentiment is very strongly against the shooting of monkeys and no purpose is served to combat it by

propaganda. The only alternative is to catch and export them. Most of the advanced countries like U.S.A., U.S.S.R. and U.K. have been experimenting for some time past in the therapeutic value of the simian glands (especially the renal) to fortify the sexual hormones and to recapture lost vitality. The Governments of those countries may be interested in the purchase of monkeys to aid their scientists in their eugenic studies.

Under the existing trade conditions the export of monkeys outside India is absolutely free from duty except during the closed season (1st March to 31st August) and that even in the closed season only export by sea is prohibited. Consequently there should be a larger export than hitherto. The Government of Madras understand that there are a number of private dealers in the country engaged in the export of monkeys to foreign countries. Such dealers may apply in this regard for full particulars to the Secretary to Government, Development Department, Fort St. George.

Epigraphical Discoveries in Srikakulam

Important epigraphical discoveries have been made at Andhavaram, a small village 12 miles from Chicacole Road Railway Station in Srikakulam District, Madras.

The place contains two mounds representing ancient settlements, probably Buddhist in character. At the western extremity of one of these mounds, under a banyan tree, was found a large urn inside which four sets of copper plates were found suspended by means of an iron rod inserted across its neck. Each set consists of three plates, fastened together by means of rings, and bears the seals of the respective authors of the plates. One set, written in Southern Brahmi characters, belongs to the region of Maharaja Anantasaktivarman of the Mathara family who ruled over Kalinga during the second half of the fourth century A.D. Two other sets, in Telugu-Kannada script of the 6th-7th centuries, belong to the early Ganga Maharajas Indravarma and Anantavarma respectively. All of them record the donation of lands to the Brahmana residents of Andoraka.

Early steps are being taken to have these inscriptions properly edited and to declare the site protected under the Ancient Monuments Preservation Act.

Obscene journals: Public Warned

It has been brought to the notice of the Government that of late several journals are being sold in this State which contain articles or other matter of an obscene character. The public are hereby warned that the production, sale, distribution, public exhibition or circulation of obscene publications is punishable under the Indian Penal Code.

Sales of Cement without Permit

The Government have directed that the quantity which may be sold by a person licensed under the Cement Control Order to bona fide buyers who have not obtained permits shall not exceed five tons per buyer and that the total quantity of cement that a person licensed may so sell in any one month in all the districts of the State of Madras shall not be more than 70 per cent of the stocks received by him during that month plus whatever remains unsold out of the stocks held in the previous month.

1. HINDU DHARMA

M. K. GANDHI (Pages 443 ; Rs. 4.)

2. AN ATHEIST WITH GANDHI

GORA (G. RAMACHANDRA RAO). Pages 55, Re. 1.

Published by Navjivan Publishing House, Ahmedabad.

In the chorus of soulful tributes that were paid to the revered memory of Bapuji, when he left us, one jarring note was struck by a message that put him down as the greatest Hindu leader. Yet in the noblest and truest sense of the term he lived and died the greatest Hindu. His was a Hinduism that regard all living beings as essentially one. His was a Hinduism that taught him to respect other religions as much as his own, and saw in the various paths of seeking good not the provocation to fanatic enmity, but the kinship that came from the pursuit of common ideals. Above all, his was a Hinduism that unhesitatingly discarded and condemned the spurious and the superficial that had infiltrated into it and threatened to replace its very essentials. He sought to purge Hinduism of those evils that revolted against God and man. Thus it is, that we see one who claims to be a sanatani but undertakes as his life's mission a crusade against untouchability. We see one who has abundant and living faith in the Shastras, and has iconoclastic and conventionally speaking almost irreligious views on such matters as caste-system and temple-worship. Here was one who held chastity, fidelity and devotion to the husband as the highest duty of the Hindu woman, but called on her to go her own way if she truly felt that her husband stood in the way of her seeking God. His Hinduism was certainly a far, far cry from the conventional, ritual-ridden, code-bound Hinduism; but if Hinduism is to live, it is clear that it can live only in the spirit on which Gandhiji practised it. Bapuji's views on almost every aspect touching the Hindu way of life have been compiled in the volume 'Hindu Dharma'. His writings and speeches have been collected and classified under various heads such as temple-worship, Brahmacharya, Non-violence, untouchability, etc., and altogether present a clear perspective of one of the most essentially human and religious ways of life, known to humanity.

The abundant tolerance that was born out of his deep religious fervour and fulness of conviction led Bapuji to respect not only other religions but even those who respected no religion and recognized no God. 'An atheist with Gandhiji' is a booklet written by a Constructive worker of Andhra who had faith in Gandhian ideology, except in one respect; he did not share Gandhiji's devotion to God. Sri G. Ramachandra Rao, the author, is a Brahman who married his daughter to a Harijan and who in his life and labours recognized no sectarian barriers. The author's conviction is that atheism, which takes man as man, and not according to his level, is not merely negative or passive, but constructive and positive and that it helps to bring out the best of the ethical, intellectual and human qualities in man. Gandhiji's belief, was that atheism is a denial of self. While the book does not claim to be an exposition of atheism, or a critical study

of the relative merits of theism and atheism, it is a brilliant commenter on the unity of heart and comradeship that can be achieved through devoted service, despite the yawning gap of ideological differences. Sri K. G. Mashruwala concludes a brilliantly written introduction, with the following words: "But so long as he (the author) retains a loving heart, exemplary moral character and courage, both in personal and public life, and a life of service and sacrifice, his name will be found in the list of God's own devotees. For his sake, *deva* will assume the name *adeva*".

D.

Gift of Wards Accepted

The Government have accepted with thanks the offer of the Provincial Welfare Fund, Gobichettipalayam, Coimbatore District, to construct three special wards of two beds each in the Government Hospital, Gobichettipalayam, at a cost of Rs. 18,000 to provide the wards with furniture, at a cost of Rs. 1,200 and to hand over the buildings with furniture to Government for maintenance.

Free Anti-Rabic Treatment

The Government have raised the assessable limit of income for free anti-rabic treatment from Rs. 50 to Rs. 100. At present all those persons whose salary or income exceeds Rs. 50 a month are required to pay charges of Rs. 6 per complete course of anti-rabic treatment. The Government have now raised the income limit to Rs. 100.

Hiring of Pumpsets

The Government have permitted the hiring of pumpsets for growing food crops in the first year or for growing cotton as the first crop after ploughing, to be followed by a food crop in the next season. This order of the Government will be given effect to immediately.

Gifts to Government

The Kasturba Gandhi Memorial Maternity Ward Committee, Adoni, has made an offer to Government to construct a maternity ward in the Government Women and Children Hospital, Adoni, and hand it over for maintenance to Government.

The Adoni Groundnut Seeds and Oil Merchants' Association has offered to donate a sum of Rs. 30,000 for the construction of a ward of eight beds in the Government Hospital, Adoni.

Both these offers have been accepted by Government.

Languages in Form III

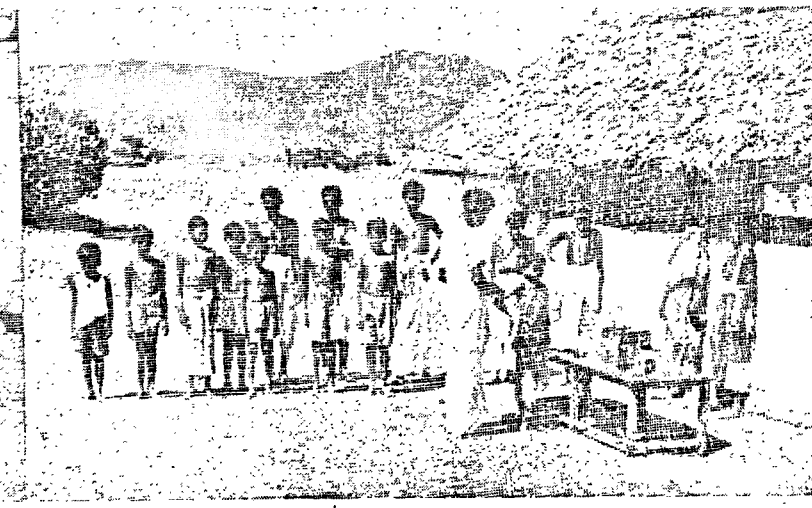
The Government have permitted the pupils reading in Form III of the secondary schools during 1951-52 to opt, if they desire so, for the study of languages under the revised scheme sanctioned by Government.



Gandhigram at Kallampatti celebrated its anniversary recently, the splendour and simplicity having won the admiration of many a visitor. Sri M. Bhaktavatsalam, Minister for Public Works, addressed the gathering on the closing day of the celebrations.



Orphans and discarded children are well looked after in Gandhigram. Picture shows the Balawati (Kindergarten). The children play and enjoy open-air treat in the evenings.



Leprosy patients receive a careful medical attendance at Kallampatti under the management of Gandhigram. The picture shows a male nurse administering an injection to a girl patient.



THE NATIONAL TREE PLANTING WEEK

The 'Vanamahotsava' was celebrated this year during the first week of July with great enthusiasm all over the State. Sri M. Bhaktavatsalam, Minister for Public Works, is seen here planting a mango sapling in the premises of the Government House, Mount Road.

A close-up of Sri A. B. Shetty, Minister for Agriculture, engaged in tree planting in the garden area of the Agri-Horticultural Society, Teynampet, Madras.

H.E. the Rajpramukh of Mysore participated in the Vanamahotsava conducted by the Agricultural Research Institute, Coimbatore. H.E. the Rajpramukh paid a visit to the Research Institute while he was in Coimbatore in connection with the Convocation of the Forest College.

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AT GANDHIGRAM

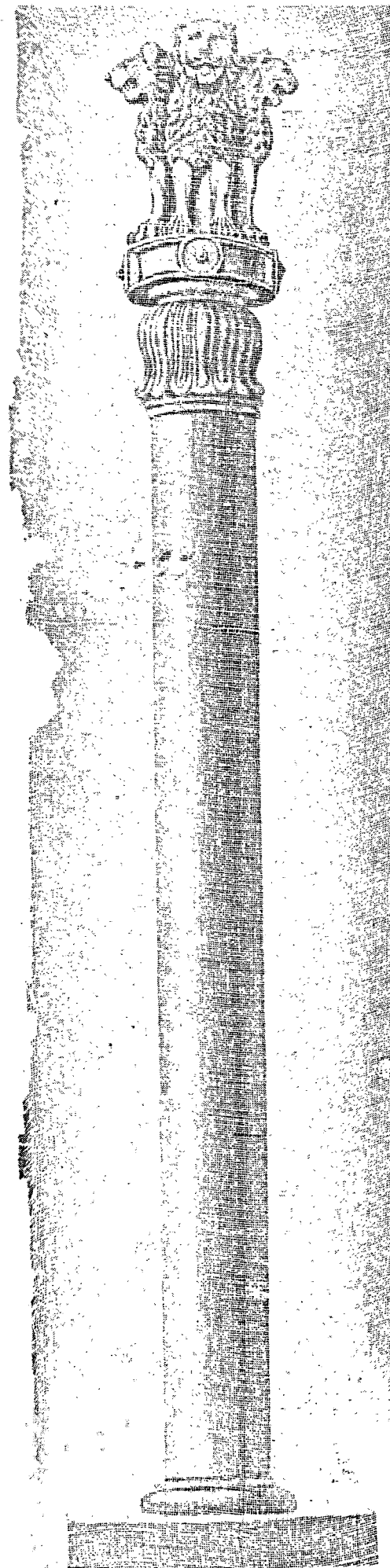
THE TRAINEES at Gandhigram receive instruction in every walk of life. Some of them are seen here digging out compost manure to feed fields ploughed by themselves.



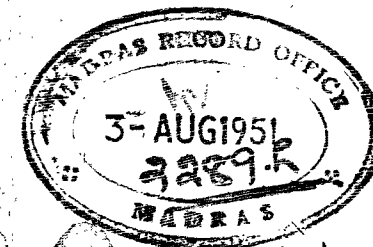
A WELL irrigates the fields and garden of Gandhigram. A pair of bullocks is used in drawing out water.



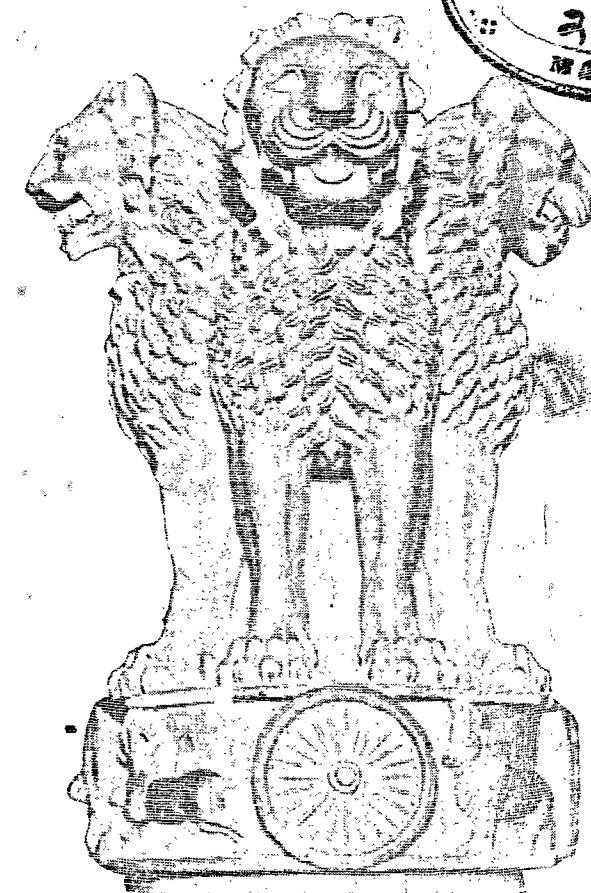
THE RICH harvest is reaped after days of hard labour.



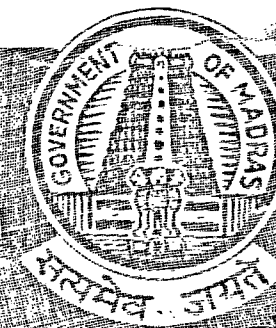
MADRAS INFORMATION



82/51



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Four Years of Freedom—A review

Another year has passed after the attainment of independence and we are entering the fifth year of freedom. The path of national progress has not been smooth and the people and their Government have had to face another year of trials and tribulations. But undaunted by the difficulties that lay in the path of progress, the people's Government have unswervingly kept up the pace and redoubled their efforts to bring prosperity and contentment all round. How far they have succeeded in alleviating people's sufferings due to the food and cloth shortage and other privations, should be judged in the context of the realities of the situation and the insuperable national calamities and obstacles which have beset our path; but taking all things into consideration, it is to the credit of this State that it has so far kept the spectre of famine from its doors and prevented conditions which might have easily been worse. That there are good reasons both for hope and concern is plain from the events that had taken place in the State during these four years. The difficulty of the Government lay not merely in the magnitude of the many problems that arose, after independence, but also in their urgency. If funds could not be found for tackling them and for extending the welfare activities in proportion to the country's needs, the realization of the benefits of people's Government might long be delayed. The revenue of the State for 1950-51 is Rs. 56.29 crores. A comparison of this with the revenue in 1937-38, i.e., 16 crores, and the revenue in 1945-46, Rs. 48 crores will bear ample testimony to the fact that if people had to pay by way of taxes a large amount, they have done so in the realization that the revenue goes to meet the expenditure on their welfare and needs.

A glance at the figures of expenditure on nation-building activities will show how the Government on their part justified the increase in revenue by spending it on schemes which promoted the welfare of the people.

Taking 1939-40 as the basic year, if we compare the expenditure in 1950-51 on the social services (Education, Medical and Health) we would notice an increase by 3.5 times. The expenditure on security services (General Administration, Justice, Jails, Police) on the other hand, has increased by 2.3 times and that on development services (Agriculture, Animal Husbandry, Irrigation, Co-operation, Civil Works, Industries and Supplies, Electricity) by 4.7 times.

Agricultural Progress

With the betrayal by Nature for the fourth year in succession, the agricultural situation of the State has deteriorated considerably. Had nature been only kind to Madras this year, the target of 5,57,671 tons of additional food production could have been reached by the intensive cultivation scheme. In spite of this, it is estimated that additional food production of 153,692 tons has been achieved during 1950-51.

The intensive cultivation scheme, referred to above, is only one of the many schemes the Government, undertook to tide over the food shortage. The Grow More Food Scheme had a plan for intensifying the mechanized cultivation will, it is expected, bring in an additional production of 7.27 lakhs of tons. There is yet another scheme providing for the distribution of fertilizers, manures, and

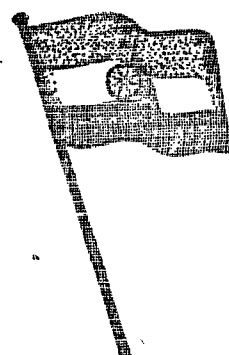
improved seeds at low rates. (With a view to replace the antiquated methods of cultivation with more modern methods and to educate the ryots in improved methods of farming which would yield increased production, the Department of Agriculture has spread a number of field workers throughout the length and breadth of this wide State.) There is no better way of inducing the ryot to take to new methods than to show him the practical results of applying up-to-date knowledge and methods; to the ryot, theory is never as convincing as "seeing is believing." The work of the officers engaged in intensive cultivation propaganda mainly consists of the introduction of new seeds, the demonstration of improved methods, the control of pests and diseases, and the holding of shows and exhibitions, thus carrying conviction home to the ryots; the results of this campaign are bearing fruit and in a few years most of the farmers would be pursuing up-to-date methods in cultivation.

Since the assumption of office the Government have been paying increasing attention to irrigation, the life blood of agriculture. (A Five-Year Plan is now being worked out and on it Rs. 10.54 crores have already been spent. The programme for irrigation development falls roughly into three parts. The first part concerns 300 small irrigation schemes at an aggregate cost of about Rs. 6 to 7 crores in five years. Up-to-date 288 schemes have been sanctioned at a cost of Rs. 385 lakhs. When the 300 schemes are completed the area brought under irrigation will be about 300,000 acres of which the yield should be 1.5 lakh tons.

The second part of the programme concerns minor rivers, the waters of which may be impounded or trained. Ten projects at an estimated cost of Rs. 23.33 crores have been already sanctioned and are progressing. Among these, the Lower Bhavani Project in Coimbatore district estimated to cost Rs. 879 lakhs and to irrigate 200,000 acres, the Malampuzha project in Malabar estimated to cost Rs. 380 lakhs and to irrigate 40,000 acres, the Mettur Canal Scheme estimated to cost Rs. 24 lakhs and benefit 45,000 acres in Salem and Coimbatore districts, the Rallapad Reservoir estimated to cost Rs. 53 lakhs and irrigate 12,000 acres in Nellore, the Upper Pennar Project in Anantapur district estimated to cost Rs. 89 lakhs and to irrigate 6,000 acres, the Bhairavanitippa Project estimated to cost Rs. 82 lakhs and to irrigate 8,000 acres may be mentioned. The third and most ambitious part of our irrigation programme comprises the multipurpose projects with the development of the Godavari, Krishna and Tungabhadra river valleys. The Tungabhadra Project, which will irrigate in the first stage 300,000 acres of land in Bellary and Kurnool districts and develop 35,000 KWs. of power, has already been undertaken at an estimated cost of Rs. 25 crores that being the share of the Madras State as distinct from the share of the Hyderabad State. For the Krishna river, the Krishna-Pennar Project is under investigation. This project will have a reservoir three to four times that of Mettur which will irrigate about three million acres in the districts of Cuddapah, Kurnool, Nellore, Chingleput, South Arcot, Chittoor and Guntur. The Project will also supply water to Madras City.

Education

Almost the first task undertaken by the present popular Ministry soon after assumption of office was the evolution



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of a system of national education which would enlist in the work of nation-building the abundant talents of Indian youths.

The first step taken towards the re-organization was the introduction of Basic education—the training of the brain through the hand. The existing training schools are being converted into Basic Training schools and new ones are also being opened every year. Forty-eight Basic Training schools are today imparting training to 4,240 pupil teachers. Elementary schools are being converted into basic elementary schools and in the State today there are 348 basic elementary schools. 2,489,000 boys and 1,487,000 girls are being taught today in the 37,801 elementary schools in the State.

Secondary education too has been re-organized and a provision for learning some useful crafts which would enable the pupil to earn a living, in case some of them cannot pursue their studies further, has also been made. Teaching through English medium has been abandoned, and the regional languages have taken its place. Teaching Hindi to those desirous of learning it, is also another aspect of the scheme of secondary education. Faced with a steadily increasing demand for more and more secondary schools, the Government had to liberalize the rules with regard to grant for the construction of buildings for secondary schools. Consequent on these measures the number of schools in the State has gone up from 599 for boys and 140 for girls in 1945 is about double the number today, viz., 1,130 for boys and 224 for girls. The boys and girls attending these secondary schools respectively are 479,590 and 103,000.

In the field of collegiate education it was the Government's aim to have at least one college for each district. Except the Nilgiris almost all the other districts in the State have now one College each. In the last five years 17 new colleges have been opened. Forty-one thousand five hundred and twenty-seven boys and girls are receiving collegiate education. The expansion is not confined to arts colleges alone. Two new Engineering Colleges, one at Kakinada and the other at Anantapur have been opened by Government. Two technological colleges have also been opened to provide additional facilities for those desirous of pursuing technological education.

Another important aspect of educational reform is Adult Education. A comprehensive scheme for educating adults, comprising of opening of literacy schools, training of teachers in adult literacy work, opening of rural colleges for adults and imparting citizenship training through various methods including visual education, is in progress. The Adult Education movement has gained momentum. One thousand one hundred and sixty-six adults schools are working with a total strength of about 24,000 pupils. Ten rural colleges of which three are for women are functioning with a strength of 286.

Prohibition

Prohibition, one of the most outstanding and important achievements is a great success in the Madras State. It was given to this State to march ahead boldly in the firm faith that the loss of tainted excise revenue got from the economically backward people least fitted to bear the burden, would be more than counter balanced by the progress in their material and moral well-being. 163,100 tappers were thrown out of employment consequently on the introduction of this policy in the State. Co-operation came in handy and many of them have been employed in the jaggery

manufacturing co-operative societies and other co-operative societies such as milk-supply, land colonization and cottage industries societies.

Harijan Uplift

A special department has been created for Harijan Welfare and its activities are:—(1) provision of house-sites to poor Harijans either wholly or partly free; (2) maintenance of schools, grant of scholarships, stipends, boarding grants, grants for the purchase of books, slates and clothing; (3) provision of wells, tanks, etc., for the supply of drinking water; (4) provision of sanitary amenities, pathways, street-lighting and burning or burial grounds; grants to private bodies engaged in social and economic uplift of the eligible communities; and (5) assignment or lease of land for cultivation. These benefits are extended to Harijans who have become converts also. The Harijan Welfare work has been steadily growing both in volume and variety from year to year.

From a modest sum of rupees two lakhs and odd in 1921, the expenditure on Harijan Welfare has risen to nearly a crore of rupees in 1950-51. The progress in expenditure was most marked under the Congress and especially after the attainment of independence.

The Government themselves are running several hostels directly for their benefit. In addition to these facilities, over 1,200 elementary schools are run by the newly created Harijan Welfare Department in the City and in several districts and the eligible pupils studying in these schools are given a meal at midday. The Government have also been encouraging private institutions working for the social welfare of the poor and depressed classes by giving subsidies towards the expenditure incurred by them.

The Government have recently passed orders that all poor Harijans who are unable to secure house-sites for themselves should be given three cents of wet land or five cents of dry land free of cost. The Collectors of all districts have been instructed to see that at least 1,000 house-sites are acquired and granted during the year under review in each district.

The Madras Government removed all the social disabilities under which the Harijans were suffering by enacting the Madras Removal of Civil Disabilities (Amendment) Act and the Madras Temple Entry Authorization Act which came into force from 2nd June 1947. The Harijans have now equal rights of access to all Hindu temples and places of public resort such as educational institutions, streams, rivers, public wells, tanks, pathways, hotels, etc.

In addition to the facilities already available, the Government have during the year under review passed orders that legal assistance should be made available to Harijans in deserving cases in which they have to protect themselves against caste prejudice.

Since 1948-49 the Government have been giving educational facilities to the members of several backward classes in addition to the Harijans and the other eligible communities. Over 130 classes have been recognised as backward classes for this purpose. It cost the Government one lakh of rupees in 1948-49 and rupees five lakhs in 1949-50 and nearly rupees seven lakhs for the year under review.

Rural Welfare

The coming into force of the Madras Panchayat Act on April 1, 1951, signals the ushering in of 16,000 additional

panchayat institutions in this State. The Act makes the formation of panchayats in villages with a population of 500 and over, compulsory. By this Act, the panchayats will become autonomous units of local administration vested with large powers in all matters relating to village life and village economy.

To change the face of the rural parts where the masses live in abject poverty, by stimulating initiative among them and raising their economic and social life on co-operative lines is certainly not an easy task for any Government. In 1947 was initiated the Pirka Development Scheme—a scheme that was the outcome of the recognition that an all round improvement of rural life demanded high priority among the activities of the Government. During the long period of tutelage under foreign rule villagers had lost the initiative to organize and develop themselves and the society around them. The villagers had to be awakened to their duties and responsibilities as citizens of a free nation and feel self-confident and take an intelligent and active interest in their problems.

Land Reforms

The achievement during the past five years in the State in the field of land reforms has been one, which any State may well be proud of. One of the greatest reforms is the replacement of the obsolete zamindari system by a new alignment with the ryotwari system. This great reform has been brought about by a legislation in 1947-48 and completed by executive action in 1949-50. But the full fruits of this reform will be realized only in the next two decades. The Rent Reduction Act is giving immediate relief to the ryots by reduction of rents and nearly one-third of the ryots in the State have got relief to the extent of 1-12 crores. Madras State has the unique distinction of being the first State to complete this reform.

A Land Reform Committee has also been constituted to go into the question of improvement and reform of land tenure and land revenue administration. The Committee, whose deliberations were spread over a period of ten months, has submitted a report which is under the consideration of the Government at present.

Industrial Progress

As in the case of agriculture, in industry too, research forms a most important part of Government's activity. For proper utilization of raw materials research is important and with this object in view, the Government have established an Experimental Mineral Section. The Mineral Section is being replaced by a Chemical Testing and Analytical laboratory for working out the process of utilization of minerals and other raw materials available in this State. Another research institution started is the Oil Technological Institute at Anantapur for conducting research on oils and fats.

To serve as model units and for training technical personnel the Government are running factories for the production of soap, coir, shark-liver oil, silk, paper and ceramic wares.

Six new textile mills with a total spindlage of 68,500 have been started and four existing mills have expanded their spindle capacities.

In cement industry, much headway has been made and the output in 1949-50, viz., 470,864 tons far exceeds the demand of 393,017 tons. The sugar industry also does

not lag behind. Thirteen sugar factories are now producing about 52,000 tons of sugar and with the expansion of capacities of five existing ones and the establishment of ten new ones, it is expected the production of sugar will go as high as 90,000 tons.

Affording medium and long term credit to existing and new industries is essential for the industrial progress of any State. A Government-promoted corporation, called the Madras Industrial Investment Corporation, started functioning in the latter part of the year 1949. So far it has sanctioned Rs. 35 lakhs as loan to various industrial enterprises. The Government on their part are affording all possible aids for the growth of industries in this State.

Labour

With the growth of industry, the strained relationship between labour and capital also increased. The machinery for the settlement of labour disputes, by means of conciliation, arbitration and adjudication has been working with great success in the State and has done much to restore cordiality in industrial relations.

The failure of monsoon has created another problem of phenomenal magnitude. An appalling number of agricultural labourers have been thrown out of employment. The Government lost no time in issuing directions to the District Collectors to take up immediately on hand works like minor irrigation, rural water-supply and other works connected with Grow More Food and employ these men. Thanks to the efforts of the district officials, over 127,000 labourers are daily employed in these works and serious catastrophe has been averted.

Public Health

Great attention is being paid to the health problems of the State. The expenditure on Public Health has also doubled. Rs. 54.49 lakhs were spent in 1945-46 and in 1950-51 Rs. 111.65 lakhs were spent.

Much leeway has also been made in the matter of providing medical facilities in rural areas. A number of Public Health centres dealing with both the prevention and curative aspects of health and having dispensaries attached to them, have been started. These institutions are within the easy reach of every section of the population in rural areas and serve as feeders to the more specialized institutions in the district.

A Three-Crore-Building programme is now on the anvil and shortly a number of medical institutions will be housed in permanent buildings.

Of the Public Health Schemes, the scheme for the provision of protected water-supply in every area of this State has received special attention of the Government. A special fund of a crore of rupees has been set apart for this purpose. Special measures have been introduced recently to accelerate the programme and to complete the provision of water-supply in rural areas in ten years. A Five-year Plan, beginning with the year 1949-50 for providing water-supply in municipal areas, forming part of a Twenty-year Plan to cover all such areas is also being implemented and provision has been made for an expenditure of Rs. 3.52 crores for the first five-year programme.

Transport and Communications

As important as the blood system with its veins, arteries and capillaries, is the network of Highways, for a

Our Food Position

By SRI P. S. KUMARASWAMI RAJA, Chief Minister.

The present food policy of giving up rural rationing and of procurement in the deficit districts, has found considerable support. It was not in the interests of the State, to treat the large body of agriculturists, who form the back-bone of the State, as law-breakers and potential criminals. There was not also sufficient inducement for them for growing more food, whose importance in the agricultural economy of the State, cannot be over-emphasised. A change in the policy was therefore absolutely necessary, and it was introduced with the concurrence of the Government of India. The new policy has now been in force for 6 months, and I may venture to state, that it has met with some success, and though it is too early to assess its results, with any degree of accuracy, indications are not wanting to show that we are proceeding on the right lines. The hundreds of complaints of harassment in procurement, and the valuable time spent on fruitless enquiries into such complaints, that formed the normal feature of the food administration, under the system of intensive procurement in deficit districts, have been eliminated to a very large extent. Wherever I go, I find that there is a sense of relief among the large body of agriculturists, whether big or small. Foodgrains are coming into the markets fairly, freely, even in areas remote from producing centres, though the prices are higher than the notified prices. But so long as the supply is not equal to the demand, the price question is bound to remain. It may, however, be stated, that the present market prices are definitely lower in most places, than what they were during the corresponding period of last year, when there was intensive procurement and full rationing. Rice is now available in the bazaar or in the streets, at prices ranging from Re. 1-2-0 to Re. 1-5-0 per Madras Measure, as against Rs. 1-8-0 to Rs. 1-12-0 which was the prevailing price in June of last year. Similarly in the case of millets also, the present market prices range from eight annas to 13 annas per Madras Measure, depending on the variety of millets, but the price last year was round about a rupee or slightly more. I do not at all suggest, that I am satisfied with the state of things, or that there is no scarcity or suffering. The present prices are still about 50 per cent or more higher than the notified prices. When there has been a failure of the monsoons for several years in succession, over a large portion of State, it is futile to expect a normal state of things, particularly after the greatest war known to humanity has violently upset the world's economy in almost all spheres. There is also the problem of unemployment among the agricultural labourers, whose earning capacity has been crippled. This is noticeable more in Coimbatore district than elsewhere, and about 22 gruel centres have been opened in that district so far. They are being run by non-officials with the official co-operation. It is a matter of gratification, that Rs. 50,000 sent to us from out of the Prime Minister's Relief Fund, came to the financial relief of these centres, as the same was distributed among them and also other districts, where similar centres have since been started.

In these circumstances, when I say that the new policy has met with some success all that I mean is, that in trying to mitigate the suffering brought about by a variety of causes, over which we have no control, the new policy

appears to be helpful and promising. Given a normal South and North-East monsoons this year, I am hopeful things would improve considerably.

I must however sound a note of warning about the vagaries of the monsoon, though we have only been too familiar with them during the last four years. This year's summer rains started off fairly well in April, when almost all the districts received more than the usual rainfall. In several districts, dry lands have been ploughed up for rain-fed cultivation, and the ryots were only waiting for another shower for extensive sowing. In the meantime the South-West monsoon, which had started off early proved disappointing subsequently in most of the districts, except in the two Westcoast districts of Malabar and South Kanara. The dry crops, that have already been raised on small patches, are now in a precarious condition, and might fail in the absence of rains in a few days. This only reminds us again, that our food position depends to a large extent, on a timely and well-distributed monsoon. We have, no doubt, spent large sums of money on the repairs to irrigation sources, and we have also distributed fairly large quantities of fertilisers and improved seeds to the ryots. Provided the monsoons are normal, it may not be very difficult to reach our target in the matter of food production. But it is needless to point out, that the realization of our expectation has necessarily to depend on the state of monsoon to a large extent. An irrigation source, though in very good order, cannot yield a crop, if it does not receive any supply; but I hope Providence will not let us down for the fifth year in succession.

In the midst of this uncertainty and scepticism, the Government of India's announcement increasing our allotment of foodgrains under the Basic Plan from 5 to 10 lakhs of tons, for which we had been pressing them all the while, is indeed very gratifying, though about 8 lakhs out of this, would consist of wheat and milo and perhaps more of wheat than of milo. The ordinary villager is still reluctant to accept wheat. All these quantities of unfamiliar foodgrains will have to be pressed into consumption before they begin to deteriorate. Instructions have been issued to all Collectors, asking them to open fair price shops freely in all areas, where the slightest need might be felt, and to issue cards liberally, not only to all non-producers, but also to partial producers, who would have by this time, mostly exhausted their slender resources. I would invite suggestions as how best we could utilise the large quantities of wheat and milo that we expect to get, and what steps should be taken to achieve our object, viz., removal of scarcity conditions and making foodgrains available to the poor at a reasonable price.

Our rice position, however, remains as difficult as ever, as the rice allotment still stands at the old level of 2 lakhs of tons, as against 2.85 lakhs tons of rice, which we got last year. As our State is mainly rice-eating, an increase in the rice quota would have been more appropriate. We have explained this position to the Government of India on several occasions before, and we would again try to impress on them, the need for a larger rice allotment by a reduction

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progressive State. Madras can boast of a metalled road length which exceeds the circumference of the Equator by 3,000 miles. With 27,148 miles of metalled roads, 626 miles of black-top roads, and 141 miles of cement concrete roads, Madras occupies the unique position of being the first State in India with regard to development of roads. The attention paid to the Road Development work may be gauged from the facts that the pre-war expenditure on capital works was on average of Rs. 21 lakhs against Rs. 318.28 lakhs in 1950-51 and the pre-war expenditure on maintenance on an average of Rs. 57 lakhs, against Rs. 521 lakhs in each of the years 1948-49, and 1949-50 and Rs. 473.69 lakhs in 1950-51. A fifteen fold increase in expenditure on new works and an eightfold increase on old works is a substantial contribution that the Government have made to the improvement of communications.

Nationalization of motor transport in the City of Madras has proved to be a great success and has afforded increasing facilities to the citizens. The Government transport fleet consists of 323 buses. In this short period of 3½ years, the Transport Department was able to turn out good work. More new routes have been opened, an automobile workshop, a coach building factory and a Central stores organization have been set up. In the year 1950-51, 32,000 road miles have daily been covered by Government buses.

Power Projects

The Madras Government, appreciating as they do the role of electricity in increasing the productive capacity, are working today a Five-year Plan costing 30 crores of rupees. Eighteen thousand KW of power have already been made available to the public under this plan. The plan envisages an additional power of 28,000 KW and 49,000 KW in 1951 and 1952. 1953 will see the completion of the Five-year Plan doubling the present capacity of power production in the State.

Early enough the Government had noticed the development of electricity in the urban areas only and to set right this lop-sided development many rural electrification schemes were taken up. To-day there are 1,700 villages electrified and Madras can claim to have the largest number of villages under electrification in all India.

The Government now generate 99 per cent of all the electricity sold in the State but distribute only 70 per cent of it directly to the ultimate consumer. The balance of 30 per cent is distributed through licensees, both local authority and private companies. In trying to implement their policy to intensify rural electrification, Government found that distribution through licensees was impeding progress and so decided to acquire all their undertakings. An Act was passed last year and acquisition is proceeding according to a programme. Already the Government have acquired in the recent months four private and three local authority undertakings. The Government are planning to take over all the remaining local authority undertakings in the quickest possible time. Thus in the next few years the process of nationalisation of the electricity supply industry would be complete.

Women's Welfare

There is yet another field in which Madras leads the rest of the States in India. Without fear of contradiction, it could be stated that it is only Madras that has a well organized Government Department looking after the work

connected with the emancipation of women in this State. Through 67 branches and 403 centres, the Women's Welfare Department spends Rs. 3.29 lakhs annually and trains women in handicraft, homecraft, tailoring, spinning, weaving, basketry, rattan work, motor-craft, etc.

Community Listening

The Radio has a vital role to play in the uplift of the villagers. It provides them entertainment besides enlightening them about the happenings of the world. The Government have been striving to provide every village with a radio set. The State Broadcasting Department after intensive research has produced a durable and cheap set which will be within the reach of even the poorest of panchayat boards or other institutions. There are at present 1,626 rural sets working in the various parts of this State.

Cultural Progress

On the cultural side, the Government have been endeavouring to encourage the development of regional languages. The Government award prizes to the best books on various subjects, arts and sciences in the four regional languages of the State. Best films are also awarded prizes. The exemption of dramas from the sales tax will, it is expected, enable the dramatic art to regain its past glory.

And thus concludes a rapid survey of the activities of the Government during the last four years of Independence. That the people have great sympathy with the Government's efforts is more than amply proved by the ryots thronging in thousands to give the Government a crore and over as loan to build a big project—the Manimathar Project—in Tirunelveli. It is in creating that realization in the ryot that the common good is inseparably bound with the Government's effort, that the greatest of achievement of the Government lies.

Correspondence in Regional Languages —Extension of Experiment Ordered

The Government have ordered the extension till the end of June 1952, of the experiment of carrying on all official proceedings and correspondence in regional languages at present conducted in Tiruchirappalli and East Godavari districts.

It may be recalled that the Government ordered in May 1948 as an experiment for a period of six months from May 1, 1948, that all official proceedings and correspondence in Tiruchirappalli and East Godavari districts should be conducted within each district, in the regional language of the district concerned; the correspondence with the Government being carried on in English.

After a review of the reports from the Collectors of the two districts and heads of the departments on the working of the scheme, it was ordered that the experiment should until further orders be continued and the Collectors were requested to submit through the Board of Revenue a detailed report specifying the facilities required for ensuring the smooth and successful working of the scheme. With reference to the Reports received from the two Collectors and the remarks thereon of the Board of Revenue the Government have decided to extend the experiment till June, 1952. The Government have also agreed to the purchase of as many Tamil and Telugu typewriters as there are typists for handling them.

Gruel Centres in Affected Areas

A sum of Rs. 50,000 was received from the Hon'ble Prime Minister as a donation from the Prime Minister's National Relief Fund for the purpose of distribution of food to the poorer section of the people in the areas affected by distress on account of the failure of rains and the consequent failure of crops. Besides this amount one, Mr. Walker R. Gorden of New York has sent a cheque for ten dollars and another sum of Rs. 11 has been received as a contribution by the Kalsa Middle School, Shogapora in Kashmir State. Of these amounts allotments have been made as shown below to the districts where distress prevails and where the purchasing power of the ryots has gone low due to the four consecutive years of adverse seasonal conditions :-

	Rs.
1. Coimbatore	5,000
2. Chittoor	3,000
3. North Arcot	3,000
4. Srikakulam	2,000
5. Tirunelveli	2,000
6. Nellore	2,000
7. Chingleput	2,000
8. Salem	2,000
9. Guntur	1,000
10. Visakhapatnam	1,000
Total	23,000

The Collectors of these districts have been asked to organize influential non-official committees to open and run gruel centres by means of non-official resources supported by Government aid mentioned above. The grain required for these gruel centres is supplied at controlled prices from the Government stocks. The steps taken in the districts where allotments have been made are detailed below.

Coimbatore district.—The District Famine Relief Committee is already running 21 gruel centres in the district and it is proposed to open 11 more centres. The Collector has applied for a further allotment of Rs. 10,000 in addition to a sum of Rs. 5,000 already sanctioned. The additional sum applied for will be sanctioned shortly.

Chittoor.—The Collector has issued orders for the opening of gruel centres in the following four places :—

Vanganoor and Ramakrishnarajupet in Tiruttani taluk, Narayanavaram in Puttur taluk, and Etteri in Chittoor taluk.

The question of opening more gruel centres is under the consideration of the Collector; he is also taking steps to form non-official relief committees.

North Arcot.—Gruel centres are already working in Thellar of Wandiwash taluk, Thandarambatti in Chengam taluk and in Tiruvannamalai town. Non-official committees have been formed in all taluk headquarters and in all important places to enlist public co-operation and to open more gruel centres.

Tirunelveli.—The conditions prevailing in the district are fairly satisfactory except in Vilathikulam area in Koilpatti taluk. Six gruel centres are proposed to be

opened in this area. A sum of Rs. 500 has been donated by the people of Vilathikulam and a gruel centre has been opened there. Sri Dandaram, the Manager of the Laxmi Mills, has offered to meet the expense of one centre for two months at a cost of Rs. 1,800 and the Managing Director of Loyal Mills, has offered to bear the expenses of another centre. The Raja of Ettayapuram has agreed to donate a sum of Rs. 900 to run one centre for one month. Donation to an extent of Rs. 500 from the Co-operative Stores, Ettayapuram, and Rs. 400 from the public are expected. The Town Congress Committee, Koilpatti, and the Taluk Congress Committee have been requested to collect funds each to run a gruel centre.

Nellore.—The need to open gruel centres is not felt. The Collector is however examining the question. In view of the alleged influx of the poor into Nellore town from Chingleput and Chittoor districts, Sri V. Raghaviah, M.L.A., has represented that at least three gruel centres may be opened in Nellore town. The question is being considered.

Salem.—The Collector has reported that only a few centres need be opened in needy areas.

Reports from the Collectors of Chingleput, Guntur and Visakhapatnam regarding the opening of gruel centres in those districts are awaited.

Our Food Position

(Continued from page 7)

in the wheat or even milo quota to the appropriate extent, if necessary. But it is difficult to say, how far they would be in a position to comply with our request. As things stand, our rice shortage for the rest of the year, would roughly amount to 1.5 lakhs of tons, inclusive of a month's buffer, that we should necessarily have on 1st January 1952. How is this deficit to be met in the event of the centre not being able to comply with our request? We are no doubt, taking steps to maximise our procurement in the surplus districts, but there may not be much scope for improvement in this direction, as our procurement has been generally speaking, fairly efficient. We are now giving 8 oz. of rice through ration shops and 2 oz. of rice through fair price shops. The demand under the latter is likely to amount to about 80,000 tons, on a rough computation for the rest of the year. This is not however, a new commitment. Even when the new policy was introduced, it was decided that in order to meet the demand for rice from areas, where there would be no rationing, 20 per cent of the imports into each deficit district, should be allowed to percolate to the villages through trade channels, subject to some sort of supervision by Government. Now that we have arranged to open fair price shops at all places, where a need is felt for them, we have only canalised the distribution of this quantity through these fair price shops. This is not therefore a new commitment, as some people seem to think.

—(From the speech at the recent Food Advisory Committee Meeting).

Food Offences, and Punishments Awarded

During the fortnight ending April 15, 1951, 408 cases of prosecutions were disposed of against food offences in the Madras State except in the district of Ram-nathapuram. The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines ranging from Rs. 1 to Rs. 500 and sentences of imprisonment up to 2 months were imposed.

In Krishna district G. Venkatappaiah and Y. Sreemannarayana, ryots, were each fined Rs. 200 for selling foodgrains to unauthorized persons, S. Subba Rao was fined Rs. 500 for running a mill without obtaining licence, G. Lakshminarayana, ryot, was fined Rs. 500 for disposing of surplus paddy to persons other than the procuring agents and Ch. Pattabhiramiah, mill owner, was fined Rs. 500 for incorrect maintenance of mill accounts.

For possession of rationed articles without authority, Kaliammal of Salem district was fined Rs. 200. A fine of Rs. 200 was imposed on Raghavendra Rao of the same district for import of foodgrains in excess of the quantity covered by permit.

A fine of Rs. 200 each imposed on K. Kotrabasiah and Hulli Sanna Veerappa of Kotharu village in Kudligi taluk of Bellary district for illegal transport of sugar.

P. Peda Appa Rao of East Godavari district was sentenced to pay a fine of Rs. 200 for unauthorized sale of cholam.

During the same fortnight other departmental punishments such as warnings, fines, forfeiture and enhancement of security deposits, cancellation of retail and wholesale licences, etc., were also awarded in 227 cases.

During the fortnight ended April 30, 1951, 888 cases of prosecutions against food offences were disposed of in the Madras State except in the districts of Cuddapah, Kurnool and Srikakulam. The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines ranging from Rs. 1 to Rs. 800 and imprisonment up to 2 months were imposed.

In West Godavari district, for milling paddy without a permit Md. Mulkwal was fined Rs. 300 and for illicit storage of rice Sri G. Venkanna, Tadepalligudem, was fined Rs. 800.

K. Ramana Reddi of Nellore was fined Rs. 500 for illicit sale and transport of foodgrains.

A fine of Rs. 200 was imposed on Nadiupetti Satyanarayana Raju of East Godavari district for sale of paddy to an unauthorized person.

Muthusamy and Rangan Ambalam of Tanjore district were each fined Rs. 200 for illicit transport of three bags of paddy.

During the same fortnight other departmental punishments such as warnings, fines, forfeiture and enhancement of security deposits, cancellation and suspension of security deposits, etc., were also awarded in 240 cases.

Improvement of Rice Diets

Enrichment of rice reduces the mortality due to the incidence of beri-beri. Enriched rice should be used as an emergency food only. From a long term view point, general improvement of rice diets in other ways is needed.

Washing before cooking has a very great effect on the nutrient content of rice. Washing and cooking practices differ widely in different countries. Highly milled rice loses all the nutrients during the process of washing but no loss occurs in the discarded cooking water. By improving the quality and cleanliness of rice, the need for washing will be lessened. Two methods of cooking are in vogue (1) the washed rice is placed in small quantity of cold water and boiled until all the water has been absorbed, (2) the washed rice is put into a large volume of boiled water, cooked and the surplus water is drained off. Owing to the discarding of the excess water, the second method is found to be inferior to the first.

Therefore, it would be ideal to design a milling machinery just like the hand-pounding technique to conserve the

nutrients in the rice grain. Par-boiling, the technique of rice enrichment, demonstrates the effect of washing and cooking and consequently conserves the nutritional value of rice.

It is important to observe the nutrient content of rice in relation to variety and cultural conditions. A problem of interest is the relation between the thickness of the Aleurone layer and the content of the grain in protein and other nutrients. Coarse varieties of rice, in which the Aleurone layer is thicker than the average, are generally richer in protein than ordinary rice.

The typical rice diet contains an excess of rice but the necessity for introducing other cereals and articles of foods, like Fish, Pulses and vegetables has also be emphasised. In the planning of national food production policies, attention should be given to supplementary items of food which have a special value from the stand-point of 'nutrition'.

Agricultural Organization in the State

By SRI N. MURUGESA MUDALIAR, Deputy Secretary to Government, Food and Agriculture Department.

Before I describe the agricultural organization in Madras State, let me very briefly sketch the organization in the World and the all-India spheres. The Food and Agricultural Organization was set up by the United Nations in order to promote collective action by the Member Nations to secure improvements in the efficiency of production and distribution of food and agricultural products, to better the condition of the rural population and thus contribute towards an expanding world economy. India is a member of the F.A.O., and an annual report is sent to it on the agricultural progress in this country. India can obtain technical assistance of the experts of the F.A.O., for its development programmes. A Liaison Office of the Regional Representative of the F.A.O. is located in New Delhi. Another attempt at international organization is the Colombo Plan which was prepared last year by the Commonwealth Consultative Committee on South and South-East Asia. This plan has given due importance to agricultural development and organization and many Commonwealth countries have already given effect to their technical assistance programmes. Both the F.A.O. and the Colombo Plan are of recent origin. India has been for a long time a member of the Commonwealth Agricultural Bureau. Indian Agricultural Scientists are on its list of research workers and there is exchange of technical literature and periodicals through its agency.

In the all-India sphere, the Indian Council of Agricultural Research which came into being as a result of the recommendation of the Royal Commission on Agriculture in India, receives an annual grant from the Government of India, and is the central organization for the furtherance of agricultural and animal husbandry development throughout the whole of India. It finances research and development schemes in agriculture and allied fields in the various States. It has on its staff an Agricultural Commissioner and an Animal Husbandry Commissioner. The Indian Agricultural Research Institute and the Indian Veterinary Research Institute run by it are the highest institutions for agricultural and veterinary research and post-graduate training. Apart from the Indian Council of Agricultural Research, there are separate Commodity Committees for cotton, jute, oilseeds, sugarcane, tobacco, coconut, arecanut, etc. These committees promote research in the various commodities with which they are concerned. Official and non-official representatives from the States are represented on the Indian Council of Agricultural Research and these Committees. Besides the Indian Agricultural Research Institute, the Indian Council of Agricultural Research maintains the Central Rice Research Institute at Cuttack, the Potato Research Institute at Patna and the Vegetable Breeding Station at Kulu. The Central Tobacco Research Station is located at Rajahmundry, the Oilseeds Research Station at Kasaragod and the Banana Research Station at Aduthurai within this State. The meetings of the Indian Council of Agricultural Research and other Commodity Committees and their technical Committees provide the meeting ground for agricultural scientists throughout India to promote research and development.

The State agricultural organization is manned at the top by the Director of Agriculture, who very frequently is a senior member of the Civil Service and sometimes a senior and selected member of the State Agricultural Service. The Director is assisted at headquarters by one Joint Director of Agriculture and three Deputy Directors of Agriculture, all of them technical men. The Joint Director of Agriculture is in charge of the Agricultural Engineering activities and of the supply and distribution of fertilizers and iron and steel for agricultural purposes. He is also the manure controller in the State. It is his duty to see that manure mixtures marketed by the private trade conforms to the guaranteed K.N.P. composition. The Headquarters Deputy Director in charge of Research has to control the progress of research conducted by the various specialists at the Agricultural Research Institute, Coimbatore in accordance with the triennial programme approved by the State Government. He has also to watch and guide the work done at about forty Agricultural Research Stations throughout the State. The other two Headquarters Deputy Directors of Agriculture are for demonstration and propaganda, for carrying out the Grow More Food. Programme and for local inspections and enquiries.

The Commissioner of Food Production is in charge of the Grow More Food Programme of all departments, viz., Agriculture, Irrigation, Revenue, Fisheries, etc. In respect of agricultural schemes, the Director of Agriculture and his staff work in close consultation and union with the Commissioner.

At headquarters, there is close co-ordination with all the connected departments not only in respect of food production but also in matters of general agricultural interest like Animal Husbandry, Forests and Irrigation. The Director of Agriculture is a member of the Agriculture and Irrigation Development Board, the Livestock Development Board and Fodder and Grazing Committee, the Soil Conservation Board and such other bodies.

At the district level, the principal officer is the District Agricultural Officer. There is one such officer for each district and in respect of some heavy districts, the district is bifurcated. The District Agricultural Officer is responsible for carrying out the agricultural programme for the district laid down by the Director and is subject to advice and control by the Collector of the district who is responsible for the general economic progress of the district. Between the Director of Agriculture and the District Agricultural Officers, there are eight Regional Deputy Directors of Agriculture, each in charge of a group of districts. The Regional Deputy Directors, who are technical supervisors of the work of the local Agricultural officers, are expected to co-ordinate the work in adjacent areas in their tract, look into the complaints made by the public and conduct local enquiries.

Under the District Agricultural Officer, is the Agricultural Demonstrator, who is in charge of a taluk, or if a taluk is big, a bifurcated taluk. His work is the most important because he is the person who is to carry out demonstration and propaganda of improved agricultural

practices recommended by the Research Institute at Coimbatore and the various Research Stations. He has to keep in touch with the ryots, make himself popular and be ready to render service whenever required. Every Demonstrator has a full equipped show-room containing instructive charts, specimens of departmental seed strains, propaganda leaflets and posters, improved ploughs and other machinery. His office cum depot is usually located near the Taluk office or some other office which is frequented by the agriculturists and you can recognize it by the green signboard. Each Demonstrator has under him a few fieldmen and maistris. At present, there are about one fieldman for two firkas and roughly one Demonstration maistri for each firka. The fieldmen and Demonstration maistris are expected to know intimately each cultivator in his jurisdiction, record the performance of seeds or results of cultural and manurial practices carried out on ryot's fields and to communicate then to the Demonstrator for onward transmission to the Research Branch. These fieldmen and maistris are inadequate in number and they do not have any distinguishing uniform or head-dress, like the Sanitary Inspector or the postman. But, they should be familiar persons to every progressive agriculturist who is on the watch for improved seeds or for new ideas from the taluk agricultural office.

All Agricultural Demonstrators are agricultural graduates. The Coimbatore Agricultural College is affiliated to the Madras University, and the Bapatla Agricultural College to the Andhra University. The personnel employed on the research side are also persons possessing basic qualifications in Agriculture or in fundamental sciences, like Botany, Chemistry, Zoology, etc. No agricultural organization is complete without agricultural colleges turning out qualified men to undertake and cope with the new demands in Agriculture. The Madras State is unique in having two Agricultural Colleges to cope with the work relating to the post-war schemes in Agriculture.

Agricultural progress depends on research and such research is carried out by the Specialists at the Research Institute at Coimbatore, which is one of the most important Research centres in India. The names of many eminent Agricultural Scientists have been associated with it in the past. The Agricultural Research Stations which cover a wide variety of crops and fruits are also live centres for Research.

Seed multiplication work is an important item of work after the crop breeder has evolved and released a new strain. In order to produce pure seeds from Seed Farms, there are five Seed Development Officers in the State.

Madras has a fairly well developed Plant Protection organization. At Coimbatore and Bapatla are stationed Plant Protection Officers to control the operation of the plant protection squad in the southern and northern districts, respectively. Each district has got a small field staff of plant protection assistants and fieldmen and maistris to attend to outbreaks of pests and disease, just as they would in case of the outbreak of plague or cholera. Plant quarantine work is also done at ports and at certain frontiers of areas to which the Agricultural Pests and Diseases Act is extended.

In connexion with the rapid advancement of mechanisation, each district is provided with two Agricultural Engineering Supervisors, with subordinate staff like

foremen, drivers, etc. These district Supervisors are controlled by Assistant Agricultural Engineers who exist for a group of districts. This staff attends to tractors, oil engines, electric motors, sprayers, dusters, etc. There is an excellent Research Engineering Workshop at Coimbatore and two Tractor Workshops at Bapatla and Coimbatore and a Central Store at Guindy.

The problem of bridging the gap between the results of research and the actual practice of the agriculturists has been the most serious one in all countries. The success in living problem will depend upon the standard of education and living of the farmer and his resources, and not so much on the quantity of staff employed by the State. The importance of Extension Service has again and again been repeated. The Fiscal Commission and the Central Planning Commission have laid great importance on organizing extension service in selected blocks in order to maximise production. In Western countries, this extension service is mainly if not wholly a voluntary service. In England, the National Agricultural Advisory Service provided by the Country Agricultural Committees appears to be a magnificent success in the democratic organization of the countryside for its own self-help. America has a highly developed machinery financed by federal grants. A successful extension service will depend on the ability to find local leaders, with adequate knowledge of agricultural matters and influence over the rural folk. In this State, a unique experiment has already been set afoot in order to meet the requirements of the extension service, i.e., the organization of Village Multi-purpose Co-operatives. If every village has a multi-purpose organization which will receive the instructions of the Agricultural department, and supplies and services made by it for distribution and popularization among members and non-members in its jurisdiction, and take on its own account such work as seed-multiplication, etc., the extension organization will be complete and effective.

The culmination of agricultural production is proper marketing. Agricultural marketing problems are attended to by the State Marketing Officer who has four Regional Assistant Marketing Officers working under him. Compilation of agricultural statistics and issue of crop forecasts are attended to by the Economic Adviser.

The Agricultural Organization is not without its aesthetic side. The Government Botanical Gardens in Ootacamund is one of the finest gardens in the East. Grants-in-aid are also given to Agri-Horticulture Societies.

In this State, there is no machinery for stabilization of prices of agricultural produce. But regulated markets have been set up for commercial crops in all important tracts, and food grains are at present being controlled in conformity with the all-India policy. But no machinery for guaranteeing an economic price for farmers for their farm produce has ever been set up. If an exception should be made, it is only in respect of sugarcane, whose minimum price has been fixed in order to regulate supplies of cane to the factories.

The Agricultural Organization will not be complete without facilities for agricultural credit. In this State, agricultural credit societies have recently been reorganized. Their number rose from 13,740 at the beginning of the year 1949-50 to 15,348 at the end. Their membership also increased. They issued loans during the year to an extent of Rs. 644 lakhs. More than 95 per cent of the loans were

given for productive purposes. The loans issued by the Central Land Mortgage Bank amounted to Rs. 72.24 lakhs. Loans are also given by the Revenue Department under the Agricultural and Land Improvement Loans Acts. These are called Takkavi Loans. Apart from credit facilities, the Co-operative Department is also organizing Agricultural Improvement and Marketing Societies for the benefit of growers.

The Madras Agriculturists' Relief Act provides a means for relief of agricultural indebtedness.

There are no national Unions of farmers as in other countries but there are Peasant Federations and Kisan Organizations. In Madras there are a few well-organized District Agricultural Associations. The Madras Chamber of Agriculture has also branches in several districts. Non-officials are associated with the District Food Production Committees and the State Food Advisory Council.

The Universities are now taking a lively interest in the improvement of agricultural education. Some have also come forward to organize demonstration farms with the help of students and staff.

I should not forget to mention the part played by the radio and the press in making the agricultural organization complete, as they are a very valuable vehicle for propaganda besides the departmental journals like "Mezhiselvam" which have gained enormous popularity.

Many of you who have listened to this talk, I am sure, are directly or indirectly interested in agriculture. The prospectus of the Agricultural Organization in this State, which I have given, may be of some benefit to you. The organization exists for you. Please make use of it. Yes, it exists for you.

—By Courtesy—A.I.R., Madras.

Intensive Manuring Scheme

At the instance of the Government of India, the State Government sanctioned in 1950-51, a scheme for concentrating the supply of chemical fertilizers in the Deltaic districts. The Government ordered that the Takkavi loans should be granted free of interest to ryots at the rate of Rs. 25 per acre up to a maximum of Rs. 200 per individual ryot, to enable them to purchase chemical fertilizers for their paddy crops. The scheme was initially implemented in respect of the first crop. Later, it was extended to second crop of paddy in the Districts of East and West Godavari. A sum of Rs. 72,00,000 was provided for the disbursement of loans to the ryots for 1950-51 and a sum of Rs. 61,36,473 was actually disbursed towards the purchase of chemical fertilizers.

The scheme was a great success during 1950-51. The Government have therefore decided to introduce this year (1951-52) the Intensive Manuring Scheme in all the intensive cultivation areas mentioned below and to provide necessary facilities for the grant of loans to the ryots in these areas for the purchase of fertilizers.

The following areas have been classified as intensive cultivation areas for the year 1951-52 and Food Production Schemes executed in those areas will be eligible for financial assistance from the Government of India for the year, 1951-52.

(1) Srikakulam, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Nellore, South Arcot, Tanjore,

Tiruchirappalli, Madurai, Tirunelveli, South Kanara and Malabar Districts.

(2) Selected areas with assured water-supply from rivers and wells in the districts of Ramanathapuram, Bellary, Kurnool, Cuddapah, Chingleput, Chittoor, North Arcot, Coimbatore, Salem and the Nilgiris.

In the districts of South Kanara, Malabar, Bellary, Cuddapah, Kurnool, Visakhapatnam, Chingleput, Coimbatore, Chittoor, Salem, Srikakulam, North Arcot, Ramanathapuram and the Nilgiris, the existing staff will attend to the disbursement of loans under the scheme. A special staff, as in last year, has been sanctioned for the deltaic districts of East Godavari, West Godavari, Krishna, Guntur, Nellore, South Arcot, Tanjore and Tiruchirappalli, Madurai and Tirunelveli. The Government have programmed to distribute a total quantity of 1,00,000 tons of ammonium sulphate in conjunction with phosphates in these areas for the year, 1951-52. The intention is that, out of this quantity, a major portion should be utilized for the long term crop of paddy.

The following special facilities have been provided under the scheme. Takkavi loans will be liberally granted to needy agriculturists. An additional staff consisting of one Special District Agricultural Officer and several Agricultural Demonstrators, majistries and fieldmen will operate in each of the ten deltaic districts so that the disbursement of loans might be effected speedily and the ryots instructed, when necessary, on the mode of application of these fertilizers. Fertilizers will be taken within easy reach of the agriculturists. Loans will be granted free of interest and on the personal security of the ryots concerned. Agricultural Demonstrators will provide every assistance to the ryots for obtaining these loans and for purchasing these fertilizers.

Ryots are therefore advised to make full use of the special facilities granted to them and thus to make a substantial contribution towards achieving self-sufficiency in foodgrains.

One hundred pounds of ammonium sulphate and 50 lb. of superphosphate should be supplied to each acre under paddy, the former for top-dressing one month after planting and the latter just before planting. The above dosage is in addition to a good basal dressing of about 3,000 lb. of green or green-leaf manure or about 5 tons of cattle manure. This will easily secure an additional production of 300 lb. of paddy (2 bags) per acre.

Areas under the Intensive Manuring Scheme

The Government direct that the following areas commanded by the New Well Subsidy Scheme, 1951-52, which have since been included in the Intensive Cultivation Areas should also be brought under the Intensive Manuring Scheme and necessary facilities for the grant of loans to the ryots in these areas for the purchase of fertilizers should be provided.

(1) The whole of Chingleput district; (ii) the whole of North Arcot district excluding Chengam and Tirupattur taluks; (iii) Puttur, Chittoor, Tiruttani, Kalahasti and Chandragiri taluks of Chittoor district; and (iv) Ramanathapuram, Paramakudi and Tiruvadanai taluks of Ramanathapuram district.

Crop Competition, 1950-51

The Government have declared Sri K. Vellaiya Gownder, Thathampatti village, Salem district, as the State Prize Winner, for having obtained highest yield of 12,000 lb. of paddy per acre. A cash award of Rs. 500 plus a gold medal worth Rs. 100 will be given to him. This yield compares very favourably with the average yield of the Madras State.

The story of how this record yield was obtained, as told by the prize winner himself, is given below:—

The total area of paddy cultivated was all told 44 acres of which the competition plot was 2.26 acres. GEB. 24 seed-farm seed obtained from Krishnagiri Agricultural Depot was sown in nursery for the purpose on 25th of July 1950. The seedlings were transplanted on 30th August 1950. The crop was harvested on 8th January 1951. Barur tank east main channel supplemented by my perennial well was the source of irrigation. About one foot both ways was the space left for a single seedling.

Details of manure applied

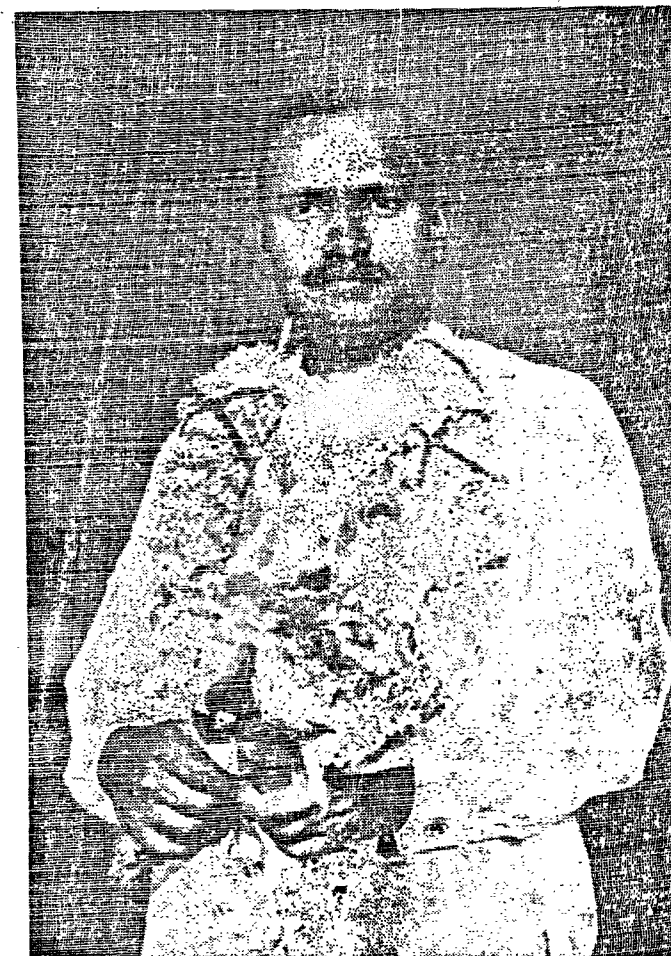
About 400 heads of cattle and sheep are being penned for the last four years during the months of February to July. There is a perennial well which is easily accessible to cattle. This facilitated all the stray cattle from Tirupattur to Barur, a distance of 20 miles to crowd in that area of 2.26 acres near the well especially during the hot months of February and July when there will not be drinking water anywhere if the season were to be bad. These cattle used to stay days together. The field was given a number of ploughings to cover up the droppings.

Being the leaf contractor of the Barur project for the past fifteen years I had the advantage of applying about 30 cart-loads of pungam leaves to that area of 2.26 acres. This dose was applied after about eight ploughings about 15 days prior to transplanting on 15th August.

As per departmental advice I had produced 45 tons of subsidized rural compost. One day prior to transplanting 25 tons of this compost and 15 tons of cattle manure were applied in the competition plot of 2.26 acres.

A mixture of 5 bags (224 lb. each) of bone-meal and 12 bags of groundnut cake (powdered) was also applied on the day of transplanting and puddled in.

During the time of first yielding after 20 days from transplanting on the 30th of August, 36 Madras measure,



Sri Vellaiya Gownder, the prize winner

of "Sovereign Brand" Desi manure composed of night-soil and urine of human beings and cattle and leaves of Virali (Dodaria) were applied. During the second yielding ten days later, three straw bags (93.5 lb. each) of ammonium sulphate were applied. This dose was repeated again 20 days later after topping the yield. It was also repeated again for the entire area of 2.26 acres for the third time at the short blade stage.

Manurial Treatment of Crops

In order to obtain maximum yields in plantain, potato and coconut, the following manurial treatments recommended by the Agricultural Research Stations may be followed:—

1. Plantain: Application of castor cake caused early flowering whereas fish guano gave normal flowering. Cattle manure improves the keeping quality of fruits. Potash improves the taste of fruits, but the "keeping" quality is not affected. Plantain manured with 3 lb. groundnut cake and 2 baskets (30 lb.) of farm-yard manure per plant gives good yields.

2. Potato: Manure mixture, now known as Nanjanad mixture, containing 500 lb. of groundnut cake, 200 lb. of ammonium sulphate, 336 lb. of concentrated super, 50 lb. of steamed bone-meal and 224 lb. of sulphate of potash would be enough for an acre and would give maximum yields.

3. Coconut: Coconut is a prominent crop along the coastal areas which have a sandy soils. Application of 20 lb. of ash and 44 lb. of ammonium sulphate per tree has recorded significant increase in yields and this is the most economic dosage to be adopted all over the State.

Towards the Welfare of the Depressed

By SRI A. B. SHETTY, Minister for Agriculture.

The backward condition of our Harijan brethren is mainly due to the age-long practice of untouchability and the in-equality of opportunity from which they have suffered during the past so many centuries. The problem of depressed classes in India has arisen out of the ancient system of caste.

Attempts have been made in the past by our great religious reformers like Buddha, Ramanuja, and Chaitanya, to remove this evil of caste tyranny from Indian life and spread the gospel of equality and brotherhood of man. In more recent times, Dayananda Saraswati, Ramakrishna Paramahansa and Swami Vivekananda have pleaded the cause of the Depressed Classes. When Gandhiji entered the arena of Indian politics, he found that the insurmountable social and religious barriers existing among the people were responsible for many of our political difficulties. He rightly thought that the consolidation of the Hindu Society and the attainment of National unity should be made issues of first-class political importance. All classes and communities must make common cause and march together in the Battle for Independence. Hindu-Muslim unity and the abolition of untouchability became, therefore, essential items of Gandhiji's revolutionary programme for winning Swaraj. By precept and example, he has been able to effect a remarkable change of heart in us towards Harijans. His epic fast which shook Hindu society and led to the Poona Pact in 1932 and his famous Harijan tour and the great wave of feeling which it aroused throughout the country in favour of these unfortunate people, have become notable events in the history of Harijan emancipation work.

Since 1920, the Labour Department has been working for the improvement of the social and economic conditions of the Harijans by various measures. The pace of ameliorative work was quickened when the Congress came into office in 1937. The Harijan Temple Entry movement was started in Madras by an Ordinance which was replaced later by an Act. The Removal of Civil Disabilities Act was first passed in 1938 with a view to remove the disabilities imposed on the Harijan community by social custom and usage. The present Congress Government have increased the ameliorative work of the Labour Department both in volume and variety. A crore of rupees was set apart in 1946 as a separate fund for Harijan Uplift work in addition to the usual provision made from general revenues every year for ameliorative work for the Harijans. A special Committee was constituted in 1947 to formulate a five-year plan for Harijan Welfare work. A separate department has been opened in April 1949 and put in charge of the ameliorative work which the Labour Department was doing. Sri V. Bashyam Ayyangar, retired High Court Judge, who has devoted himself heart and soul to the service of the Harijans is the Honorary Director of this Department, and there is a staff of Welfare Officers working under him.

The amount of Government expenditure on the uplift of Harijans has increased from Rs. 29 lakhs in 1945-46 to Rs. 110.5 lakhs in the current year. Rupees 85 lakhs of this amount has been allotted for educational work which includes Rs. 21 lakhs grants to hostels, Rs. 17 lakhs

for mid-day meals in schools and Rs. 10 lakhs for scholarships. Government are at present maintaining 22 hostels for Harijans at a cost of over Rs. 1.5 lakhs. Four hundred and fifty-one hostels accommodating about 11,000 pupils were subsidised in 1950-51. The number of special schools run for Harijans has risen from 1,100 in 1946 to 1,300 and the strength of pupils has also gone up from 78,000 to nearly 100,000. The time has come to consider whether it is necessary to continue to run separate schools and hostels for Harijans and keep them apart from children of educationally advanced communities. Full fee concessions are given to Harijan children in schools. Scholarships and stipends are also given for education in these schools as well as in Industrial, Commercial and other professional schools and colleges. Poor Harijans are granted house-sites at the rate of 3 cents in wet lands or five cents in dry lands free of cost. Lands are assigned for cultivation. Financial assistance is given for purchase of agricultural requisites. Co-operative societies have been organised for settling Harijans in colonies. There are also other co-operative societies working for the benefit of Harijans in various ways. Wells, pathways, latrines and other amenities are being provided in Harijan cheris. Government have relaxed certain rules regarding the minimum general educational qualifications and the age limit prescribed for certain posts so as to help Harijans in getting appointments in Government service. The new Constitution of India has put legal stamp on the abolition of untouchability. The statutory equality of status accorded to untouchables opens a new chapter of social democracy in India. In the Parliament (House of the People) out of 75 seats allotted to the Madras State, 12 are reserved for Scheduled Castes. In the Madras Legislative Assembly out of 375 seats, 62 have been similarly reserved. Reservation of seats has also been provided in the New Village Panchayat Act which has come into operation since last April.

We shall have to consider to what extent we have been able to improve the deplorable condition of our Harijan brethren by the ameliorative measures taken so far. The Harijans have no doubt been given equal rights of access with members of other castes and communities among Hindus to all Hindu temples and places of public resort such as schools, wells, hotels, etc., by the Madras Temple Entry Authorisation Act and the Removal of Civil Disabilities Act which have been amended in 1947. The psychology of the untouchables which had once degenerated to such an extent as to make the great body of them accept their degraded position as natural and inevitable has undergone a change in recent years. A gradual change has also been taking place in the attitude of caste Hindus towards Harijans. Yet we see the Harijans continuing to live as untouchables in the same old way in cheris segregated from other Hindus. The spirit of social exclusiveness seems to persist in India as the colour bar does in America. It is a complex having unsuspected reserves of strength.

The Scheduled Classes with 86 subdivisions and the aboriginal and hill tribes with 28 classes of their own

(Continued on page 17)

Educational Facilities to Harijans

Realizing that the educational advancement is the forerunner of all progress, special attention is being paid to the provision of educational facilities to Harijans. In order to encourage elementary education among Harijans, more Harijan Welfare schools have been started. On 1st April 1950 there were 1,290 Harijan Welfare schools in the State, with a total strength of 98,744 pupils. From 1945 onwards there has been a steady increase in the number of schools, teachers and the pupils reading in them, as may be seen from the following statement:—

Year.	Number of schools.	Number of teachers.	Number of pupils.
1945-46	1,112	2,027	68,845
1946-47	1,148	2,207	77,674
1947-48	1,194	2,469	84,432
1948-49	1,205	2,624	94,950
1949-50	1,290	2,834	98,744

According to the recommendation of the Provincial Harijan Welfare Committee which the Government have accepted, separate schools are run for Harijans where the need for such schools is felt.

Boarding Grants.—In order to help poor Harijan students to secure good and adequate food while at school, provision has been made for the sanction of boarding grants to private hostels and institutions which accommodate Harijan pupils studying in schools and colleges. The boarding grants sanctioned for the last five years and the number of pupils benefited are as below:—

Year.	Number of pupils granted boarding grants.	Amount spent.
1945-46	1,885	2,29,034
1946-47	2,234	3,43,740
1947-48	3,966	5,13,267
1948-49	6,753	10,08,305
1949-50	8,580	12,84,035

The figures for 1949-50 clearly show the encouragement which the Government are giving to the education of the Harijan pupils. The Government are also maintaining 22 hostels (3 for girls and 19 for boys) at a cost of Rs. 1,56,808.

Midday meals.—Midday meals are supplied to the children of eligible communities reading in Harijan Welfare elementary schools. The system of supply of midday meals has been extended to all the schools in the States and the expenditure on this has slowly increased from Rs. 8,00,000 in 1945-46 to Rs. 12,52,500 in 1949-50. The table below gives the number of pupils fed and the amount spent for the past four years:—

Year.	Number of pupils fed.	Amount spent.
1945-46	64,000	8,03,992
1946-47	71,541	10,48,978
1947-48	74,319	11,15,704
1948-49	85,732	12,30,964
1949-50	87,339	12,52,498

The supply of midday meals is being continued to the Harijan students as recommended by the Provincial Harijan Welfare Committee.

Scholarships.—Residential and non-residential scholarships are granted to Harijan pupils and converts by the Harijan Welfare Department. In order to remove uncertainties regarding the conditions of the various educational concessions from year to year, the Government have taken the following long-range decisions:—

(1) that full fee concessions be granted to pupils belonging to Harijans and other eligible communities studying in secondary schools and colleges for a period of 10 years from 1948-49,

(2) that the pupils be allowed the benefit of scholarships and boarding grants for a second year in the same class;

(3) that the pupils need not ordinarily produce poverty certificates, and

(4) that full fee concessions be granted to all Harijan pupils in elementary and higher elementary schools irrespective of the income of their parents.

The figures given below will speak to the progress made in this direction:—

Year.	Number of scholarships.	Amount spent
1945-46	6,594	1,61,369
1946-47	5,829	1,81,722
1947-48	5,980	2,20,291
1948-49	7,697	3,07,566
1949-50	13,969	5,46,902

Towards the Welfare of the Depressed

(Continued from page 16)

form a considerable percentage of the population in our State. All these classes are eligible for the ameliorative measures undertaken by the Government. Our Prime Minister, Pandit Nehru, has pointed out how in the modern world all real progress and advance has become very much a joint affair and a backward group pulls back others. The spirit of the age as he says, is in favour of equality which means equal opportunities for all and no political, economic or social barrier in the way of any individual or group. Therefore not only equal opportunities must be given to all, but special opportunities for educational, economic and cultural growth must be given to backward groups so as to enable them to catch up to those who are ahead of them. The present policy of the Government in regard to Harijans and backward classes is aimed at bringing about such a result. It is the duty of all the people to understand aright the spirit and intention of Government policy and act in accordance with it.

—(From the address delivered at the Harijan Conference at Tiruvannaimallur).

Training to Grama Sevaks

The Government have ordered that the Grama Sevaks who are working in the Rural Development Scheme, be given one week's course of Cub Masters' Training along with the regular course of Grama Sevaks training at the Vidyalayams. The Scout training will be given by a Provincial Officer and an Associate Officer of the Bharat Scouts and Guides.

The Saraswathi Mahal Library, Tanjore

By SRI S. GOPALAN, B.A., B.L., Honorary Secretary.



Members of the Research and Copying Staff of the Saraswathi Mahal at work.



A palm leaf manuscript more than 400 years old, a rare commentary of Tiruvaimozhi of Nammalwar. Above is seen a picture of Sri Mahavishnu in Sesha Sayanam with Sri and Bhudevi in one of the leaves.

The Saraswathi Mahal is rightly considered one of the wonders of the world. But unfortunately it is a wonder of which enough is not known. There is a vague and general idea that it is merely a treasure-house of Sanskrit learning or a mere museum of antiquarian interest of a repository of ancient knowledge and quaint wisdom. It has yet to be realized that it is an institution of vital significance in the present and future. It is a fit centre of research for the Scientist, a testing ground for the medical man, an endless adventure for the historian and a voyage in realms of gold for the man of letters. It is a valued possession of the South of India preserved in trust for the whole of India, and ultimately for the benefit of the world.

It is the product of the synthesis of three different cultural influences, the Tamilian Cholas, the Telugu Nayaks and the Marattas. This cultural fusion was further enriched by the impact of influences from the West, especially under Raja Serfoji.

The Saraswathi Mahal as a repository of learning is referred to as early as the time of King Raghunatha Nayaka who reigned during the first half of the seventeenth century. In Sahitya Ratnakara composed by Yagnanarayana Dikshita, the court-poet of the King, there is evidence that the Saraswathi Mahal existed even in the Sixteenth Century and was greatly enriched by the attention, support and personal literary contributions of the scholarly Kings of the Nayak dynasty.

Great as is the debt of Saraswathi Mahal to the Nayak Kings, it owes its present importance and glory especially to King Serfoji the last of the great Maratta rulers. King Serfoji reigned from 1798 to 1833 A.D. He ascended the throne with the help of the East India Company, after signing a treaty under which he was obliged to resign the administration into the hands of the Company. This treaty ended the Maratta kingdom of Tanjore but unconsciously gave birth to the Saraswathi Mahal Library in its present form.

Serfoji, having been obliged by force of circumstances to relinquish actual power, devoted all his time and energy to study and to the enlargement and development of the library. Apart from collecting together the most precious works on various subjects in European languages, he purchased, regardless of cost, a great many manuscripts from various places in India. The collections he made about the beginning of the Nineteenth century during a visit to Benares, are justly considered remarkable in point of range of subjects, worth and volume.

The palm-leaf and paper manuscripts in the Library are very nearly 35,000 in number. They contain the important collections of Raja Shahaji (1711) and Raja Tulaja (1735), the distinguished predecessors of Serfoji. They are in Sanskrit, Tamil, Telugu and Marathi and cover a wide range of subjects. In addition to the works of first rate literary and scholarly interest, they include valuable medical and scientific works. It is not as well known as it ought to be that Raja Serfoji was running an institution in Tanjore called the *Dhanavantari Mahal*, in which great physicians trained in different systems worked together, pooled their knowledge and experience and recorded their results of their research in manuscripts now available in the Library. These medical manuscripts provide great scope for research, and for resuscitation of indigenous formulae and prescriptions, peculiarly suited to our country. The manuscripts contain tested prescriptions for fell diseases like Cancer, Asthma, Diabetes and Tuberculosis, tested in the light of modern knowledge and experience and acknowledged with receipt by foreign students of medical research. Similarly the manuscripts in Science, which lay down the method of preparation of many valuable chemicals provide ample scope for research.

Special attention must be drawn to a Sanskrit manuscript called *Anandakandam* which may be hailed as marking a great advance in atomic research.

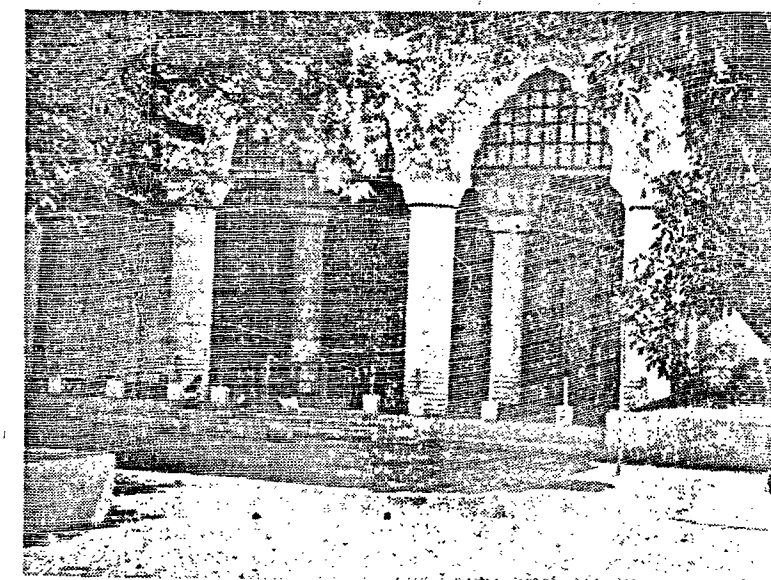
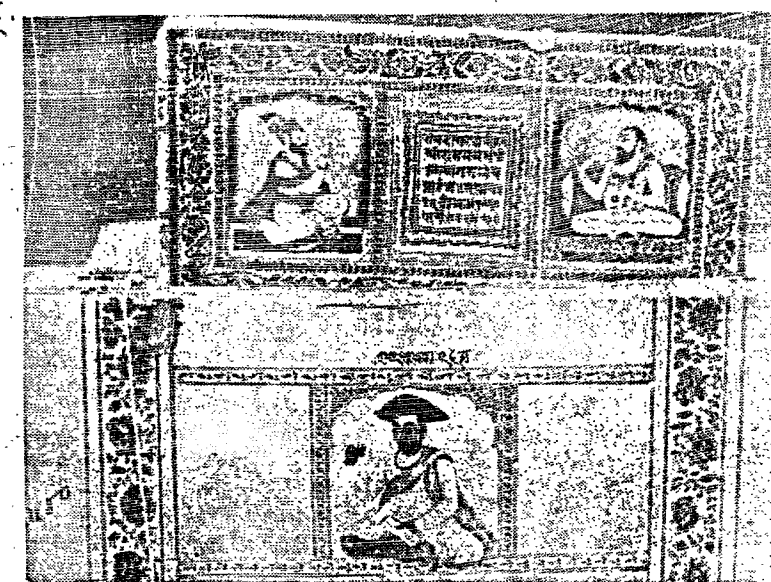
Besides the above manuscripts the Saraswathi Mahal covers a wide range of subjects like Art, Architecture, Philosophy, History, Religion, Astrology, Music, Natural History, Law, Culinary Science, Sociology, Botany and the like.

They are in many languages including English, French, German, Greek, Latin, Danish and Dutch. But pride of place must be given to the manu manuscripts, papers, and rare books out of print, which provide splendid raw materials for reconstruction of South Indian History, particularly relating to post-British period. The time of Rajah Pratapa Simha and Raja Tulaja which cover a period of fifty years from the seventeen thirties onwards, happened to synchronise with some of the most important events in South India, as for instance, the progress of the East India Company as a territorial power, the Maratta invasions under the Peshwas, the invasions by Hyder Ali and Tippu Sultan and the clash between Tanjore and the Nawab of the Carnatic. Tanjore was the pivot of many of these events, especially the battles between the country powers with the English on the one side, and the French on the other. The records available in the Library throw new light on many of these events, enabling us to reconstruct our history and rescue old heroes and kings from oblivion in some cases, and obloquy in others.

We have been able to decipher the contents of good many valuable manuscripts, edit the same, and publish some of them with funds provided by the Government of Madras, in a series entitled "*The Madras Government Oriental Series*". We are grateful to the Government of Madras, for the timely assistance given to us to preserve and publish these precious works.

Right (top): ILLUMINATED MANUSCRIPTS: The wrapper page of each bundle is illustrated as above in gilded colours which still look fresh after nearly 250 years. The above portraits are (1) Shivoji, listening to his guru Samarth Ramadoss. (2) Below is the portrait of the author of a work in Vyakarana in customary court dress.

Right (bottom): Nalk Durbar Hall originally called Rama Saudha. Now contains at the centre the statue of Maharaja Serfoji.



Geological Survey

After surveying Chodavaram and Polavaram taluks of East and West Godavari districts, Sri S. Krishnaswamy, Geologist, Geological Survey of India has submitted a brief report to Government.

The main purpose of the survey was to examine and select sites suitable for boring for coal. The area surveyed covers a large portion of both Chodavaram and Polavaram taluks. Practically, the whole of the Polavaram taluk and the southern portion of Chodavaram taluk are covered by the grey to brownish grey coloured sandy soils.

The economic minerals found in these areas are clays, coal, chalcedony, graphite, iron ores, kankar and mica. Of these occurrences, only some of the clay, graphite and mica are said to be of any economic importance, the others being poor in quality and quantity.

Interest-Free Loans to West Godavari Weavers

The Government have directed that a sum of Rs. 25,000 be placed at the disposal of the Registrar of Co-operative Societies for disbursement as interest-free loans to 1,000 really deserving poor weavers in the West Godavari District, as certified by the local Tahsildars, at the rate of Rs. 25 for each weaver.

The amounts so advanced should be recovered by the societies concerned in twelve monthly instalments from the wages of the weavers and repaid to the Government.

This scheme will be tried for a period of three months or until the supply position of yarn improves, whichever is earlier.

Co-operatives in Madras are playing an important part in fostering rural and cottage industries. The handloom industry in the State is organised on a co-operative basis much more successfully and on a larger scale than in any other State in India. The Madras Handloom Weavers' Provincial Co-operative Society with its 964 affiliated weavers societies command 149,802 looms which represent nearly one-third of the total looms in the State. The annual production of handloom goods is Rs. 323.16 lakhs and the total sales Rs. 421.3 lakhs. Distribution of yarn through co-operative societies has helped the weavers to get yarn in reasonable quantities. Besides societies for handloom weavers other cottage industries societies are also functioning in the State to help the artisans in a variety of directions. There are societies for metal-workers, blacksmiths, pottery-makers, basket-makers, etc. Over 270 cottage industries societies for various industries with 26,900 members are working at present and they produced and sold goods worth Rs. 31 lakhs and Rs. 44.37 lakhs respectively. The societies are very essential for supplying the ordinary needs of the ryots and should function as production units for the supply of the requirements of the villagers. With a view to revive and develop village industries in the selected firkas in the State, Government have recently sanctioned a scheme for the distribution of implements and supply of raw materials to the artisans through co-operative agencies. Under this scheme improved labour-saving tools and implements will be distributed to the artisans free of cost and raw materials supplied to them at cost price. Firka cottage industries co-operative federations will be organised in 12 firkas to work the scheme and in the other firkas the central wholesale co-operative stores, the marketing societies or the multi purpose societies will undertake the work. To begin with, the scheme will be worked in one firka in each district. Government have placed a sum of Rs. 12 lakhs at the disposal of the Registrar, to be advanced to the co-operative agencies under the scheme for the procurement and supply of raw materials.

One important industry that has received a stimulus in recent years consequent on the introduction of Prohibition in the State is the Palm Gur Industry. This industry also is organised on a co-operative basis. There are at present 1,939 co-operative societies for jaggery manufacture with 1.58 lakhs members and paid-up share capital of Rs. 5.4 lakhs. They produced jaggery worth Rs. 27.45 lakhs during the last year. These societies have provided employment to 78 per cent of ex-tappers thrown out of work and given a fillip to the palm gur industry. The ex-tappers are trained in the manufacture of improved variety of jaggery by Palm Gur Instructors appointed for the purpose. Free sets of equipment have been distributed to about 1,000 tappers in the Madras State. Production centres have been organised at Tisayanvilai in the Tirunelveli district and Doddaghatta in the Anantapur district for production of palmyrah and date jaggery respectively in order to examine the commercial possibilities of this industry. Palm jaggery being an article of food, there is scope for the development of the industry on co-operative lines.

Co-operatives play a notable part in the matter of provision of houses. In the initial years, the housing schemes aimed at providing houses for the middle-class people. Recently Government sanctioned a scheme of rural housing and under this scheme one society is to be formed in each district during the first year. Twenty-four Rural Housing Societies have been registered. It is proposed to select a

second village in each district for introducing the scheme. Government give loans up to a limit of Rs. 5,000 for each member and on the basis of three times his share capital. This is a new enterprise and its working is watched with interest.

The scope of the co-operative movement is vast and varied. There are in fact few spheres of human activity where the principle of co-operation cannot be usefully applied. There is a growing realisation of the advantages of the co-operative method by the people, and with the attainment of political independence and establishment of popular Governments in the States the co-operative movement is bound to penetrate into the remotest corners of the country and lay the foundations of a new economic order. The success of the co-operative movement in the State is in no small measure due to the encouragement given to it by Government. A voluntary movement like co-operation should not however always look to spoon-feeding by the State. It should rely on its own resources and stabilise itself on solid foundations. If this objective should be achieved, there ought to be an increasing interest in the movement on the part of the people at large. Much depends on the number of workers available and even more on their efficiency, integrity and steadfastness. If the past is any guide to the future, I have every hope that the country will produce a large number of workers imbued with the right spirit and we can expect the movement to play its part in the economic regeneration of our villagers.

—By Courtesy—A.I.R., Madras.

Restrictions on Power Supply in Hydro-Electric System Relaxed

The Government previously removed the 15 per cent cut on the consumption of power in the hydro-electric areas from May 15, 1951. Consequent on the further improvement in the water storage position in the hydro-electric reservoirs, instructions have been issued to the Superintending Engineers of Pykara, Mettur and Papanasam Electricity Systems to remove the following restrictions on supply of electricity in hydro-electric areas which have been in force from February 15, 1951:—

(i) Suspension of supply of electricity to new industrial loads of over 3 h.p. each; (ii) freezing of the maximum demands of all licensees receiving bulk electric supply from the Hydro-electricity systems at the peak demands reached by them respectively so far; and (iii) staggering of supply for agricultural and other rural loads.

As the combined effective capacity of the three hydro-electric systems is still inadequate to cope with the peak demand, the following restrictions will have to continue for sometime, till the power position improves with the commissioning of Moyar Project and additional plants in other power houses:—

(1) Keeping off low tension power loads during the evening peak load period between 18 and 22 hours; (2) staggering of holidays of Textile Mills and other high tension industrial establishments not engaged in continuous processes; and (3) staggering of recess hours of textile mills and other high tension industrial establishments not engaged in continuous processes.

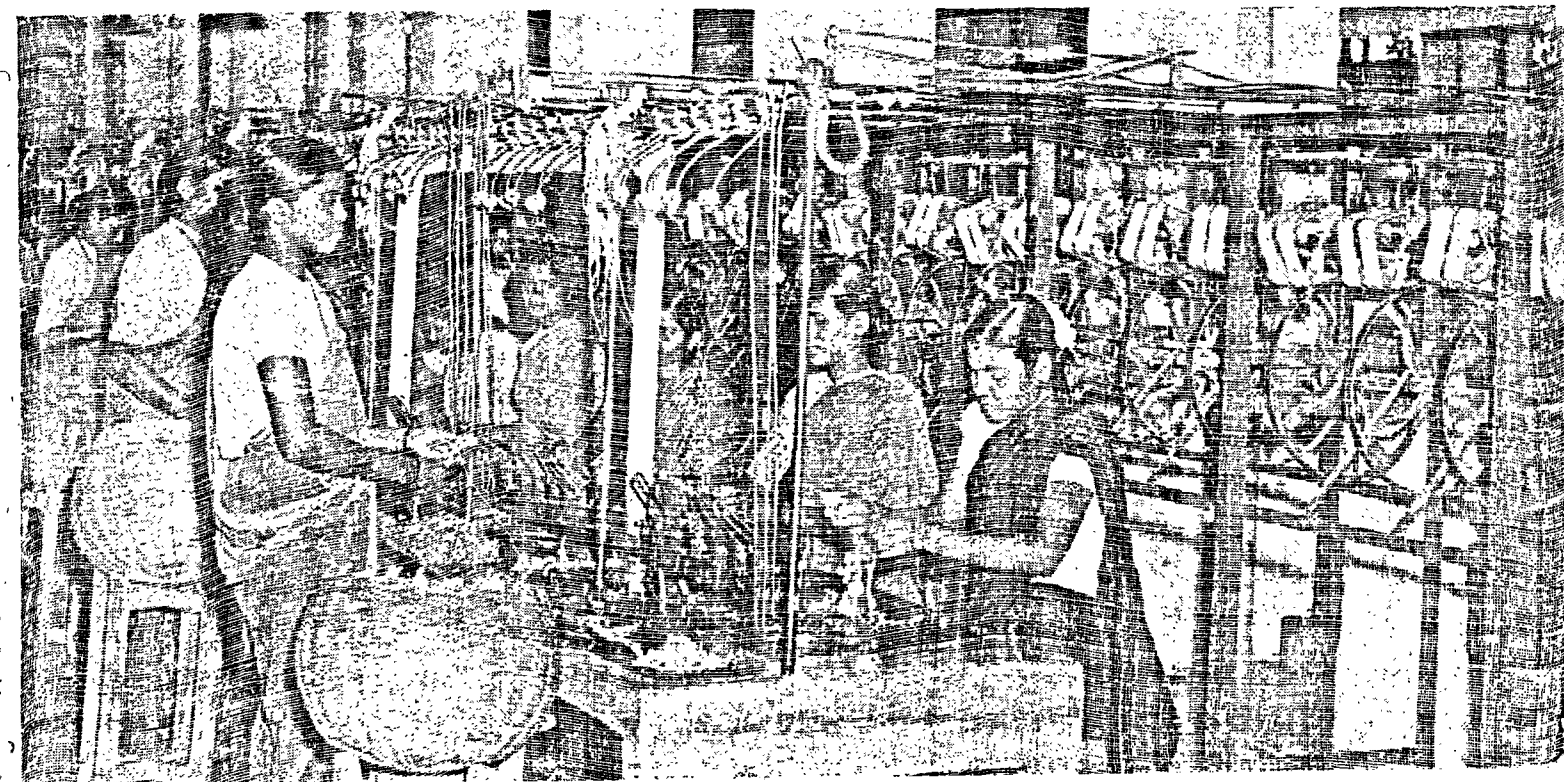
THE ALL-INDIA SILK BOARD MEETS



The All-India Central Silk Board met recently at Kollegal, Coimbatore, under the Chairmanship of Sri Hare Krishna Mehatab, Union Minister for Industries. At the extreme left is seen Sri C. Perumalswami Reddiar, Minister for Industries, Madras.

Sri Hare Krishna Mehatab and Sri C. Perumalswami Reddiar at a silk producing cottage filature. Filature work forms the main occupation of most of the families at Kollegal.

Unreeling silk thread from the smoked or steamed cocoons, is a very delicate work which requires much patience and vigilance on the part of the workers. The picture at the bottom shows a section of the government filature at work.



Working of Prohibition in the State

As Prohibition was extended to the remaining districts in the State except the Agency from 2nd October 1948, this is the first annual report covering a period during which Prohibition was in force throughout.

Country Spirits (Arrack).—As Prohibition was in force throughout the State there was no production of arrack in the State and all arrack shops were closed throughout the State including the Agency areas.

Toddy.—Tapping of fermented toddy was not permitted. There were also no toddy shops in the State. In the Agency areas also all toddy shops were closed. The Koyas in the Agency areas were, however, permitted to tap trees for fermented toddy for their personal consumption as in the previous years. The number of trees tapped by the Koyas was 22,808 as against 6,511 in the previous year. No trees were tapped in the Agency areas for sweet toddy either for domestic consumption or for the manufacture of jaggery.

Foreign liquor.—The duty on Indian-made foreign liquor, Indian-made rectified spirit, Indian-made wine and Indian-made medicated wines continued to be Rs. 35 per proof gallon as in the previous year. The duty on coconut toddy arrack remained at Rs. 25 per proof gallon and the duty of beer brewed in India also remained at annas 12 per gallon. Compared with the previous year, there was an increase in the consumption of wines, beer, denatured spirits and methyl alcohol. Consumption of spirits, however, showed a considerable decrease. Only 1,978 gallons of beer were imported into this State from Mysore as against 63,692 gallons in the previous year. No beer was imported from Calcutta, Bombay and other States. The quantity of foreign liquor imported by sea into this State showed a decrease during the year. It was only 1,13,385 gallons as against 1,43,881 gallons in the previous year. The duty realised on spirituous preparations issued from the pharmaceutical laboratories and from the firms for which special licences were granted for the manufacture of spirituous preparations under-bond was Rs. 8,85,458-7-0 as against Rs. 1,13,600 in the previous year for medicinal preparations and Rs. 14,397-13-0 as against Rs. 29,442 in the previous year for other spirituous preparations. There was thus a large increase in the total amount of duty realised on the spirituous preparations manufactured in this State during the year. The duty realised on spirituous preparations issued from the Medical Stores Depot, Madras, amounted to Rs. 45,720. The duty collected on spirituous preparations imported into this State from other States under-bond by sea amounted to Rs. 2,275 while that on the imports by land from other States amounted to Rs. 8,29,188-9-6. An amount of Rs. 2,40,138 (as against Rs. 65,415 in the previous year) was collected as licence fee on denatured spirits and methyl alcohol. The total amount of gallonage fee realised on the retail sale of foreign liquor was Rs. 60,228. An amount of Rs. 39,586 was collected as fees for licences issued under the Madras Prohibition Act during the year. The total revenue derived from taxation of foreign liquor and Indian-made foreign liquor showed a further decrease during the year amounting to only Rs. 8,45,396.

Opium.—Possession of opium was allowed only by registered addicts who held permits and by licensees who required it for medicinal, scientific or such like purposes.

There were no shops in the State including the Agency areas. Opium was issued to registered addicts and licensees from taluk offices. The quantity issued was reduced by 20 per cent from 1st October 1949 in order to give effect to the decision to stop issue completely within a period of 5 years. The consumption of raw opium was 7,430 seers as against 10,155 in the previous year. The revenue derived from opium amounted to Rs. 33-47 lakhs (as against 43-54 lakhs in the previous year). Transactions in opium and its preparations were allowed only under licensees.

Revenue and expenditure.—The total revenue (demand) during the year was Rs. 50,81,942 as against Rs. 3,69,99,367 in the previous year. The total collection for the year including the arrears of previous years amounted to Rs. 51,32,467. A sum of Rs. 1,87,769 was written off as irrecoverable. The total expenditure during the year amounted to Rs. 77,21,309 as against Rs. 69,00,349 in the previous year.

Enforcement of Prohibition.—The enforcement of the Prohibition Act continued to be vested in the Excise Prohibition Department in the districts of Anantapur, Bellary, Kurnool, Cuddapah, Malabar, South Kanara, The Nilgiris, Visakhapatnam, East Godavari, West Godavari, Krishna, Madras, Chingleput, South Arcot, Ramanathapuram and Tirunelveli. The Police Department continued to be in charge of enforcement in the remaining nine districts of Salem, Coimbatore, North Arcot, Chittoor, Guntur, Nellore, Tanjore, Tiruchirappalli and Mathurai.

Offences.—The total number of cases reported in the whole State was 67,650 as against 61,545 in the year 1948-49 during the first half year of which there was Prohibition only in 16 districts. It is reported that there was an increase in the offences against Prohibition Law in the old Prohibition districts of Salem, Coimbatore, Guntur and South Kanara, while in the new Prohibition districts Visakhapatnam ranked the foremost in the number of cases detected. Both in the old and the new Prohibition districts, about 44 per cent of the reported cases related to illicit distillation. This type of crime seems to have been widely prevalent even in the pre-Prohibition days in the Rayalaseema area, and in the districts of Salem, Chittoor, North Arcot, Guntur, Nellore, Visakhapatnam and East Godavari and has gradually spread even to the places where it was not known previously. Making allowance for the fact that a number of cases must have escaped detection, the situation on the whole seems to call for more effective measures on the part of the Department to put down this crime.

On the receipt of reports that the concession of tapping of sweet toddy was being widely abused in the Rayalaseema area the Government had to withdraw the concession from the entire area in these districts.

It is an offence under section 5 of the Madras Prohibition Act to render fit for human consumption any spirit which has been denatured. It is reported that offences under this head occur largely in North Arcot and Madras districts and that not only denatured spirit but also preparations containing denatured spirit such as shellac, French polish are also rendered fit for human consumption. The Act has been amended recently amplifying section 5 so as to make the latter type of malpractices also punishable.

Progress of Co-operation in the State

By SRI A. PALANIAPPA MUDALIAR, Deputy Commissioner of Prohibition (Amelioration).

The co-operative movement in the Madras State is now over forty years old. It is not that the principle of co-operation is new to India. It is as old as our ancient civilization. Our ancient rural economy was based on this principle and a spirit of helpful fellowship and mutual aid ruled the social and economic life of our villages in the olden days. New co-operation, as now understood, as a method of doing business is comparatively of recent growth in India. For long time, the movement remained predominantly a credit movement. The conditions created by the war and the various economic and social problems that the country had to face in the post-war years gave ample opportunities for the many-sided development of the co-operative movement. In the Madras State it has made great strides of progress in recent years. Not only has the movement expanded considerably but it has also extended its spheres of activities in divorce ways so as to cater to the various needs of the people. Madras is the first State in India which has demonstrated the immense possibilities of the co-operative method and it is today a shining example of what co-operation can contribute to the solution of various problems in the sphere of production, procurement and distribution of food, supply of yarn to weavers, relieving housing shortage, resettlement of ex-servicemen, rehabilitation of ex-tappers, development of village industries, etc.,

The village co-operative credit societies which constitute the back-bone of the movement have received great attention and stimulus to their activities. As a result of the working of the scheme of reorganization and expansion of rural credit societies sanctioned by Government, the village co-operatives have come to occupy a prominent position in the agricultural economy of the State. The idea of the scheme is that more than 50 per cent of the villages should be covered by co-operative societies and 1/3 of the rural population brought within the co-operative fold and that all the existing societies should be converted into multi-purpose societies and they should actively cater to all the economic needs of their members besides supply of credit. There are at present 13,193 village societies covering 64.6 per cent of the villages and with 11.53 lakhs members and a paid-up share capital of Rs. 136.99 lakhs. The percentage of population served by the societies is 17.28. The societies issued loans to members to the extent of Rs. 7 crores during 1949-50 and the amount involved in the multi-purpose activities undertaken by them such as distribution of domestic, agricultural and industrial requirements of members was Rs. 3 crores. The societies have also encouraged thrift as part of a drive to stimulate savings in the wake of Prohibition and during the year 1949-50, a sum of Rs. 4.99 lakhs was saved through hundi boxes and home safe deposits, etc. The village societies also undertake general uplift work such as running of reading rooms and libraries, conduct of night schools and games, provision of first aid, etc., Funds for these purposes are raised by donations. The societies contribute from their Common Good Fund for purposes such as education and sanitation. Village societies have undertaken the construction of godowns with the aid of Government subsidy and loan during the year 1949-50. Seventy-eight societies were sanctioned free grants amounting to

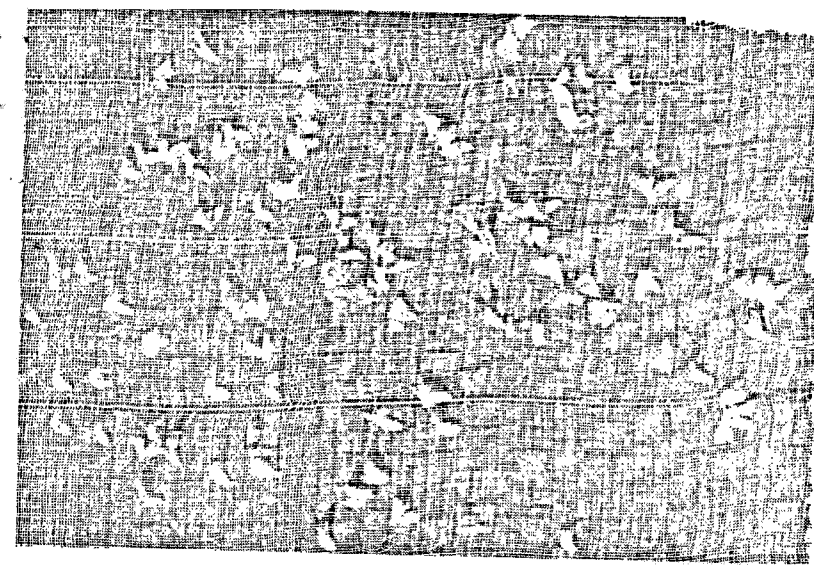
Rs. 4.16 lakhs and 16 societies constructed godowns. Of late, there is an increasing tendency to look to these multi-purpose rural credit societies to undertake a variety of activities. It is no doubt an encouraging sign and if a society is able to cater to all the needs of the villagers or at least to their essential needs, they are sure to attract great attention and function as live centres of economic progress in the countryside. It should not however be forgotten that the success of these societies in the last analysis depends upon the availability of suitable leaders imbued with necessary enthusiasm and having the necessary leisure. In proportion as the societies can secure the services of efficient, honest and enthusiastic workers who will undertake the work, they can be expected to flourish.

Co-operative societies have been taking an increasing part in schemes of food production. The distribution of chemical fertilisers like ammonium sulphate, super phosphate, iron and steel is now in the hands of co-operative organisations. The village co-operative societies are now being harnessed for the purpose of food production. Government have sanctioned a scheme of intensive food production through village co-operative societies in 7 select districts and it is proposed to extend it to 6 more districts. Under the scheme, the village co-operatives undertake the distribution of seed, manure, agricultural implements and encourage the manufacture of rural compost. They also advance special loans to members for purchase of irrigation pumpsets. They take fallow lands for cultivation wherever it is possible. Till now 378.17 acres of fallow lands have been brought under cultivation by some of the societies in the districts of Nellore, Coimbatore and Tirunelveli. Chemical fertilisers have been distributed by 1,040 societies to the extent of Rs. 1.55 lakhs and iron and steel for agricultural purposes to the extent of Rs. 19.06 lakhs by 640 societies selected for the purpose. Increased tempo is given for rural compost manufacture by these societies. 12,971 manure pits have been dug by 854 societies which would give 4,810 tons of rural compost. The village societies provide the necessary non-official agency to promote and carry out the food production measures launched by Government. It is expected that with the co-operation of the central banks and the non-official agencies, village co-operatives will function as potent agencies for the promotion of the agricultural progress and further the food production measures of the Government, thus helping in the solution of one of the major economic problems of the State, i.e., food shortage.

In the present days of food shortage, proper and equitable distribution of foodgrains is as important as production of foodgrains. And in this task of distribution of foodgrains and other essential commodities, co-operative wholesale stores and primary stores have played a notable part. There were on 31st December 1950, 1,702 primary stores with 5.4 lakhs members and a paid-up share capital of Rs. 92.36 lakhs. They sold goods to the value of Rs. 2,559.16 lakhs during 1949-50. The existence of the organisations has served to check black-marketing, hoarding and profiteering and have exercised a salutary influence on the methods and practices of private trade.



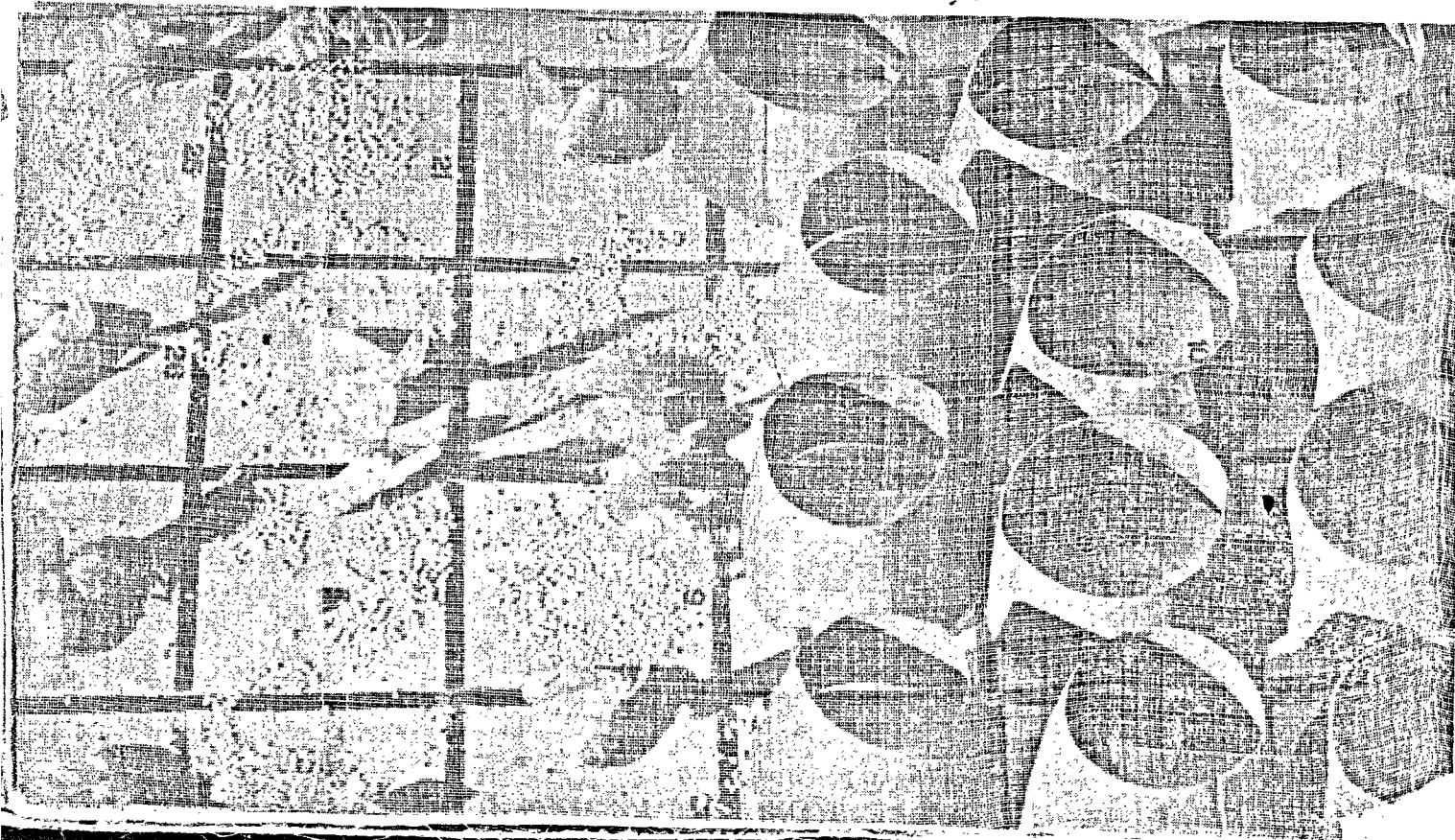
(1) Silk moths, when taken out from ripe cocoons are examined by experts to find out whether they are disease free



(2) Disease-free moths are allowed to mature for the purpose of laying eggs

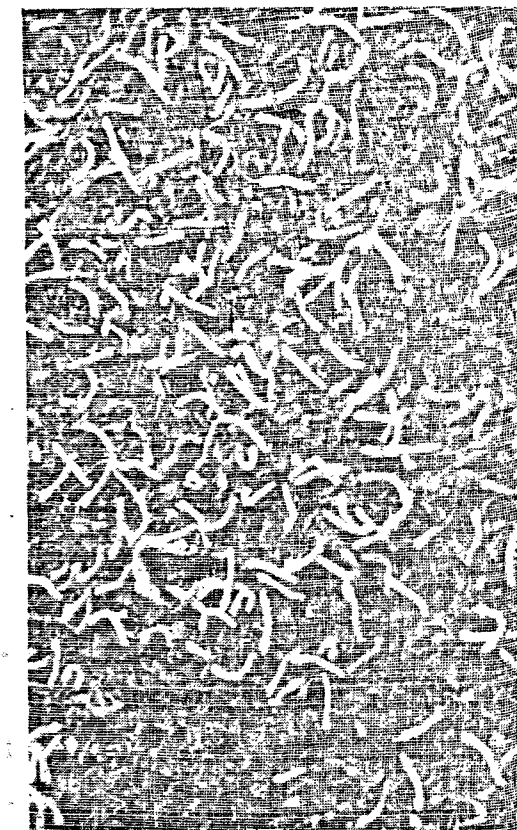
Kollegal in Coimbatore District is one of the famous silk producing centre of the south. The Government Sericulture and Silk Research Station take keen interest in scientifically rearing eggs, preserving foreign and local species

(3) Segregated male and female moths are clubbed together in separate bed-chambers where after a few days the males meet their natural end. The female moths are allowed to lay eggs



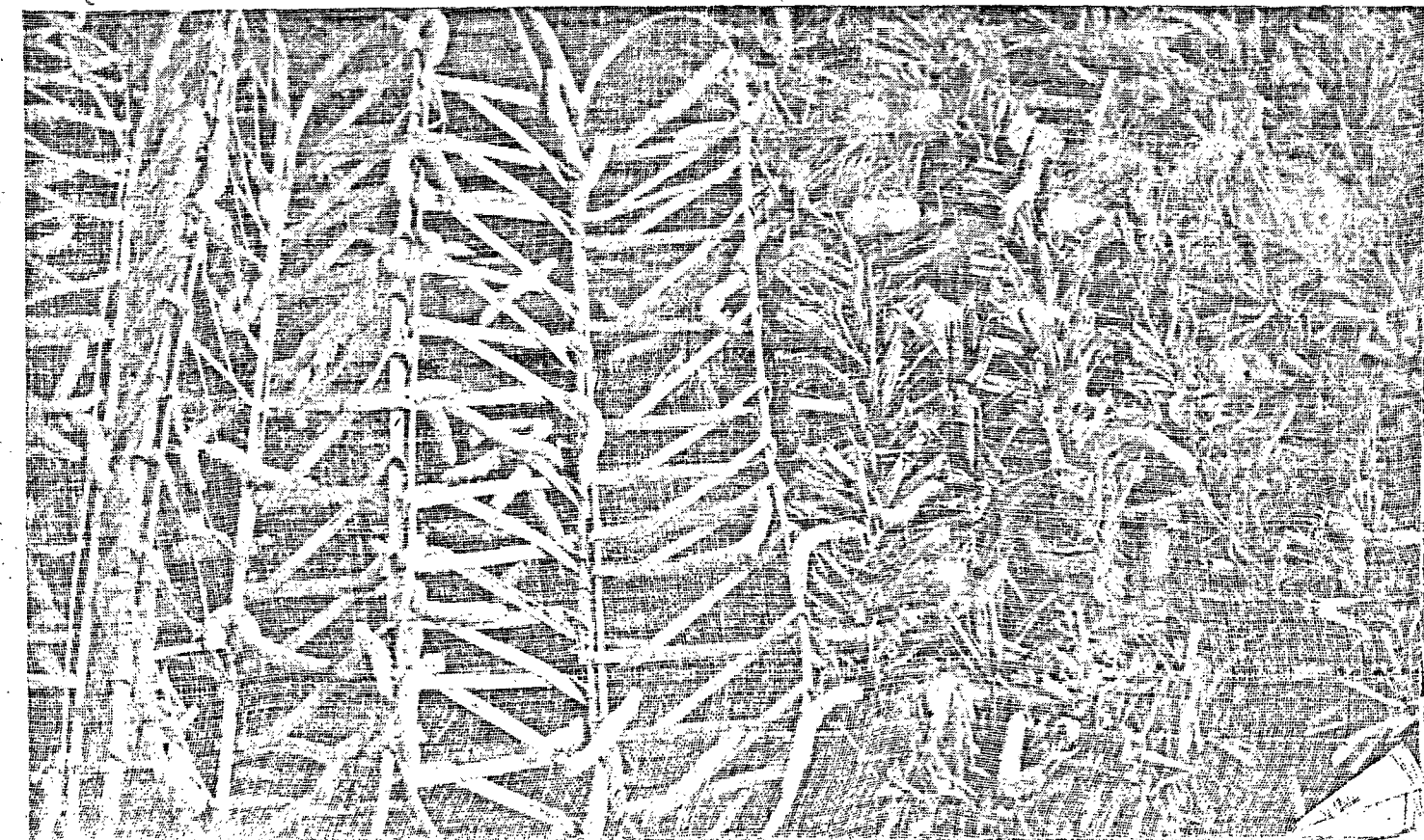
(4) Eggs are cleaned and brushed gently before they are reared

and selling the best eggs to cottage industrialists for rearing cocoons. These pictures illustrate the interesting story of the silk worm—its short span of life



(5) The little worms are carefully looked after. They are fed on mulberry leaves till they reach the caterpillar stage

(6) The caterpillar goes on eating voraciously till at last it discards food and goes into absolute seclusion and privacy. It winds up its body with the fine filament of its salival-silk and thus develops into a cocoon from which silk is reeled after steaming



India and the I.L.O.

SRI H. SITARAMA REDDY, Minister for Labour.

(The following is the speech delivered by Sri H. Sitarama Reddy, Minister for Labour, Government of Madras and a Member of the Indian Delegation at the 34th Session of the International Labour Organization at Geneva, which concluded on 30th June 1951.)

Let me begin by congratulating the Director-General on his excellent report. It is a report which has frankly highlighted some of the problems that face the world and that press for early solution. Today we live in an atmosphere of uncomfortable suspicion as to what might happen on the morrow. Pursuers of peace who fearlessly advocate the cause are essential for the progress of humanity. The Director-General has restated the principles underlying the work of the International Labour Organization. In a world of mounting tension it does us good to remind ourselves that the ultimate aim of all that we seek to achieve is the enrichment of the life of the individual, and that it is in terms of the individual's well being that the achievement of our civilisation is to be measured. I am grateful to the Director-General for reminding us of this simple but supreme truth.

The Director-General has invited our attention to the special problems of the under-developed areas where millions of people have awakened to a sense of self-realisation and are seeing with new eyes the injustices and inequalities in the present world. That poverty anywhere is a threat to prosperity elsewhere is no new principle for the International Labour Organization. I only wish that the Director-General's plea for using every means to help these areas to help themselves will evoke adequate response from quarters for which it is intended.

It is a measure of the tragedy of our times that the shadow of war should have made its appearance in a report devoted to the promotion of peace. The whole climate of the report is overcast with the economics of rearmament. In the preface to his last year's report, the Director-General likened the world to a reeling drunkard assuming plot and counter-plot and shuddering with the impact of each new violent development. "The world constituency of little people" he said, "is in a state of bewilderment and apprehension and looks with fervent hope to their statement for formulae for peace". Unfortunately the year that has since passed has brought no improvement and the formulae for peace are yet to emerge. Even when the conference was in session last year, the Korean Crisis burst upon a surprised world and for a while it looked as if we were on the verge of a world conflict. Perhaps the situation is a little less desperate today. The danger, however, is still there and it is imperative on men of goodwill throughout the world to make ceaseless endeavour for developing what our Prime Minister has characterised "a temper of peace". Meanwhile, a large part of the world has undertaken a programme of stock piling and rearmament. As has been clearly brought out in the report, this has not only created possibilities of inflation in the countries possessing full employment but it is also threatening to lower further the already low standard of living in the under-developed and over-populated countries by impeding their development programme. The Director-General has frankly cautioned us that industrially advanced countries are so pre-occupied with rearmament that fewer of their resources would be available for assisting development programmes of under-developed countries.

So far as my country is concerned we have been steadfast in our pursuit of peace. We have chosen to take the "risk of peace" and I am happy to say that we have even reduced our expenditure on the Army in the current year's budget by about 10 million pounds. So far as India is concerned, we are indeed anxious to realise our country's development early with a view to attaining a higher standard of life. I may mention that a sum of about 58 million pounds has been provided in the current year's budget for capital development and most of it is devoted to the development of communications, power projects and irrigation schemes and schemes of rehabilitation and agricultural production. In his report, the Director-General has suggested that programmes of economic development in under-developed countries should be financed as far as possible by fresh taxation and borrowing and cuts in wages should not be restored to for creating a large profit margin in the hope that entrepreneurs might provide the necessary fund for investment. I might mention here that the current year's budget in India provides for fresh taxation of the order of about 22 million pounds. The money for public investment required for financing the Colombo Plan is also proposed to be raised from additional taxation, reduction in expenditure, increase in the earnings of commercial enterprises, borrowings from the public and the railway depreciation fund. Even so, with a low national income of which more than half is spent over food, there is not much scope for capital formation in India. As the Indian Minister for Finance pointed out in the course of his budget speech "finance from abroad and that on a substantial scale has to be forthcoming if the problem is to be tackled adequately". We hope that outside assistance on honourable terms would be available for promoting the economy of not only our country but of all under-developed countries in the near future. To this end, we rely upon the International Labour Organization, with its mounting recognition of Asian problems and the fruitful co-ordination of its activities with those of the United Nations Organization and other international bodies, to bring into harmony the needs of defence on the one hand and the needs of under-developed countries on the other in such a way as to ensure the flow of capital goods and technical assistance to these countries and to enable them to forge ahead with schemes yielding peace, progress and contentment for vast millions of mankind. At first sight this may sound like a plea for regional attention, but it is only a practical means of accelerating the regions concerned to the universal standards dear to the International Labour Organization. As Mr. Troclet rightly pointed out in his inaugural address, regionalism and universalism can work in harmony over the short run so long as we do not lose sight of the ultimate objective to attain universal standards in all parts of the globe.

The Director-General has brought up for discussion the problems of restraint on wage increase in a programme designed to minimise the possible inflationary effects of full employment, economic development and rearmament. For us in India full employment is still a distant goal. The



Honble Sri H. Sitarama Reddy, Minister for Labour, Government of Madras, participated as India Government Delegate in the recent Conference of the International Labour Organization at Geneva. To his left is seen Sri N. K. David, Secretary, Ministry of Labour, Bombay, substitute Government Delegate and Adviser.

Although community welfare centres are a great asset in developing citizenship in the minds of the village folk, much of the confidence and affection of the women are won by the close touch maintained through daily family visits. A close study of the Family Survey maintained by each welfare organiser will reveal the problems of each home. These records are however kept confidential and will be made available only to those who are genuinely interested in the family and wish to offer help. Many a small misunderstanding has been patched up. Many a home that had no men to help in matters pertaining to securing of rations or a getting a child admitted in a school, or a patient in a hospital, has been rendered help by the Organizer.

The Community Welfare Centres have also started subsidiary industries in order to teach women how to supplement the family income. This scheme is popular



Milk distribution among the pre-basic children in Vellore Branch



Glass bead section of the Vocational Training Centre

as their economic condition is poor. The industry chosen has been according to the desire of the local women. Some of them are tape weaving in Chemudugunta, Venkatachalam, Vallur and Kakinada, pickles in Tirunelveli, spinning in Kuruvikulam, tooth powder, chandu, nut powder and toy making in Tanjore, tailoring in Naga-pattinam, knitting in Chingleput, poultry in Madurai, crochet and coir work in Kozhikode, bags in Cannanore. Spinning of course is done in all the branches. The raw materials have been brought for these industries and samples of the finished articles are exhibited not only in the model centres in the branches but also in the show-room of the head office in Madras, Government House, Mount Road. Visitors are welcome to the show-room and orders may be placed.

Visitors to the Model Community Welfare Centres have been greatly impressed with the charts displayed, the use of indoor games material, the cloth weaving and mat weaving, looms, the adult literacy material, pre-basic equipment, the information corner, the needle craft and spinning apparatus, etc. During centre hours, the members will be seen to be very busy, not in the sense that they are undergoing a routine drudgery but working with pleasure at a hobby which they have specially chosen. A group will be spinning, another working at a jacket for herself or a little romper for her son, another group will be around the Laubach chart deciphering the words in Tamil Padi, some will be flying the shuttles across the looms to turn out a length of shirting or towels or handkerchiefs. After an hour's work at the crafts, the groups will be seen to assemble for their music. Sometimes the musical programme will consist of solos and sometimes of chorus singing. Even those who may have been shy to open their mouths at the start, have learnt to enjoy singing. The Organizer will then tactfully get into a conversation and drive home into the minds of the listeners, a few points she may have prepared for the day, on nutrition or child care or budgeting home expenses, etc. Their news hour and discussion hour is the real Adult Education feature in the programme and the women enjoy it. It is surprising to find how alert the women are to every-day happenings around them. Such model centres with all the equipment that will attract the village folk, are being built up gradually in all the branches and they are becoming very popular.

Service Home and Training Institute

This Home and Training Institute for the widows, destitutes and deserted wives has risen in strength to 150. The batch of 50 recruited in 1948 are now ready to be settled. Among them are the house-keepers, bala sevikas, needle work and handicraft teachers and midwives. Of the midwives who are still undergoing their training in the Government Hospital two have appeared for examination and one has topped the list in the whole State.

The School of Social Work

The twenty organiser trainees have their training in administrative and field work. They have had interesting lectures on subjects like sociology, psychology, child psychology, nutrition, home economics and home craft, adult literacy, animal husbandry, bee-keeping, kitchen gardening, world religions, social legislation, social and rural economics and medical information. Side by side they have field work followed by discussions. They have been

having practical work in Jegannathapuram slim, Chetpet. Some of them attended the Adult Education Seminar. Learning of crafts and needlework also form an important part of their programme and they now know leather craft, spinning, weaving, palmyra work, pottery, making of soft toys, tailoring, etc.

Every one knows the task that awaits a social worker in the village and what the village conditions are. Hence every effort is made to attract the right type of worker who is willing to go to the villages and carry on the work entrusted. Everything depends on the right spirit and interest of these workers. Problems relating to health, sanitation, maternity and child care, social, cultural, economic, etc., are all inter-related and form a vicious circle and so the Department of Women's Welfare programme has been planned to be comprehensive to include these since, conditions being what they are in our land, specialisation is not possible. Hence the need for field workers to bring with them not only the right spirit, attitude and interest but also the ability to understand the entire programme and work in a spirit of understanding and co-operation. This takes time and of course eliminates all spectacular shows and this is a thing we in our country must learn—not to be satisfied or even aim at immediate results and spectacular outbursts but to particularly strive to tackle the basic factors of each problem and slowly and steadily lay strong foundations for a lasting edifice.

The Industrial Training Centre for Women

Good progress has been made in the three sections of the industrial training centre which though financed by the Central Government is under the immediate supervision of the Women's Welfare Officer. In the weaving section saree borders, ribbons, bedspreads, table cloths, handkerchiefs and towels are woven. Samples are in the office show-room and orders are executed. There are 10 girls undergoing training in this craft, 13 in the bead and chalk-making section and there are 32 girls in the tailoring section. Varieties of shapes and sizes are turned out in the bead section and an attractive selection can be made by any visitor. The tailoring section which is the most popular has learnt from the simplest cutting to the making of a complete gent's outfit. Orders from factories and firms are already being executed here.

Toda Welfare

Three model centres have been built up in Arranmore Mund, Garden Mund and Minick Shola Mund. Each mund has exactly the same equipment as any model centre in the plains and in addition it has bee-hives. Many a visitor has been astonished to find Toda Women so respective to adult education. Many of them spin, knit, play indoor games, read Tamil, book I and book II of the Tamil Padi series. They recite Tamil poems. In their community garden they grow their own vegetables. Special attention is being paid to their health problems.

Term of Office of Municipal Councillors

The term of office of the Councillors of certain municipalities which under the law now in force extends up to noon on the first day of November 1951, has been further extended by Government up to noon on the first day of November 1952.

Land Tenures—First Report of the Land Revenue Reforms Committee

The Land Revenue Reforms Committee, Madras, which was constituted by the Government in May 1950, has in its first report examined whether and in what manner the Government should fix maximum holdings, form economic holdings, eliminate non-cultivating and non-resident pattadars, prohibit alienation of land to non-cultivators, confer occupancy rights on tenants under ryotwari pattadars, secure fair rents and fixity of tenure for such tenants and ensure fair wages and proper conditions of work for agricultural labourers.

2. The Committee in its first report has made the following among other recommendations:—

(i) *Maximum limit to holdings.*—The Committee has recommended that no person should be allowed in future to acquire agricultural lands, if he already has a holding carrying an assessment of Rs. 250 (rupees two hundred and fifty only), or so as to constitute a holding carrying more than Rs. 250 (rupees two hundred and fifty only) as assessment. The Committee suggested modifications of this limit in the case of joint families, inheritance, bequests, etc. As regards *existing holdings*, the Committee has also recommended that the question whether or not a holding can be increased can be determined only with reference to a crucial date and that such a date should be fixed by legislation.

(ii) *Transfer of lands to non-cultivators.*—The Committee considered that it was necessary and justifiable to prevent lands in future at least, from passing into the hands of those who are not cultivators themselves. The Committee has therefore recommended the prohibition of alienation in future to those who are not cultivators.

(iii) *Limit to personal cultivation by landlords.*—The Committee considered that it was necessary to see that the tenancy of landlords to take to personal cultivation did not lead to dislocation on a considerable scale in the tenants' sector. The Committee has accordingly suggested that a maximum limit should be fixed for personal cultivation by landlords. The maximum limit recommended by the Committee is land bearing a total assessment not exceeding Rs. 250 (rupees two hundred and fifty only) inclusive of lands already under personal cultivation, if any. The Committee, however, considered that the maximum should not apply to landlords who were personally cultivating larger areas on the crucial date and that, they might continue personal cultivation up to the extent actually under their personal cultivation on the crucial date.

3. In the Committee's view, the crucial date should appropriately be the date of the publication of the report, so that, on the one hand transactions to evade the provision may not be embarked upon, and on the other hand transactions effected before the public had notice of the likelihood of such a provision being made, may not be affected.

4. Although the Government have not yet come to a definite decision on the recommendations of the Committee, the public are hereby informed that the crucial date will be the date of the publication of the report itself, viz., July 1, 1951, in respect of such of the recommendations of the Committee involving the conception of a crucial date as are finally accepted by the Government.

problem of raising wages to a level where they can be considered fair is therefore already with us in India and has been made more acute by extraneous inflation. So long as the wage remains far below the living standard, workers are bound to resent any general talk of a wage freeze. The Fair Wages Bill before the Indian Parliament tries to tackle the problem with special reference to productivity and the capacity to pay. Before the Bill was drafted, the principles of the Bill were discussed and unanimously approved by a tripartite Council set up for the purpose. Wage structures are however diverse and wage fixation must be recognised as complex. Even the factor of productivity depends on the machine, the materials and the working conditions which differ from unit to unit, from industry to industry and from country to country. Furthermore the wage question in India is complicated by a system of bonuses resting on the capacity of the unit or the industry to pay, and bonus disputes are at times, highly contentious. I would therefore suggest that wage structure be studied in three parts: one part confined to the basic constant; the second part being vested by variable according to productivity; and the third part being variable as well as contingent on the profits or dividends, in other words the capacity to pay. It is only in respect of the last part that it is proper to consider a wage freeze, concomitantly with a profit-cum-dividend freeze, as an all-round contribution to fight inflation in the interest of the general consumer and to promote the country's development programme.

The latest survey of India's national income shows that the per capita national income in 1948-49 was Rs. 255 (about £ 19) per annum. Our production in agriculture and in industry has no doubt gone up but then the growth of population has more than overtaken the economic development. Our provision census figures compiled this year show that India has a population of 296 persons per square mile. I have looked into comparative figures of density of population per square mile available in respect of some other countries and there is hardly any country except Japan which has so high a density of population. Unless relatively empty and undeveloped areas take over some of the surplus population of the Asian region, these unfortunate millions will constitute raw material of soothing discontent.

The Director-General has stated in his report that without an open world and the free movement of peoples and ideas, "we shall never be free from suspicion and fear". The International Labour Organization has done a good deal of useful work in tackling this problem of migration in some European countries. Unfortunately to-day we find a few nations that think still in a narrow way, oblivious of the change in the outlook of the people of other parts of the world. They are perhaps a century behind in their approach to the problem of movements of populations and if they do not change their outlook, the forces that are let loose by their own unimaginative attitude will engulf them in a situation which they can hardly be expected to feel as comfortable, we find unreasonable attitude regarding the need of some nationals for equitable and equal opportunities for merely continuing to live honourably and peacefully in parts of the world to which they migrated long ago and to the development of which they made substantial contribution. It is too much to hope that the International Labour Office will study this problem as it affects the Asian region and put up concrete proposals for assisting emigration from that region on satisfactory conditions as early as possible. I

realise that there are various obstacles in the way but these obstacles must be overcome if Asian countries are to co-operate effectively to preserve world peace. May I further say that these obstacles are more of the mind, of the kind which arise from conceptions of nationalism, doctrinaire fanaticism and political shortsightedness? In the interest of world peace and social justice we cannot neglect solving the problem any longer as in my opinion, further delay will be most undesirable and perhaps disastrous.

May I, Sir, make one suggestion with regard to technical assistance for under-developed countries, which is at present rightly engaging the attention of the International Labour Organisation as of some other specialised agencies, of the United Nations? Our most pressing need is to increase production particularly of food, clothing and housing. While I fully appreciate the technical assistance offered, I must take this opportunity of mentioning that our slender resources make it necessary that in order to be fully effective, technical assistance programmes should carry with them a certain amount of material assistance as well, such as the provision of machinery and equipment for undertaking pilot projects. Without such material assistance, it will be difficult, in some cases impossible, to put into effect the recommendations made by experts. I would suggest that the International Labour Organisation may arrange, in collaboration with such International Organisation as the Director-General may consider appropriate for the purpose, to undertake a few pilot projects in my country for increasing food production by training agricultural workers and providing them with subsidiary cottage industries to ensure their full employment. Agricultural workers are hardly employed for 180 days during the year in my country. With mechanisation the number of agricultural workers required will be less. It is, therefore, important that the surplus manpower should be provided with supplementary occupations. Here also some pilot projects run under expert supervision with equipment and machinery secured under the Technical Assistance Programme will be most useful. The mere deputation of experts will not help the under-developed countries to the desired extent although it may be of the greatest help to some of the developed countries. Their requirements are different from ours and technical assistance schemes with respect to under-developed countries should accordingly be designed to meet our special requirements. Here universal schemes will not go far regional schemes with the common aim of improving the worker's lot to his best advantage are indicated. In my opinion technical assistance coupled with a certain amount of material assistance will go a long way in helping the under-developed countries.

The International Labour Organization is about the only international institution of long standing where constructive international co-operation in the pursuit of peace has been practised now for over a quarter of a century. Even while a large part of the world is engaged in stock piling and re-armament which may lead to a lowering of the standard of living not only of the countries concerned but also of the under-developed areas it is good that the Director-General in his report has pin-pointed the important task of achieving rapid development of the economies of the under-developed areas. I join him in his appeal to the advanced countries to help under-developed countries to come to their own within the shortest possible period.

Women's Welfare

By Kumari S. SUDARSANAM, Assistant Women's Welfare Officer.

In a country like ours where illiteracy, ignorance are of considerable magnitude and where social workers and funds are so meagre, it takes time to understand the full scope of programme that must be launched upon. While many problems are common to men and women, the special needs of women affecting the entire family and community are so numerous that sufficient justice cannot be done by merging them into a general list of all problems of a country or State. This is what in fact is happening in Egypt. They have a broad welfare programme but because they did not approach the family and general welfare through the women the scheme except for the maternity and medical aspect, is not successful in spite of the vast amounts that are being spent. The Madras Government have done well in recognizing this and in giving their co-operation in all efforts towards the welfare of the women, which ultimately is towards the welfare of all.

Realizing fully the needs of the women the majority of whom are in the villages, the Women's Welfare Department has opened since June, 50 and more rural branches. The demand for branches from villagers is increasing. A thorough investigation revealed good scope in the places selected for intensive work. With good trained workers the new branches are showing good results.

The local people in each of the villages have been displaying a great deal of interest and have always extended help. In some of the villages the people themselves have come forward to erect a shed or a room for the purpose of developing into a model centre. The aim is to encourage slowly local initiative and interest. Model centres, of which there is one in each village have become not a model for women alone but for the men and children as well and that is the aim. The approach is through women but the services really are for all concerned. It is a model for the whole village and has come to be recognized as a educational and a recreational centre.

Medical Aid

In most of the villages the model centres are also dispensaries. As the nearest doctors or hospitals are some miles away from the villages, the welfare centres cater to all the minor ailments, distributing medicines either during house to house visits or when the patients came to the centres. The need is so great that the centres run out of medicines very quickly and have to be supplied them frequently. Finding the call for medical aid so urgent, the Women's Welfare Department has appointed midwives to help in giving medical advice during house visits and also to take special care of expectant mothers and new born babies. This is an experiment to carry on general family welfare which includes maternity, child care, simple medical care and hospitalisation. Here again the difficulty is experienced in securing the right type of workers for it is not the mere midwife who is wanted but a midwife-cum-social worker. Those already in the field have had a very good response. Within the short time they have started work they have attended on the average about 50 general cases in a month in each branch, about 20 antenatal cases, 18 post natal cases and about 5 delivery cases. So far all the delivery cases have been

successful. The Women's Welfare Organizers and the Midwives work hand in hand and it will take time to root out some of the most unhygienic methods the ignorant women have been following in not only maternity cases but in their daily household routine.



House visiting in villages is one of the main functions of the Welfare Organizers



Tailoring section of the Vocational Training Centre

Development of Highways

All roads in the State come under one or the other of the following categories :—

- National Highways
- Provincial Highways
- Major District Roads
- Other District Roads
- Village Roads

The Five-year Plan now under execution is split up as follows :—

National Highways	Rs. 4.25 crores.
Other Roads	Rs. 12.06 crores.

Works on the National Highways are entirely financed by the Government of India and, though executed by the Highways Department of this Government they are taken up only with the approval of the Government of India. So far an expenditure of Rs. 90 lakhs has been incurred on these roads and the provision in the budget for 1951-52 on this item is Rs. 93 lakhs for original works, and Rs. 72 lakhs for maintenance.

As regards the remaining roads, though the Government of India gave this Government some assistance in the years 1947-48, 1948-49 and 1949-50, they discontinued this assistance from 1950-51 owing to their financial stringency, and expenditure on these roads has now to be met entirely from State funds. Up to the end of 1950-51 an expenditure of Rs. 4.92 crores has been incurred on original works on these roads and the corresponding provision in this year's budget for them is Rs. 215 lakhs.

At present there are about 22,587 miles of roads still in the charge of local bodies. About 5,700 miles of these roads will be taken over by the Government gradually depending upon the financial resources of the State. In the meantime, the District Boards will have to meet the expenditure on their maintenance. As far as original works taken up by the local bodies are concerned the Government give them grants amounting to not less than 50 per cent of such expenditure.

The Five-year Plan provides for the formation of 10,000 miles of road which include about 6,800 miles of village roads. So far only a length of 1,182 miles has been formed. It is proposed to form another 450 miles in the current year.

A number of important bridges, the total cost of which is Rs. 266 lakhs are under construction by the Highways Department.

Several important ghat works taken up for the development of particular areas are also under construction by the Highways Department.

Important experiments are being conducted by the Highways Department on new types of surfaces. One of these is in the Madurai division, where the experiment is on a new type of Bitumen surface as opposed to the Bitumen Semi-Grout or Asphaltic Concrete work. The process is the same as in the ordinary water bound macadam except that about 1 inch of the stones at the top will be bound by Bitumen coated sand instead of gravel. The

surface will be dust proof and if it continues to stand up to traffic, as it is now doing, it may turn out to be an economical type of surface.

The latest scientific methods of soil stabilization are being tried out on a 14 miles stretch of new road from Tuticorin to Tiruchendur in the Tirunelveli division.

Another experiment, which has drawn the attention of road engineers from other parts of India also, is the formation of a new road, about 21 miles long, from Ramanathapuram to Mandapam in Ramanathapuram division. On this work, a stabilized soil base course to a width of 21 feet is being laid consisting of a mechanical admixture of local sand and clay. About 13 miles of the road have been formed already and subgrade work completed on another 7.6 miles.

The Madras State spends nearly Rs. 8 crores on its roads annually. The rapidly increasing volume and nature of traffic call for improved surfaces for traffic. If the job of modernising our roads is to be done properly, new methods have to be adopted and developed both in design and execution, and an experimental station will be essential for this purpose. Proposals are therefore under examination for the establishment of a Highway Engineering Experimental Station.

In the past, there has not been adequate progress on road development works on account of the shortage of technical personnel and delays in land acquisition. These difficulties have since been got over. The present problem facing Government in the implementation of the programme is mainly financial. In view of only Rs. 5 crores having been allowed by the Planning Commission for road development works during the period 1951-56, the tempo of road works will inevitably be reduced considerably, as at least Rs. 12 crores will be required to complete the balance of works. For financing these schemes, the Board of Communications considered certain proposals like the raising of special loans which would be repaid by levy of tolls and the formation of Transport Development Co-operative Societies, where works will be financed by contributions, loans and Government grants, the loan again being repaid by levy of tolls, etc. Item (1) was considered not immediately feasible. Item (2) is under consideration and the Chief Engineer's further report is awaited. It will thus be seen that every effort has been made to keep the road system in this State in as efficient a condition as possible.

The following statement gives in one view the provision made in this year's budget (1951-52) for the various types of works :—

	N.Hs. (Central Government). RS.	P.Hs. (State Government). RS.	Local Bodies. RS.
	IN LAKHS.	IN LAKHS.	IN LAKHS.
Original works	93.36	133.00	82.08 (Grant)
Repairs	72.47	320.03	Not available.

Road Communications in Tirunelveli District

The earliest attempts at road communications in Tirunelveli district, worth mentioning, were made in the time of Nayakkan queen Mangamma. These were marked by the many miles of avenues of trees—the Salais—several of which exist even to the present day and go by the name of "Mangammal Salai." The roadways beneath the trees however had never been properly formed or drained and no bridge or culverts had been built.

After the advent of East Indian Company, the road communications were given greater attention both for Military purposes and for commercial purposes as the cotton and piece-goods had to move from the cotton country to other parts by road. Till 1924, practically nothing was done about roads and between 1926-1930, a start was made with some small yearly outlay.

Looking at the present position, there are 1,277 miles of roads of which 1,232 are motorable. In a district with an area of 4,315 miles, this gives 30 miles per square mile against the State average of 29 miles/square mile.

The population of the district is 22.44 lakhs according to 1941 census and the population served by one mile of road is 1,743 against the state average of 1,346. In both respects the district is a little above the State average.

Classification of Roads

The Post-war Road Development plan provides for a classification called "District Roads" which form the main set of roads serving important places of the district. These have been subdivided into major district roads and other district roads according to their relative importance. The major district roads are eventually to be maintained at State expense and the O.D.Rs. by District Boards. There are 715 miles of M.D.Rs. and 100 miles of O.D.Rs., 85 miles of National Highways of all India Importance and 101 miles of Provincial Highways of State importance also pass through the District adding to the main roads of the District.

The Post-war Road Development plan as drawn up contemplates additions of 146 miles under M.D.Rs. and 333 miles under O.D.Rs.

Apart from the classifications mentioned above, there are village roads which are purely feeder roads to villages of which there at present 276 miles and 601 miles more are planned under Post-war Road Development.

Rural Roads

The 22.45 lakhs of people of the district live in about 960 villages and towns. Out of this 32,600 people, i.e., about 1.5 per cent of population live in 138 villages each of which has a population of less than 500. Of the 821 villages with a population of 500 and above, 521 villages are already served by roads and the Post-war Road Development plan aims at providing access roads to the balance 300 villages also. This however does not contemplate in view of the sheer magnitude of scheme. But 32 of them already lie on existing roads and many more will come within easy reach of the new roads to be formed. The Post-war Road Development plan proposes 1,080 miles more of new roads and this when fully implemented will give 2,978 miles of roads serving the village in which 98.5 per cent of the population reside. The first five-year programme of the Post-war Road Development is in progress

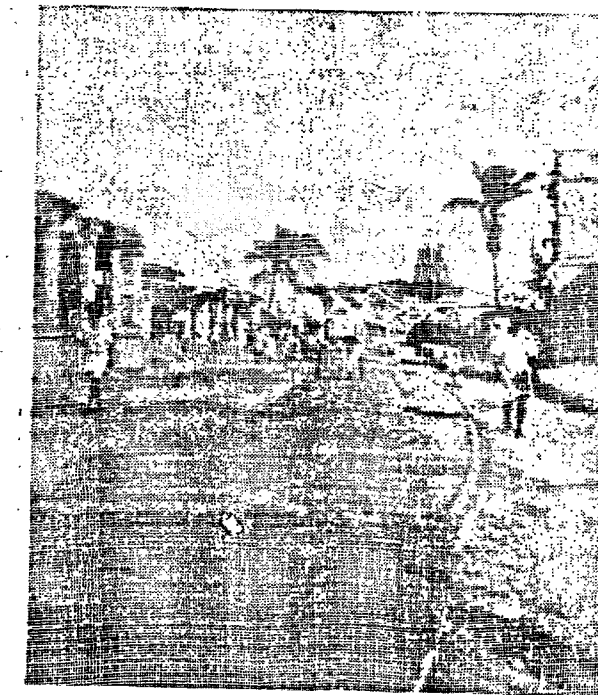
and 30 miles from new roads have been formed so far. The work of forming a direct road from Tuticorin to Tiruchendur has been taken up and is in progress. Considerable changes in the procedure for Land Acquisition have been effected which is expected to result in quicker progress on new roads.

Metalled Roads

Earth roads particularly in Black cotton soil do not serve as all weather roads. Metalling is the cheapest way of ensuring on all weather roads but it requires more money. Fortunately 1,173 miles, i.e., a good majority of the roads in the district are already metalled. About 1,000 miles more are proposed to be metalled under the Post-war Road Development plan which will provide all the existing roads and a majority of the proposed new roads also with metalled surfacing.

Black Topped and Cement Concreted Roads

Improved surfacing to roads treated with bitumen or cement concrete require high initial cost particularly cement concreting; but they compensate by their longer service. As the State's finances are naturally limited, such improved surfacing are restricted to stretches where the traffic intensity is high. Black topping or cement concreting also serve to render the roads dust-proof. To enable dust-proofing of roads on a liberal scale and at less cost, surface dressing is being done under ordinary maintenance allotments to the extent permitted by funds. The important stretches in built up areas at Nanguneri and Palayamkottai have been treated with bitumen for dust-proofing 61 miles more or proposed to be treated with bitumen in the next few years.



A view of C. C. road work to Sannadhi St. at Tiruchendur

At present, 13 miles of roads are provided with C.C. Cement-concreting Palayamkottai-Tuticorin road from miles 1/5 to 2/5 and 13/2 to 30/1 and Ambasamudram-Tenkasi road from miles 0/1 to 1/1 are provided in the P.W.R.D. plan. Cement-concreting Tuticorin-Koilpatti road from miles 1/1 to 10/0 is also under investigation under R.D.F.

Bridges

No road communications are complete without bridges to cross the rivers and streams. In the second half of the nineteenth century when road communications were in their initial stages in the district, progress was made in bridge building. Bridges connecting Palayamkottai and Tirunelveli, another at Ambasamudram, a third at Vikramasingapuram and a fourth at Srivaikuntam all over the Tambraparni and bridges over Chittoor in the Tiruchendur-Sankaranainarkoil road and the Gangaikondan were constructed even before 1890. In the recent past before the introduction of Post-war Road Development Scheme, seven bridges were constructed under the scheme of road development prepared by Mr. Vipan against the 21 bridges proposed by him. The Post-war Road Development plan which has superseded Vipan's scheme provides for construction of 47 major bridges at a cost of 36 lakhs. Besides this, bridges are also proposed under R.D.F. The following four bridges have been taken up for execution:—

- (1) ATM 45/5 of Tirunelveli-Mayapalayam road.
- (2) Improvements to bridge at 24/1, Palayamkottai-Tuticorin.
- (3) M.O. 6 of Parur Chatram-Surandai road.
- (4) M. 4/8 across Nambiyur in Nanguneri-Thirukamudi road.

For bridges at miles 13/6 to 16/6 of Sankarankoil-Nallatirupattur roads and at mile 3/6 of Ambasamudram-Alangulam road, estimates have been sanctioned. Seven other schemes are under investigation.

The numerous water-courses cutting across roads form bottlenecks in the communication system which call for bridges and culverts. The Post-war Road Development schemes provide for the construction of 47 major bridges and culverts to supplement the existing ones. Under the five-year programme, already seven works at an estimated cost of Rs. 7.30 lakhs have been taken up.

Administration

The roads in the district as all over the State are divided into 4 groups for purposes of administration, viz., Government, District Board, Municipal and Panchayat roads. The National Highways are financed by Government of India but administered by the State. The State Government finances P.H.s. and majority of M.D.Rs. while District Board finances the rest of M.D.Rs., O.D.Rs. and V.Rs. The Tirunelveli and Palayamkottai Municipalities finance the roads left in their charges and the streets and Panchayats numbering 31 look after the purely local roads of very minor importance and their streets. State Government gives grants to the District Board, Municipalities and Panchayats for road improvement works. All the Government and District Board road works are executed by the State Highways Department. Panchayats carry out their own works but certain original works of the Panchayats are got executed by the Highways Department and is required to take up some important works for them as deposit works. In this district, the Highways Department has a Divisional Engineer with headquarters at Palayamkottai, 3 Assistant

Engineers, one each at Palayamkottai, Srivaikuntam, and Koilpatti and 12 Supervisors located at Palayamkottai, Tirunelveli, Ambasamudram, Tarkers Sankaranad, Koilpatti, Ettayapuram, Tuticorin, Srivaikuntam, Valliyur, Nanguneri and Tiruchendur.

Import of Oil Engines

In order to meet the country's urgent demand for diesel engines for increasing agricultural production, the Government of India have liberalised their import policy in regard to diesel oil engines during 1951. Under the revised policy, (1) the import of diesel oil engines of 0-10 h.p. will be allowed without limit from any country by the established importers who have after-sales-service organisation provided they are shipped on or before December 31, 1951 and in the case of other established importers, the import licences for January-June 1951 will be doubled, and (2) the import of diesel oil engines of 11-20 h.p. will be allowed for three times the value of the licences issued for this category of oil engines for the period January to June 1951.

The matter is of particular interest to agriculturists in this State who depend on lift irrigation and whose efforts to secure oil engines from the trade during the past few months have been attended with a measure of failure generally owing to restricted imports. As a result of the liberalisation of the import policy by the Government of India, the Government expect that there will be adequate, if not abundant, supplies of oil engines in the coming months. The Government hope that with the increased imports and consequent improvement in the supply position of diesel oil engines, agriculturists will be able to secure their requirements for lift irrigation without any difficulty through the trade. The Government also hope that the trade will co-operate in the national effort to increase agricultural productivity in the country and will utilise the opportunity to import more diesel engines of lesser h.p. to meet the agricultural requirements of this State.

Oil Technological Institute at Anantapur

With a view to conduct research and train persons in oil technology, the Government have made arrangements for the establishment of an oil technological institute at Anantapur.

The institute is expected to commence its work from August 1, 1951. Twelve students, out of which three will be scholarship-holders of Rs. 25 each, will be trained. The course is for three years.

Candidates, who have passed Intermediate examination with Physics, Chemistry and Mathematics, will be selected for the course. The students will have to make their own residential arrangements as no hostel is attached to the institute.

A Survey of Tungabhadra Project Site

With a view to facilitate the localisation of the ayacut of the Tungabhadra Project and to watch its development, the Government have sanctioned a survey on engineering, agricultural, health and economic aspects of the ayacut area (2.5 lakh acres), to be served by the project.

Our Rural Welfare Programme

The Rural Welfare programme of the State Government which has generated much enthusiasm among the people and appreciation from outside the State is based on the Gandhian concept of Village Swaraj. The programme aims to galvanise the villagers into a new activity and to revitalise them in order to render them fit for re-building rural life and economy. The object is to organise the villagers for a happier, more prosperous and fuller life in which the individual villagers will have the opportunity to develop both as an individual and as a unit of a well integrated society. This is sought to be achieved by using local initiative and local resources to the utmost extent possible. The sympathy, interest and active support of the villagers in general are enlisted. Wherever the execution of work involves labour like digging of wells or dredging of irrigation canals, etc., the local resources in labour are canalised as much as possible with a view to see that the cost on Government account is reduced to the minimum possible. It is the endeavour to create the urge for betterment to come from the people themselves. The essential technique underlying the scheme is self-help, with intimate expert counsel. Self-help is the general rule of the work. The main job of the Rural Welfare Department is to plan, teach, train, organise and supervise. All the work is being generally done under the Rural Welfare Programme by the villagers themselves.

Under the scheme the first concern of every village will be to grow its own food crops and cotton for its cloth. It will have a reserve for its cattle, recreation and playground for adults and children. The village will maintain a public hall and school; it will have its own drinking water wells ensuring clean water supply. Attention will be paid on the improvement of village communications. The policy is one of an all round improvement of the life of the villager touching his whole life at all points simultaneously. As far as possible every activity under the Rural Welfare Programme will be conducted on a co-operative basis.

The scheme has succeeded in a large measure in breaking the inertia of age long habits and the mental apathy of the villagers and has brought about a silent psychological revolution. The amenities provided make a long list. Without attempting to catalogue them, reference will be made here only to some of the more important items of the work done up to the end of December 1950.

Rural water-supply.—Five hundred and thirty-seven new wells were sunk whilst 319 more wells were under construction. Four hundred old wells were repaired or improved in addition to 67 other drinking water sources.

Village communications.—Five hundred and sixteen miles of roads were formed in addition to 200 other roads for which linear measurements are not available 159 roads were under construction. Ninety-two miles of roads were improved in addition to 83 other roads. Seventy-three miles of cart-tracks and foot paths were formed. Sixteen miles of road were repaired. Two hundred and forty-one culverts were constructed and 40 more repaired. Two hundred and five road dams, dams across channels and foot bridges were also formed.

Education.—Considerable attention was paid to the provision of educational facilities in the selected areas.

Emphasis has been laid on the extension of the basic education in the selected areas. First preference is being given to selected firkas and centres in the matter of location of the basic training schools and in training teachers. Two hundred and ninety-three elementary schools, 426 night schools, 345 adult schools, 28 basic education schools, were started. Ninety-one elementary schools were converted into basic education schools, 150 schools buildings were constructed. One hundred and ninety-three reading rooms, 25 central libraries and 658 branch libraries were opened. One hundred and thirty-eight reading rooms were improved. Eighty-six buildings for libraries and reading rooms were constructed. One hundred and twenty radio sets were installed.

Sanitation.—Emphasis has been laid on systematic improvements of villages. The goal is the clean and tidy village, the means is through education and not merely by mechanical activities. Two hundred and sixty-three latrines of Wardha type and 434 latrines of other types were constructed. Three hundred and eighty-nine dust bins, 519 cess pools and 115 bath-rooms were constructed. Five-thousand one hundred and eighty-one insanitary pits were filled up and drainage to a length of nearly 18 miles was constructed.

Co-operation.—Co-operative activities in the selected areas were intensified. A determined effort has been made to bring into existence co-operative societies covering all the villages in the selected areas with the result that out of a total of about 2,400 villages, only about 420 villages remained to be covered by co-operatives by the end of April 1951.

Panchayats.—Panchayats have been constituted in all but 35 villages of the 34 firkas originally selected. The work in this direction in the newly selected firkas is pending the implementation of the Village Panchayat Act. Grama Seva Sanghams whose aim is to mobilise non-official support for Rural Development work have been constituted in each of the main villages of the selected firkas.

Electricity.—High priority is being given for the electrification of the selected areas. Up to the end of 1949, 25 villages in the selected firkas, namely 6 in Palladam, 7 in Avanashi, 2 in Tiruvallur, 2 in Kundah, 4 in Tirumangalam and 4 in Cheranmahadevi firkas had the benefit of electricity. During the year 1950, supply was extended to 36 villages of the Palladam, Kundah, Tiruvallur, Veerapandi, Tirumangalam, Malli, Kurnool and Avanashi firkas.

Primary centres.—The Government have sanctioned the opening of a primary centre at Dendulur in the Dendulur firkas of West Godavari district during the current year. Srimathi G. Hymavathi Devi, Member, District Board, Dendulur, had offered a free gift of a house costing about Rs. 60,000 and a plot of land of about one acre in extent for housing the Primary Centre. She also offered to find a residence for the Medical Officer who will be in charge of the centre. The Government have accepted the offer.

Agriculture.—Special attention was paid to increasing production of food grains, cotton and mesta by subsidising the agricultural requirements and offering various facilities to the farmer. Fallow and cultivable waste lands were

reclaimed by felling standing trees and shrubs and ploughed with tractors and bull-dozers. The cultivation of subsidiary food crops like sweet potato and tapioca was encouraged by distributing seed free of cost. Similar steps were taken in the case of vegetables.

In view of the inadequacy of cattle manure, farmers were encouraged to prepare compost manure with waste vegetable matter like grass, weeds, stubbles of crops and other farm wastes. A subsidy of rupee one was paid for every ton (or 50 cubic feet or two cart-loads) of compost prepared. Special steps were taken to demonstrate remedial measures to be adopted against insects, pests and fungus diseases affecting crops. The pesticides (Chemical to be applied) were sold at concessional rate, viz., half the price.

A sum of Rs. 2,000 was sanctioned for sale of agricultural implements for each firka at half rates to poor cultivators.

Demonstration plots were laid out on farmers' fields to convince them of the efficacy of improved methods. This was found to be an effective method.

The Government have ordered that the Registered Model Agricultural farms to be opened in every taluk should be located in the Rural Welfare area if there is a Rural Welfare Centre in that taluk. Four thousand, four hundred and eighty acres of waste lands were brought under cultivation. One hundred and seven model agricultural farms, 868 agricultural demonstration plots were started. Twenty-eight thousand, five hundred and ninety-three manure and compost pits were dug.

Irrigation.—Schemes which will materially contribute for the development of irrigation in several firkas have been sanctioned or are under consideration or investigation. The execution of many such schemes has also been completed.

Village Livestock Improvement Scheme.—The Village Livestock Improvement Scheme, which aims at concentrated livestock improvement in the villages has been ordered to be implemented in four selected firkas. The scheme is worked out on co-operative lines in the Ongole and Palladam firkas and by the Department of Animal Husbandry in the Alur and Salimangalam firkas. In the Ongole firka, the Ongole Co-operative Cattle Breeding and Marketing Society was entrusted with the implementation of the scheme. The Kangayam Co-operative Cattle Breeding Society at Palladam took up the implementation of the scheme in the Palladam firka. The Animal Husbandry Department are taking the necessary steps for implementing the scheme in the other two firkas. The working of the scheme has just commenced and good progress can be expected in the next quarter.

Entrustment of Rural Development work to non-official agencies.—With a view to extending rural reconstruction work in additional areas, and in order effectively to stimulate healthy competition between the official and non-official agencies, the Government have now decided that rural development work may also be entrusted to non-official agencies engaged in doing constructive work. To start with, five non-official agencies will be selected and paid grants for doing rural development work on the following items;—

- (1) Provision of communications;
- (2) Provision of drinking water facilities;

- (3) Improvement of sanitation;
- (4) Improvement of agriculture;
- (5) Development of khadi and other village industries; and
- (6) Other items of the constructive programme such as Adult education, establishment of multi-purpose co-operative societies, etc.

Khadi Scheme.—In order to improve the village economy it is necessary to revive the village industries. Khadi is not only an important village industry by itself, but it can serve as the centre of numerous other village industries. The Department has therefore given to Khadi a high place in its programme. There are 7 centres in the State where facilities are provided for the local population to produce pure Khadi and to use as much as they require for their own consumption and to sell the surplus. The number of families which have taken to spinning in their spare hours under the scheme has been steadily increasing. There were as many as 32,284 spinning families under the Scheme at the end of March 1951. There were also about 1,200 looms engaged in weaving Khadi. The value of the Khadi produced in the centre amounts to about Rs. 12 lakhs per annum. In considering the benefit derived by the rural population from the Scheme, it should be remembered that almost the entire amount spent is distributed as wages among the tens of thousands of families in the villages with the minimum of over-head charges and every piece practically circulates among the people.

Financial arrangement.—A special fund of Rs. 4 crores has been constituted for financing general schemes of Rural Reconstruction, Harijan Uplift, Cottage Industries and Khadi. A sum of rupees one crore has been set apart from this fund for financing general schemes of rural reconstruction. A sum of Rs. 5 lakhs has been added to this one crore part of the fund during 1949-50. The details of expenditure on account of the Rural Welfare programme from the commencement of the scheme to the end of December 1950 are furnished below:—

Year.	Expenditure.
	LAKHS.
1946-47	1.73
1947-48	7.02
1948-49	18.40
1949-50	19.84
(Up to December 1950)	10.20
Total	57.19

The foregoing account will show that in spite of the limited resources at the disposal of the Government, substantial results have been achieved in the field of rural reconstruction. This only indicates that the villagers have come to evince an extraordinary interest in improving the neglected conditions in the villages. The villagers have responded magnificently to the call of village uplift by contributing generously in cash or in kind or by way of labour for the construction of roads, buildings, wells, etc. The Government note with satisfaction this achievement of the Rural Welfare Staff in having created in the villagers an urge for self-advancement.

have been migrating to inhabited areas just because the forests cannot support them. The problem created is one for which we can see no solution. Otherwise wild life depends on a natural balance the tiger for instance keeping down the numbers of deer, which would otherwise follow the monkeys to cultivated areas.

The positive policy of the Forest Department is to re-plant. Among the more interesting afforestation schemes and those for teak, 1,600 acres each year, casuarina for which a target of 150,000 acres has been fixed, wattle for tanning, cinchona for quinine, softwoods for match and plywoods, pyrethrum for insecticides.

A difficult and expensive kind of afforestation is necessary for eroded areas. Both the Forest and Agricultural Departments are carrying on experiments for finding the cheapest methods. Some encouraging work has been done in the Nilgiris. Soil Erosion Boards in the Nilgiris and for the State have been brought into existence. Government are also taking powers to prohibit the cutting of trees in private estates where this is necessary to protect the soil. They are also legislating for the creation of a National Park for the Wenlock Downs in the Nilgiris.

The task of afforestation cannot end with what Government are doing. It has to be extended to every part of the country because only when the land becomes green with trees will the soil be moist and the air cool. This is the purpose of the tree-planting week we are celebrating every year. For the past three years the festival has been held on a national scale. Last year, we planted nearly 83 lakhs of trees of which 17 lakhs were fruit trees. This year a target of 50 lakhs is set with 500 trees per village. Tree-planting committees have been organised at different levels. Prizes have been created for records which individual districts or institutions will set. Meetings are being held to create interest in a subject the importance of which is overlooked.

The question to be asked is, if enough is being done. The plan for planting 50 lakhs of trees would imply even at the rate of one tree per person which is not true, that only one-tenth of our population will share in the task. Some one has said that to plant a tree is to bind in gratitude at least four generations, who will have shade from the sun, rain from the skies, fruits, flowers and fuel from the earth. How can we make an increasing section of the population conscious of this opportunity for immortality. One suggestion is that the whole State should be divided into small circles each with a tree-lovers committee, which will train children to track every individual with the question if he has planted his tree. At the same time, all the land available in private and public properties may be surveyed by the committee for marking out the places to be planted. Such committees can work only on goodwill with entreaties, songs, meetings to create consciousness of the task of making India a green and pleasant land.

Planting alone is not enough; aftercare is most important. There is watering to be done for short periods, and there is watch and ward to be maintained against cattle and goats. Until trees are more numerous and foliage plentiful, animals will attack growing plants. A grille with strips of iron is best, but even some cages of sticks and thorns can do, though these have to be watched against being stolen for fuel. It is not easy therefore to raise trees, for which reason, the country has to be roused to the task by every

means possible. In this task, those who know and understand have to teach and persuade those who do not. Love of tree has to become almost a religion, if the encroaching desert is to be repelled, and the green and pleasant outline restored to our landscape. With trees, life began on the earth, with more of them, we can give our civilization the appropriate contour and colour, the proper balance between nature and progress, the true contract between utility and beauty. To the extent we worship trees, in the spirit, if not the manner of our ancestors, Heaven will not pass away from the earth.

By courtesy, A.I.R., Madras.

Five-Year Programme of Tree-Planting

The Government contemplate the implementation of a Five-Year Programme for Tree-Planting in the State. They have asked the Commissioner of Food Production to chalk out the Five-Year Programme to be brought into force from July 1951 in consultation with the Heads of Departments concerned and the State Standing Committee for tree-planting on the lines suggested by the Board of Forestry.

Committee to Study the Working of Prohibition

A five-man committee to study and report on the working of Prohibition in the State will shortly be appointed by the Madras Government.

The Committee will consist of two officials and three non-officials. Of the two officials, one will be either a senior I.C.S. Officer or a Listed Post Holder and the other a senior Police Officer.

The Committee will have its headquarters at Madras and will be empowered to tour the entire State except the scheduled areas.

Undertaking of Private Tuition

The Government have passed orders that the general instructions issued with regard to the regulation of undertaking of tuition by teachers in secondary schools should also be made applicable in the case of teachers in elementary schools.

According to these instructions no teacher shall be permitted to undertake tuition ordinarily for more than three students in any one month and the tuition given to them shall not in any case exceed 12 hours a week, of which at least four hours shall be during the weekly holidays. The names of pupils and hours of engagement shall be intimated to the headmaster leaving the matter of valuation papers of such pupils to the decision of the staff council. The undertaking of private tuition shall not encroach on games and extra-curricular activities. No teacher shall undertake tuition without obtaining the previous consent of the management. Any neglect of duty or misbehaviour of a teacher and violation of the above conditions will entail the cancellation of the permission given.

Progress in the Field of Education

The following figures will show the all round progress achieved in the field of education in the recent years :—

Year.	Number of Elementary schools and strength.		Number of Secondary schools and strength.		Number of Arts Colleges and strength.	
1946-47	36,148	34.56 lakhs	901	4.39 lakhs	78	31,000
1947-48	36,575	36.51 "	975	4.74 "	82	35,000
1948-49	37,195	38.17 "	1103	5.21 "	89	40,000
1949-50	37,812	40.00 "	1247	6.00 "	98	43,100

The expenditure on education has progressively increased during the last six years. The provision made during the last few years was as follows :—

Year.	Rs. (in crores).
1946-47	5.9
1947-48	7.0
1948-49	8.0
1949-50	9.6
1950-51	10.3
1951-52	11.39

The abstract of the current year's budget figures is given below :—

University Education including Collegiate	..	1.13 crores.
Secondary Education	..	1.48 "
Primary Education	..	7.09 "
Special Education	..	0.73 "
Other items	..	0.96 "

New Rules of Admission to Professional Colleges

The following fresh regulations for the admission of students to Medical, Engineering, Agricultural and Veterinary Colleges have been framed by Government ;

(1) Fifteen per cent of the total number of seats available will be reserved for those belonging to the Scheduled Castes and Scheduled Tribes.

(2) Twenty-five per cent of the total number of seats available will be reserved for the socially and educationally backward classes of citizens. The Communities enumerated already in the Government Order relating to educational concessions will be deemed to be the backward classes needing social and educational advancement. This list includes Muslim communities like Lubhais, Dudo Kula and Moplais, Christian converts from Scheduled castes and tribes will also be included under this list socially and educationally backward classes.

(3) This reservation is intended to secure for these classes a minimum number of seats and according to merit and availability, more than this minimum number among these classes may be admitted.

(4) These reserved seats as well as the non-reserved seats will be distributed among the four regions, namely, Circars, Rayalaseema, Tamil Districts and the West Coast Districts (Malabar and South Kanara) in the same ratio as was observed last year.

(5) Twenty per cent of the seats available in the Medical Colleges will be reserved for women students.

(6) Selections will be made by Committees, appointed by Government who will interview the applicants in different centres. There will be three Committees, one for the Medical and another for the Engineering Colleges and the third for the Agricultural and Veterinary Colleges. The Vice-Chancellor of the Madras, Andhra and Annamalai Universities will each be Chairman of one of the Committees.

(7) Except in the case of candidates belonging to the Scheduled castes and Scheduled tribes, applicants for Medical and Engineering Colleges, who have failed to secure not less than 45 per cent and 50 per cent respectively, of the total marks in the Part III subjects will not be considered at all.

(8) The following will be taken into consideration in the selection of candidates :

(i) Marks obtained in Part III Intermediate Examination ;

(ii) Activities in sports and in the National Cadet Corps ;

(iii) Special aptitude of the candidates ;

(iv) Physical fitness ; and

(v) Backwardness of the family in the matter of high education.

Panchayat Administration

The Madras Village Panchayats Act, 1950 has come into force on the 1st April 1951. Leaflets prepared in the regional languages of the State explaining the salient features of the Madras Village Panchayats Act, 1950 were distributed in the villages. Sixty-one sets of rules have already been issued under the various provisions of the above Act. Government have ordered as a special case that translations of these rules in the regional languages should be published in the District Gazettes also so as to afford adequate facilities for the rural population to acquaint themselves with the vast changes effected by the new Act.

For implementing the provisions of the Madras Village Panchayats Act, 1950 Government have appointed an additional staff of 24 District Panchayat Officers and 48 Deputy Panchayat Officers (with the necessary clerical and inferior and menial staff), on the basis of one District Panchayat Officer and two Deputy Panchayat Officers for each district, with the exception of the Nilgiris. (There were already 27 District Panchayat Officers and 123 Deputy Panchayat Officers). The entire staff of District Panchayat Officers, Deputy Panchayat Officers and the staff under them have been taken over to Government Service with effect from the 1st April 1951, consistent with the provisions of the Madras Village Panchayats Act that the cost on account of the said staff should be met from the Consolidated Fund of the State. The liability to State funds on this account works out to Rs. 6.19 lakhs, a year. These Officers will be constituted into a separate subordinate service of Government and necessary rules defining the mode of recruitment and other conditions of service will be issued in due course.

To begin with, Panchayat will be constituted under the Madras Village Panchayats Act, 1950 for villages with a population of 2,000 and above (numbering about 2,700) in the first year, besides villages selected for Rural Welfare work. Side by side, the work of reconstituting the existing Panchayats formed under the late Madras Local Boards Act (numbering 8,516), so as to conform to the provisions of the new Act will also be attended to. This work consists of the following items :—

(1) Classification of Panchayats as Class I and Class II corresponding to the old classification of "major" and "minor" ;

(2) Division into wards and distribution of seats in accordance with the new Act ; and

(3) Splitting up of existing panchayats wherever necessary.

Section 71 of the Madras Village Panchayats Act, 1950 provides for the setting apart every year of a sum not being less than 12½ per cent of the total land revenue (including water cess) for distribution as grants to Class II Panchayats on the basis of their population. This section was recently amended by Madras Act XII of 1951 so as to permit the Government during a period of two years from the commencement of the Act (1950-51 and 1951-52) to set apart for such distribution only such sum as may really be necessary for the panchayats actually in existence as the entire 12½ per cent allotment will be required for distribution only after panchayats have been constituted for all the villages in the State.

Section 12 of the Madras Village Panchayats Act, 1950 provides for entertainment of claims and objections before the publication of the electoral roll of a panchayat. This is no longer necessary, in view of the fact that the Assembly electoral roll which is to be adopted as the electoral roll of the Panchayat also, will, under the Representation of the People Act, 1950, be revised annually except in 1951 and will thus be kept up-to-date. It is therefore proposed to bring in legislation in the ensuing session of the Assembly to amend the Madras Village Panchayats Act, 1950 as so to provide for the mere publication of the relevant portion of the Assembly roll and the alterations thereto, pertaining to the area within the jurisdiction of a Panchayat, as the electoral roll of the panchayat. As it is desired to conduct elections to Municipalities and Local Boards on the basis of adult franchise after the elections to the Legislatures are over, the term of office of members of panchayats has been extended to 2nd January 1952.

Ex-gratia grant sanctioned

The Government have sanctioned an ex-gratia payment of Rs. 500 to Srimathi Komaraju Rajyalakshmanna, the widow of Karnam, Sri Komaraju Venkatarayudu of Indugamali village in Nandigama taluk of Krishna district. Sri Komaraju Venkatarayudu, Karnam, was kidnapped by communists on November 29, 1948, and is suspected to have been murdered. Sri Komaraju Venkatarayudu had rendered material help to the authorities in detecting crimes, rounding up bad characters and combating the communist menace. It has been represented to Government that the widow of the deceased was in a most helpless state. The Government have, as a special case, decided to sanction an ex-gratia grant of Rs. 500.

Research into Infantile and Maternal Mortality

The Indian Council of Medical Research has sponsored a scheme of research and enquiry into infantile and maternal morbidity and mortality in Poonamallee Health Unit area under the auspices of Madras Public Health Department.

The Government have sanctioned necessary special staff for the work and the work has just been started.

Relief to unemployed Agricultural Labourers

With a view to provide relief to unemployed agricultural labourers, the Government of Madras have sanctioned a scheme of laying roads in the Guntur and Bellary districts.

A fifteen-mile gravel road from Vinukonda to Mupparajuripalem in Guntur district will be laid at a estimated cost of 1 lakh rupees.

The Government have also sanctioned the formation of a seven and a half mile road from Allur to Molagavalli in Bellary district at an estimated cost of rupees 1.90 lakhs.

It may be recalled in this connection that the Government have sanctioned road works in Chingleput and Anantapur districts at an estimated cost of Rs. 38,250 and Rs. 47,000 respectively some time back for the same purpose.

Expansion of Medical Relief in the State

The ultimate target of expansion of medical relief is to provide medical relief within a reasonable distance of every member of the population generally at a distance of 5 miles from any village. In heavily populated areas, the population factor should be combined with the distance factor and a Primary Centre provided for every 10 to 12 thousand persons. The aim is to provide suitable buildings not only to accommodate the dispensary but also for the staff of the dispensary. There will be six beds (2 emergency and 4 maternity) besides 2 beds for infectious cases.

Owing to financial stringency, the Government decided to open 150 primary Centres and 25 Taluk Centres in the first quinquennium of the Post-War period, the opening of these centres being spread over the first five-year period at the rate of 30 Primary Centres and 5 Taluk Group Centres in a year. The first instalment of 30 Primary Centres and 5 Taluk Centres have already been ordered to be started during the year 1948-49.

The opening of the second instalment of 21 Primary Centres during 1949-50 was sanctioned. Twenty-five Primary Centres were also sanctioned under the Intensive Rural Reconstruction Scheme. But on account of financial stringency, the opening of the above Primary Centres has been ordered to be deferred.

During 1951-52, the Government have permitted the opening of a Primary Centre at Dendeluru, West Godavari District, availing of the generous donation offered at the above place for the opening of the Centre.

Taluk Headquarter Hospitals

According to the proposals of the Health Survey and Development Committee, the Taluk Headquarter Hospitals form the secondary units. It is intended that an average Taluk Headquarter Hospital should have at least 50 beds and those in more densely populated areas 100 or more beds as might be required. Originally, it was intended that 40 Taluk Headquarter Hospitals should be reconstructed during the first quinquennium of the Post-War period and that the scheme should be extended in three stages of the Post-War period so that the required number of 177 new hospitals may be provided. But owing to financial stringency, the above programme of improvements could not be adhered to.

The improvements which were required immediately to certain institutions and costing less than Rs. 50,000 and the electrification of these hospitals wherever electricity is available, was taken up for execution in 1949-50. A sum of Rs. 15 lakhs was included in the Budget Estimates for 1949-50. A second instalment of schemes of improvements for 1950-51 was sanctioned and a provision of Rs. 5 lakhs was included in the annual estimate of that year. As a large part of the provision of Rs. 15 lakhs included in the expenditure for 1949-50 was not utilized, the Government ordered that all works relating to the implementation of the programmes for 1949-50 and 1950-51 should be done with the utmost speed and every effort made to utilize the provision in full.

Improvement of District Headquarter Hospitals

The general lines of reorganization of the District Headquarter Hospitals are as follows:—

(1) Provision of a first-class laboratory, X-ray department, special departments for Tuberculosis, Leprosy

Venereal diseases and Eye diseases, training of nurses, midwives and compounders and separate Infectious Diseases hospitals.

(2) Employment of adequate staff both for general work and for special departments.

The scheme was originally expected to take 20 years to complete. Early in the year 1947, the question of reorganization of the District Headquarter Hospitals was referred to a Sub-Committee appointed by Government. The recommendations of the Sub-Committee and the remarks of the Director of Medical Services, were considered by the Government and they ordered that no useful purpose would be served in discussing the question of improving or expanding the District Headquarter Hospitals, as the necessary personnel to man the hospitals is not available. It has therefore been ordered that the first and essential objective should be to expand the facilities for Medical Education by starting a new Medical College at Madurai and expanding the Guntur Medical College, in order to provide the personnel required. The question of improving the District Headquarter Hospitals will be taken up after the Medical College schemes have been approved and sanctioned.

Sale of Sandalwood

A conference at the Secretariat level to chalk out an inter-State Governmental policy towards the sale of sandalwood, will shortly be held at Bangalore. The Madras Government will be represented by the Secretary to Government in the Development Department, Director of Industries and Commerce, Chief Conservator of Forests. Besides officers from other State Governments, the conference will also be attended by leading sandalwood oil distillers from Southern and Northern India.

It may be recalled in this connection that a Conference to discuss the same question at ministerial level was held at Bangalore on May 14, 1951.

Increasing Cotton Production

The low production of cotton in the State is responsible for the poor outturn of yarn and the consequent shortage of cloth. This shortage can be got over by extending areas under cotton and by adopting proper manurial treatments in cotton-growing tracts. There is scope for growing cotton in rice fallows in delta areas and for growing cotton as a mixture with groundnut in dry lands. Experiments conducted at the different Agricultural Research Stations indicate the following results:—

(a) Early sown Cambodia cotton gives higher yields than late sown Cambodia.

(b) Cotton responds well to manuring and irrigation.

(c) Inorganic manures do not give significant increase in yields particularly in places of low rainfall.

(d) Super phosphate has no effect on the yields of cotton.

The experiments conducted at the Agricultural Research Station, Bellary, to find out the effect of groundnut cake and ammonium sulphate on cotton in dry lands showed that application of groundnut cake was profitable in the medium fertile soils.

In the Sphere of Education

Eradicating Illiteracy

The subject, Adult Education, did not receive much attention in the past. In 1948-49, the Government drew up a scheme for the education of adults. The main features of the scheme are the following:—

- (1) Opening of literacy schools,
- (2) Training of teachers in adult literacy work,
- (3) Opening of rural colleges for adults, and
- (4) Imparting citizenship training through various methods including visual education.

The scheme was continued during 1949-50 on the same basis as in 1948-49. The movement to eradicate illiteracy gained momentum this year. The aim is to make the maximum number of illiterate people literate in the minimum time.

To help the movement the Government of India first sanctioned a grant of Rs. 1.57 lakhs in 1949. Subsequently they placed an additional allotment of Rs. 6.86 lakhs at the disposal of this Government for the extension of adult education on condition that this Government contribute an equal amount. This allotment is available up to 1952-53. In view of the great importance of this movement this Government agreed to the condition, despite the financial stringency. According to the report of the Director of Public Instruction, there are at present 1,678 adult schools with a strength of about 34,256 students. There are also 10 rural colleges of which 3 are for women and 7 for men. Their strength is reported to be 270 (men 218 and women 52). A provision of Rs. 12.0 lakhs has been made in the current year's budget. It is the intention of the Government to spend the entire amount for the worthy cause without allowing any part of it to lapse and the question of drawing up a comprehensive scheme is engaging the attention of this Government.

Improving Library Service

The Madras Public Libraries Act, 1948, was passed by the Legislature in 1948 and has been brought into force from 1st April 1950. In pursuance of the provisions of the Act, Local Library Authorities, one for each district, have been constituted all over the State. These bodies will be in charge of the extension of library service in the areas under their respective jurisdictions. They will function in accordance with the rules and regulations framed by the Government for their administration. The Chairman of the Local Library Authority will be elected by that body. The District Educational Officer is the Secretary of the local library of the district. The Director of Public Instruction has been appointed as ex-officio Director of Public Libraries and will exercise the powers of superintendence, direction and control over the library service in the State. A State Library Committee has also been set up to advise Government on matters relating to library service.

Under section 12 of the Madras Public Libraries Act, each Local Library Authority is authorized to levy a library cess of 6 pias in the rupee of property-tax or house-tax in the municipal or panchayat areas as the case may be.

Under section 13 (3) of the Act, the Government will make a contribution to each Library Authority of a sum equivalent to the amount of collections from the Library

cess. The collections from the library cess together with the Government contributions will constitute the library fund. The budget provision for these Government contributions in the current year is Rs. 5 lakhs.

It was not possible for the Library Authorities to make much headway so far as the collections of the last year are concerned. But from this year, the collections will be made regularly and the Local Library Authorities will start functioning.

S.S.L.C. Examination Results—A Warning to Parents

Following the publication of results of the S.S.L.C. Public Examination, many parents who expected their children to pass, on finding that they have failed, begin to entertain a doubt that there may be a mistake somewhere either in the totalling or valuation. On this assumption they undergo considerable trouble and expense in travelling to interview departmental officers on the possibility of a revaluation of answer papers or re-checking of marks. Greatest care is exercised in the checking, posting and tabulation of marks and many checks are made at various stages to ensure there is no mistake. There is no provision in the rules of the S.S.L.C. Examination for revaluation of answers or retotalling of marks. Parents could save themselves all the trouble and expense involved if they are aware of the above facts.

The position is complicated for some parents who claim that according to 'Private Information' their children have passed while the published results show that they have failed. This makes no difference so far as the department is concerned. They have been already warned, in the article on 'Private Information' published in *Madras Information*, June 1951 against the possible inaccuracy and the absolute unauthenticity of such 'Private Information'.

Some parents think that the heading 'Provisional list' as published in the daily newspapers means that there may be a supplemental list. What is meant by 'Provisional' is that the list is in advance of the official list to be published in the *Fort St. George Gazette* with the names and full particulars of the eligible candidates. They will be saving themselves disappointment if no expectation of a supplemental list is entertained. This, however, does not preclude the newspapers themselves publishing corrigenda or typographical errors committed by them.

Another impression among parents is that certified copies of marks can be obtained from the office of the Secondary Education Board in advance of the publication of results. Parents will be saving themselves trouble and disappointment in this respect too, if they wait until the publication of results and apply for certified copies of marks, as otherwise they will have to go through the same procedure, twice.

Parents of underaged children can save themselves undue anxiety and trouble of correspondence, if they wait for the children's results until they complete 14 years and 6 months. Even if the children have obtained passing marks, their results are withheld until that time. Universities which prescribe this minimum age do not grant any age relaxation for admission to colleges and an earlier knowledge of the results of such candidates can therefore be of no use.

Development of Forests

By SRI J. M. LOBO PRABHU, Secretary to Government, Development Department.

Forests have a lyrical quality, which has always appealed to human imagination. They are the scenes of the earliest stories of mankind. The Vedas like the Nordic, Gallic epics, breathe the magic of the forests. Shakspere uses them as the background for his more beautiful plays. In our own time, Tagore seems to have been dominated by the mystery and enchantment of forests. Many countries have made a cult of trees. The Japanese not only preserve their forests but introduce miniature trees in their gardens, to create the verisimilitude of vast landscapes, in a small space. They have full grown trees, decades of years old, dwarfed to one hundredth of their size, to be kept in pots inside the houses. To the Germans forests constitute the best idea of a holiday. In Berlin, vast and deep forests take away the severity of city's modern outlines.

If you think of it, there is, in all of us, perhaps for atmospheric reasons, an invincible yearning for forests. Deep down, we thrill at the green sweep which meets our eyes, at the mysterious luxuriance which we pass or penetrate. In the early light of the morning, the forests proclaim the birth of day, in the fading light of the evening they strike the appropriate note of parting. For their effect on the mind, as a garment of the lord, as a ladder to the infinite, sages have chosen forests for their retirement. In a word therefore of departing values, forests remain as one of the few treasures of our existence.

But what have we been doing with them? What is called progress seems to be only cutting down of trees. In the Ramayana, the Deccan Plateau and the now arid Ceded districts are described as Dandaka Vana, an impenetrable mass of forests. The Indus Valley, now largely a desert, opposed the armies of Alexander, as a trackless forest. Before our eyes, since the war, trees are cut everywhere, and even the landscape of the Nilgiris one of the finest in the world has been reduced to a patch-work of potatoes and mud.

KUMARI CULTIVATION IN THOTTAPADI RESERVE FOREST

The barren parts of the forest are regrown with trees and at the same time cultivated with cholam. Cholam crop is seen in the picture.

It will be pleaded that the need of food is greater and that forests are a luxury which must take way for urgent necessities of a growing population. This argument overlooks the utility of a growing population. This argument overlooks the utility of forests in the balance of nature. The rapid denudation of tree growths from hill sides and cultivable plans has led to devastating floods, erosion of soil, progressive diminution of rainfall and general deterioration of climatic conditions. The resulting shortage of fuel is compelling the cultivator to divert his farmyard manure from his field to his hearth, resulting in progressive impoverishment of the soil. To take the instance of the Nilgiris alone, the indiscriminate clearing of privately owned eucalyptus plantations of nearly 20,000 acres has resulted in an erosion of 100 to 150 tons of soil per acre, which not only threatens the fertility of the land involved, but of the vaster areas of land in the plains. This happens because the rivers are being silted up, the Cauvery in Tanjore having risen 2 or 3 feet since 1934, while the Mettur and Pykara reservoirs, on which so much irrigation is built have risen much more. The mystery of the unbroken run of monsoon failures may also lie in the hillsides bared of the foliage which attracts the clouds. Food and forests are therefore not competitive, and forests cannot be reduced, without depriving fields of their water supply and manure, and depriving cattle of their grazing and fodder.

In this context, the position of forests in the Madras State, may be surveyed. The area under Forests in the Madras State is about 18,000 square miles roughly 16 per cent of the State. The West more than the east of the State is heavily wooded, generally speaking the higher altitudes being the sanctuaries of the retreating trees. Fifteen thousand square miles of forests belong to Government, the exploitation of which is carefully regulated by working plans related to the life and nature of the trees. According to these plans, trees may be clear felled, the land being then replanted, select felled natural regeneration filling up the vacancies; or coppiced, growth from the stump supplying the regeneration. In 1949-50, the area clear felled was 3,809 acres, selected felled 18,128 acres and coppiced 43,856 acres. While regeneration takes place, field crops can be grown under the system known as Kumari of which the extent in 1949-50 was 901 acres.

The produce of forests is varied. In 1949-50 wood and charcoal of the value of 92 lakhs, sandalwood of 28 lakhs bamboo of 16 lakhs and minor forest products of 11 lakhs were sold. Of the wood about 15 lakhs worth was timber, both hard and soft in proportion of two to one. Of the minor forest products, wattle bark for tanning leather, canes for furniture, ixora venica for alkaloids, myrabolan, soapnut, lac, tamarind, honey, wax may be mentioned. A Committee has reported the quantities of such products available in the State, and Government are now actively considering plans for their utilisation. Experts are also being secured for preparing plans and plants.

The life which forests support is enormous. Nearly one seventh of our cattle population is allowed to graze in Government forests. Wild life includes elephants, tigers, panthers, bears, deer, monkeys. The last named monkeys,

Schemes for Developing Cottage Industries

For well over a quarter century, attempts have been made by this Government, as well as by some public bodies, to revive cottage industries. A real effort to revive and develop cottage industries and particularly those which would meet the basic needs of the villager was only made in 1946 when an elaborate scheme for the development of cottage industries in the selected firkas under the Rural Welfare Scheme was sanctioned. The primary object of the scheme was to train rapidly local workers in up-to-date methods of manufacture of articles of daily use. The main features of the scheme were—

- (i) establishment of demonstration cum training units;
- (ii) reorganization of industrial and commercial museums; and
- (iii) provision of financial assistance to cottage industrialists.

Experience of the working of the scheme for over one year revealed the need for laying greater emphasis on the production side of the utility articles of improved quality rather than on the mere training of artisans. The scheme was, therefore, revised during the middle of 1948. The modified scheme contemplated the starting of a number of production-cum-training units by private agencies, the Government fulfilling their legitimate role of encouraging and assisting production and marketing. The demonstration and training units formed under the scheme of 1946 were ordered to be transferred to non-official agencies, like co-operative societies, etc., for being run as production-cum-training centres. The revised scheme of 1948 provided for the training of only 4 or 5 pupils in each production centre. It has later pointed out that certain village industries, like hand-pounding of rice, flour grinding, ghani oil pressing, which were indispensable for village economy were decaying and that it was necessary to undertake their immediate revival. A scheme designed to ensure speedy revival of the dying village industries was, therefore, drawn up and put into execution in April 1950. This scheme aims at helping the villagers to produce their daily requirements for consumption in their own villages, thus making the villages self-sufficient economic units. The scheme also provides for the free distribution of improved labour saving tools and implements up to Rs. 6 lakhs in value to enterprising village artisans engaged in any of the village industries in the selected areas and for the imparting of instruction in their use. The scheme also provides for supply to the artisans at cost price of raw materials at an estimated cost of Rs. 12 lakhs through co-operative agencies specially formed for the purpose.

As a complement to the scheme, two model centres of village industries have been opened, one at the Tamilnad Grama Sevak Vidyalayam, Kallupatti and the other at the Andhra Grama Sevak Vidyalayam, Gopannapalem, where—

- (1) the results achieved by the scheme will be demonstrated;
- (2) course of training in village industries could be organized; and
- (3) surveys and researches connected with the village industries could be carried on.

Besides the abovementioned schemes, the Government have also sanctioned Sri M. Visveswarayya's Rural Industrialization Scheme which is expected to bring about intensive development of small scale and rural industries in every village in the State. The scheme aims at the development of industries in every part of the State and increase production and income from them by encouraging growth of the spirit of self-help, initiative and ambition in the rural population by affording them an opportunity to acquire higher operative knowledge, skill and practice in industries. This scheme provides for the formation of village group units for every 15 to 20 villages with a population ranging between 10,000 to 20,000 and the constitution of committees for these group units composed of the local competent businessmen and leaders. Half of the working expenses not exceeding Rs. 1,500 for each committee per year will be met by Government and a contribution from the villagers will be collected to cover the other half. An expenditure of Rs. 1,10,266 has been sanctioned by the Government in connection with the implementation of the scheme.

Besides the abovementioned basic rural industries, certain cottage industries which have developed firm local traditions have been selected for intensive development and they are—

- (1) Match industry,
- (2) Palmyra fibre and leaf products,
- (3) Leather goods manufacture,
- (4) Woolen cumby and blanket weaving,
- (5) Pile carpets,
- (6) Handmade cotton lace,
- (7) Coir, and
- (8) Druggets.

To stimulate actively the development of these industries, special advisory boards have been constituted.

With a view to devise ways and means for the intensive development of cottage industries in the State, the Government have also constituted a State Cottage Industries Board for this State.

The drugget industry is a dollar-earning industry. With a view to reviving this industry, a Joint Drugget Industry Advisory Board for Madras and Mysore has been constituted. The Board has met a number of times and fixed standards for druggets to be exported to U.S.A., so that market for druggets in that country may not suffer. With a view to help the drugget manufacturers to secure tannery wool easily and at reasonable cost, the Government of India have, at the request of the Drugget Board, regulated the movement of tannery wool to places other than Wallajah, Salem and Bangalore.

Training and research have always been considered as the chief necessity in the campaign for the development of cottage industries. This is achieved by arranging for training in the following institutions:—

- (1) Government Industrial schools,
- (2) Private-aided industrial schools,
- (3) Institute of Leather Technology, Madras,
- (4) Coir schools,
- (5) Government Textile Institute, Madras,
- (6) Kerala Soap Institute, Kozhikode,

7. Pottery Training Centre at Rajahmundry,
8. Glass Bangles and Beads Training Centres at Kalahasti and Kasargod.
9. Two Model Centres of Village Industries attached to the Grama Sevak Vidyalayams, and
10. At the Industrial Training Centre for Women at Madras.

Besides organizing training in the abovementioned institutions in several cottage industries, arrangements have also been made to get some artisans or village workers trained outside the State. Three Rural Welfare Officers and six Grama Sevaks were trained in Village Industries at the All India Village Industries Association, Wardha and the experience gained by them at A.I.V.I.A. is now being utilized at the Model Centres for training other artisans. Two carpenters from the Grama Sevak Vidyalayams have also undergone training at Wardha in the construction and working of Wardha type of Ghani and one of them was deputed to Hyderabad to study the cement ghanis installed there. Six technical subordinates of the Industries Department were deputed to undergo training in the operation of the Japanese Cottage Industry Machinery set up at New Delhi by the Ministry of Rehabilitation. The Deputy Director of Industries and Commerce (Cottage Industries) was also deputed to study the working of these Japanese machines.

The financial resources of almost every cottage industry being slender, the need for financial assistance being extended by Government to these establishments has long been realized in this State. Statutory provision has been made in the Madras State Aid to Industries Act. The Director of Industries and Commerce has been empowered to grant a loan or subsidy not exceeding Rs. 500 to any cottage industrialist, who desires to start or carry on a cottage industry which has an important bearing on the development of the country.

With a view to promote the popularization of the products of cottage industries, Industrial and Commercial Museums have also been started with a Central Industrial Museum at Madras.

Supply and Distribution of Yarn during May 1951

Eighteen thousand three hundred and thirty-six bales of yarn were received from mills by Government during the month of May 1951. The normal allotment of the State is 22,500 bales.

Of the quantity received during the month, 15,936 bales were distributed to handloom weavers and 2,400 bales to other consumers.

The following gives the details of the allocation made during the month of May 1951. Nine thousand six hundred and sixty bales have been allotted to the district for distributing 6,600 bales through trade channels and 3,000 bales through Mill depots. Seventy bales were allotted to the districts for distribution through consumers' associations. Six thousand and seven bales were allotted to Madras Handloom Weavers' Provincial Co-operative Society for distribution to weaver members of primary societies. The Department of Fisheries have been allotted 122 bales for distribution to fishers. Two thousand four hundred and seventy-seven bales have been allotted to consumer quota holders.

Payment of Salaries to School Teachers

Allegation proved false

In a recent issue of a 'Malayalam Daily,' there was an editorial that the teachers in the elementary schools under the control of the District Board, Malabar, had not been paid their salary for two or three months, that the teachers were therefore put to considerable hardships, that the Government did not heed to the appeal of the President, District Board, for financial help in order to pay the teachers regularly and that the Government's inaction was due to political motives. The picture presented in the editorial is not based on facts. A letter was received by Government on 22nd May 1951 from the President, District Board, Malabar, in which it was reported that the salaries of the teachers were in arrears and that the District Board required an advance subsidy of Rs. 6,00,000 to pay the teachers regularly. With reference to this request, orders were issued on 2nd June 1951 granting an advance subsidy of Rs. 5,00,000 to meet the demands under elementary education. In addition to this subsidy, the Government have also sanctioned to the District Board in April 1951, a subsidy for elementary education amounting to Rs. 7,26,200 payable in monthly instalments of Rs. 60,516 each. In May 1951 another subsidy of Rs. 1,93,000 in a lumpsum was also paid to meet the expenditure incurred on account of elementary education. The District Board is eligible for yet another subsidy of about Rs. 1,14,750 towards expenditure to be incurred by it in 1951-52 on the scheme of compulsory elementary education and the payment is likely to be sanctioned soon. It will therefore be seen, that the allegation that the Government are swayed by political considerations in sanctioning the subsidies to the Malabar District Board is false and mischievous.

Electricity Extension Schemes

Andhra Power System: The Government have sanctioned a proposal for extension of electricity for agricultural, domestic and street-lighting purposes at Gannavaram, Gudavalli and Kesavapalli villages in Gannavaram Taluk, Krishna District, at an estimated cost of Rs. 1,24,500.

The Government have sanctioned a proposal for extension of supply of electricity for agricultural, domestic and industrial purposes at Kumaram village, Chepurupalli Taluk, Srikakulam District at an estimated cost of Rs. 41,900.

Madras Electricity System: Sanction has been accorded to the extension of supply of electricity to Ambattur village for agricultural, industrial and domestic purposes at an estimated cost of Rs. 32,400.

Mettur Electricity System: The Government have sanctioned the extension of supply of electricity to Nellorepet and Perumbadi villages in Gudiyatham Taluk, North Arcot District for agricultural purposes at an estimated cost of Rs. 79,800.

Papanasam Electricity System: The Government have sanctioned a scheme for the extension of supply to Sivarakottai village in Tirumanagalam Firka, Mathurai District for agricultural, industrial and domestic purposes at an estimated cost of Rs. 73,800.

Five-Year Plan for Madras

The Report of the Planning Commission envisages an expenditure of Rs. 137 crores on developmental schemes in this State during the 5 years covered by the plan. A rough break-up of this sum under various heads is indicated below:—

	RUPEES IN CRORES.
I. Agriculture and Rural Development ..	21.9
II. Major Irrigation and Power Projects ..	80.4
III. Industries ..	2.1
IV. Transport (Roads) ..	5.0
V. Social Services (Education, Medical, Public Health, Housing and amelioration of Backward classes) ..	27.6
Total ..	137.0

The bulk of the expenditure, about Rs. 80 crores, is on irrigation and power projects which are already under execution as a part of the Post-war Development programme launched by the present Government. A sum of about Rs. 22 crores has been set apart for agriculture and rural development. Many of the agricultural schemes, such as the distribution of chemical fertilisers or improved strains of seeds, are fully or partially self-supporting. The sum provided for in the plan, is the net cost to the Government after setting off the receipts against the gross expenditure. As pointed out by the Commission, greater emphasis has been placed on schemes intended to improve the standard of living of the people rather than on social services. The amounts provided for items like Education, Public Health or Communications are not spectacular, but this had to be so, in view of the limited resources available.

The Commission has indicated in a general way how the plan has to be financed for the country as a whole. As far as this State is concerned, the money is expected to come from the following sources:—

	RUPEES IN CRORES.
(a) State Revenues available for development expenditure on the present scale ..	30
(b) Possible economies in expenditure ..	5
(c) Surplus in deposit transactions ..	8
(d) Loans from the open market ..	17
(e) Withdrawals from Reserves ..	27
(f) Additional taxation ..	20
(g) Assistance from the centre ..	30
Total ..	137

A good few of the items included in the plan, are mere continuations of schemes already in operation in this State. Even without the plan, provision would have been made to the extent possible, in the Revenue budget of the State for these services, and normal a sum of Rs. 30 crores would have been spent on them during the five years as indicated under item (a) of the statement. Item (b) amounting to Rs. 5 crores will have to come out of drastic economies in departments like Civil Supplies, Police, Prohibition and other spheres of general administration.

The sum of Rs. 8 crores under item (c) represents the normal capital accumulations with the Government from transactions such as deposits on account of provident funds and State trading schemes. Under conditions now obtaining in the money market, it is a fair expectation that a sum of Rs. 17 crores can be raised from this source during the next 5 years as indicated under item (d). We have in our reserves securities worth Rs. 32 crores, and therefore we may safely take credit for the sum of Rs. 27 crores under item (e). Coming to the question of additional taxation, the Planning Commission has advised us to augment our resources to the extent of Rs. 4 crores per year to make up a total of Rs. 20 crores indicated under item (f). A portion of this sum will be covered by the proposal now under consideration by the Central Government to levy death duties. In the State sphere, we have indeed explored many new avenues but there does not seem to be much scope for further revenue under items like General Sales Tax or Motor Vehicles Tax. But our Land Revenue which used to be the mainstay of our pre-war budgets, is still being maintained more or less on the old level. No doubt, we have controlled the price of foodgrains and therefore, agriculturists growing food crops have not been able to earn their full share of increased costs. But on lands growing commercial crops such as groundnut, cotton, coconut, pepper, etc., the present assessment sits very lightly, and therefore there may be a case for some little enhancement. The execution of various irrigation schemes by the Government, should have increased the value of lands newly brought under the plough, and some kind of betterment levy seems feasible. The Commission has recommended the levy of agricultural income-tax and a surcharge on irrigation revenue. All these aspects will have to be carefully examined by this Government in the near future.

The plan for this State may appear to be the largest when compared with those of other States. But this does not take into consideration the enormous expenditure undertaken by the Centre on large multi-purpose projects like the Bhakra-Nangal, the Hirakud and the Damodar Valley. These projects costing Rs. 176 crores to the Centre during the five years, will benefit the Punjab, Bihar, West Bengal and Orissa and therefore the proportionate share of the costs of these projects should be added on to the plans of those States in order to arrive at a true comparison. Actually, all the irrigation and power projects covered by our plan are already under execution, and nothing new has been added to the list. Ours is the most deficit of all States in food and all that deficit is in rice. Wheat growing projects of the North, however attractive they might be from the All-India point of view, cannot bring in lasting succour to the half-starved people of this State. We will indeed, endeavour to implement the plan prepared by the Commission to the best of our ability, but our food deficit can be met, only if the Krishna and the Godavari projects, both of which have been fully investigated in consultation with international experts, are taken up for execution. The Planning Commission has paid us a compliment for the initiative we have shown in developing our natural resources. Through our sustained efforts during the past few years we have managed to build up a first-class engineering organisation of this State. The key-personnel of this organisation have been trained Overseas and some of

them are men capable of holding their own in international circles. Machinery and transport worth several lakhs of rupees, with workshops for their maintenance, have been set up and are giving excellent turnover. It is in the interests of the nation that this set-up, capable of investing about Rs. 20 crores per annum in the development of natural resources, should be continuously put to use and improved on. The Planning Commission has in mind a supplementary programme costing about Rs. 300 crores to be initiated, subject to external assistance being forthcoming to the anticipated extent. Let us hope that in the apportionment of priorities for schemes to be included in this supplementary list, the case for the Krishna and Godavari projects will receive proper consideration.

Administration of Jails

The Administration Report of Jails for 1950 shows that there was an increase in the number of admissions to jails from 313,081 in 1949 to 321,520; still, the daily average population decreased from 26,661.12 to 25,514.94. The daily average of the undertrial prisoners increased from 6,919.43 to 8,867.25.

2. 38.37 per cent of the convicts in the jails were employed in the jail manufacture of various articles the value of which was Rs. 24,16,693 in the year under report against Rs. 24,39,436 in 1949.

3. The following are the important events and notable administrative measures introduced in the jails during the year under review :—

(1) Declaration of the jail at Pudukkottai as a third class district jail.

(2) Constitution of a Jail Reforms Committee to consider the question of improvements to be made in the administration of jails in the State and to suggest suitable reforms.

(3) Conversion of the post of Matron Superintendent into one of Lady Deputy Superintendent of gazetted rank in the Presidency Jail for Women, Vellore.

(4) Deputation of teachers from the Central Jails at Coimbatore, Vellore, Tiruchirappalli, Penitentiary, Madras, Rajahmundry, Bellary, Cannanore and Presidency Jail for Women, Vellore, to undergo training in Adult Education.

(5) Introduction of poultry farming as an experimental measure in the Central Jails at Rajahmundry and Tiruchirappalli.

(6) Introduction of bee-keeping industry in the Central Jail, Salem, and the deputation of a second grade warder to undergo training in bee-keeping at the Agricultural College, Coimbatore.

(7) Nomination of the District Magistrate (Judicial) as an ex-officio member of the Board for the revision of sentences of prisoners in jails in the districts in which separation of executive from judiciary is in force.

(8) Placing under the supervision of District Probation Officers of prisoners released prematurely or on parole.

(9) Permitting the use of tobacco by under-trial prisoners in the subsidiary jails.

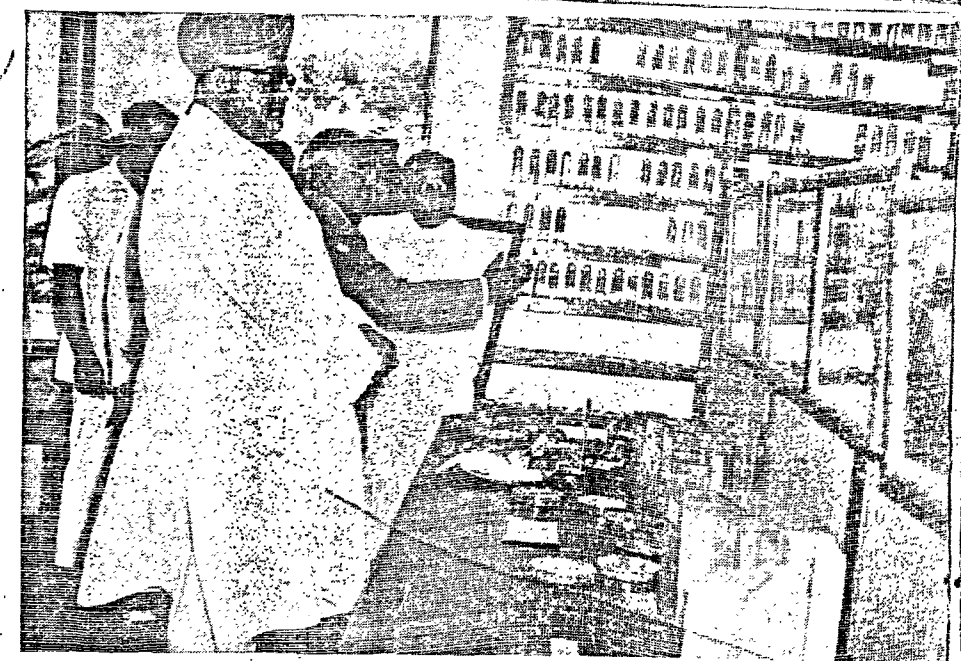
(10) Reservation of a separate room in the General Hospital, Madras, for detenus admitted there for treatment.

(11) Grant of amnesty and special remission to prisoners in honour of the inauguration of the Indian Republic on 26th January 1950.

(12) Transfer of ex-military and other prisoners convicted by civil courts of criminal jurisdiction beyond the State of origin to the State of origin, with the prior concurrence of the respective States Governments.

(13) Application of section 29 of the Prisoners Act (III of 1900) to Part B States so as to permit inter-transfer of prisoners.

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H.E. THE RAJPRAMUKH OF MYSORE recently visited the Agricultural Research Institute at Coimbatore. The picture shows the Paddy Specialist showing different strains of paddy to H.E. the Rajpramukh.



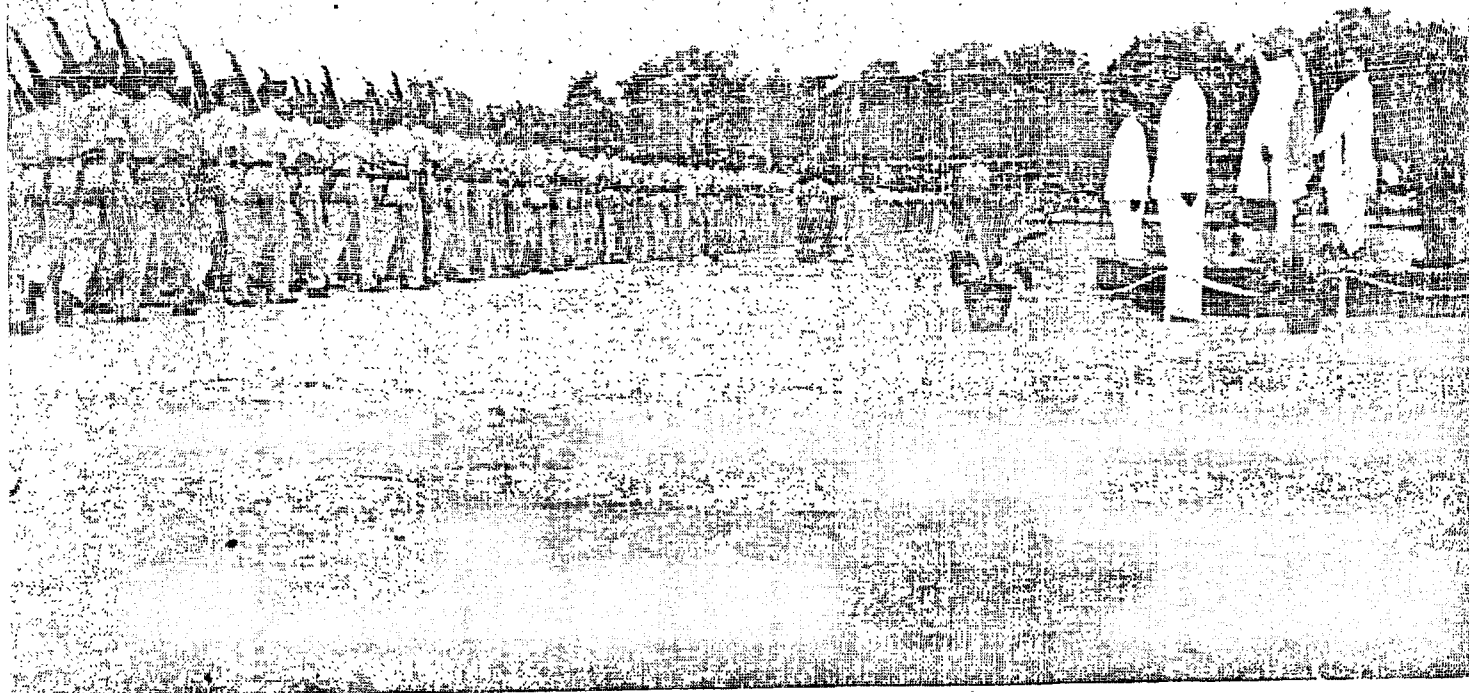
FOOD GIFT PACKAGES FROM U.S.A.

SRI J. L. P. ROCHE-VICTORIA, Minister for Food, receiving Care Food gift parcels from U.S.A. for distribution among the poor, from Sri T. S. Ramachandran, I.C.S., Collector of Madras, who took delivery from the ship.



HON'BLE MINISTER FOR FOOD giving away food packages for distribution among the deserving at Udampet.





FOURTH ANNIVERSARY OF INDIA'S INDEPENDENCE

Madras State celebrated the fourth anniversary of India's independence on August 15. There was a ceremonial parade on the Island Grounds, Madras City. H.E. the Maharaja of Bhavnagar, Governor of Madras, drove round in a car and reviewed the parade. Pictures show His Excellency at the saluting base, taking the salute as the troops march past



MADRAS INFORMATION

Welfare State Programme Calls for Willing Sacrifices

H. E. the Governor's Address to the Joint Session of
Madras Legislature

HONOURABLE MEMBERS OF THE LEGISLATURE!

I thank you all most sincerely for your courtesy in attending this third joint meeting of the Houses of the Legislature of this State under our new Constitution. We have overcome many difficulties so far, but we have still several problems before us which I have no doubt we can overcome with confidence if we approach them in the right spirit and with the firm resolve that whatever is undertaken for the good of the people will be pursued with vigour.

All of you must have noted with interest the points covered by the report of the National Planning Commission. That report envisages an expenditure of Rs. 137 crores on development schemes in this State during the quinquennium commencing from this financial year. A detailed note will be placed before you for your information, and I shall refer only to some broad aspects of the questions arising out of the Planning Commission's report. An amount of Rs. 80 crores has been earmarked for Irrigation and Power Projects, Rs. 22 crores for Agriculture and Rural Development and Rs. 35 crores on Social Services, Transport and Industries. It is the intention of my Government to implement this modest plan and thereby extend irrigation over a million acres of land, double the existing power generation and also cover a sizeable portion of our large food deficit. A good few of these schemes are already under implementation from out of the ordinary resources of the State.

Tapping New Resources

Some assistance is expected from the Central Government, but the bulk of the expenditure will have to be met by the liquidation of our Revenue Reserves, by borrowing from the open market, by additional taxation and by any possible economies in general administration. Under the conditions now obtaining in the money market, the sale of securities and the raising of open market loans may present difficulties, but I hope that with the co-operation of the Reserve Bank, which has been doing its best to aid this State, and that of the general public, these difficulties will be surmounted.

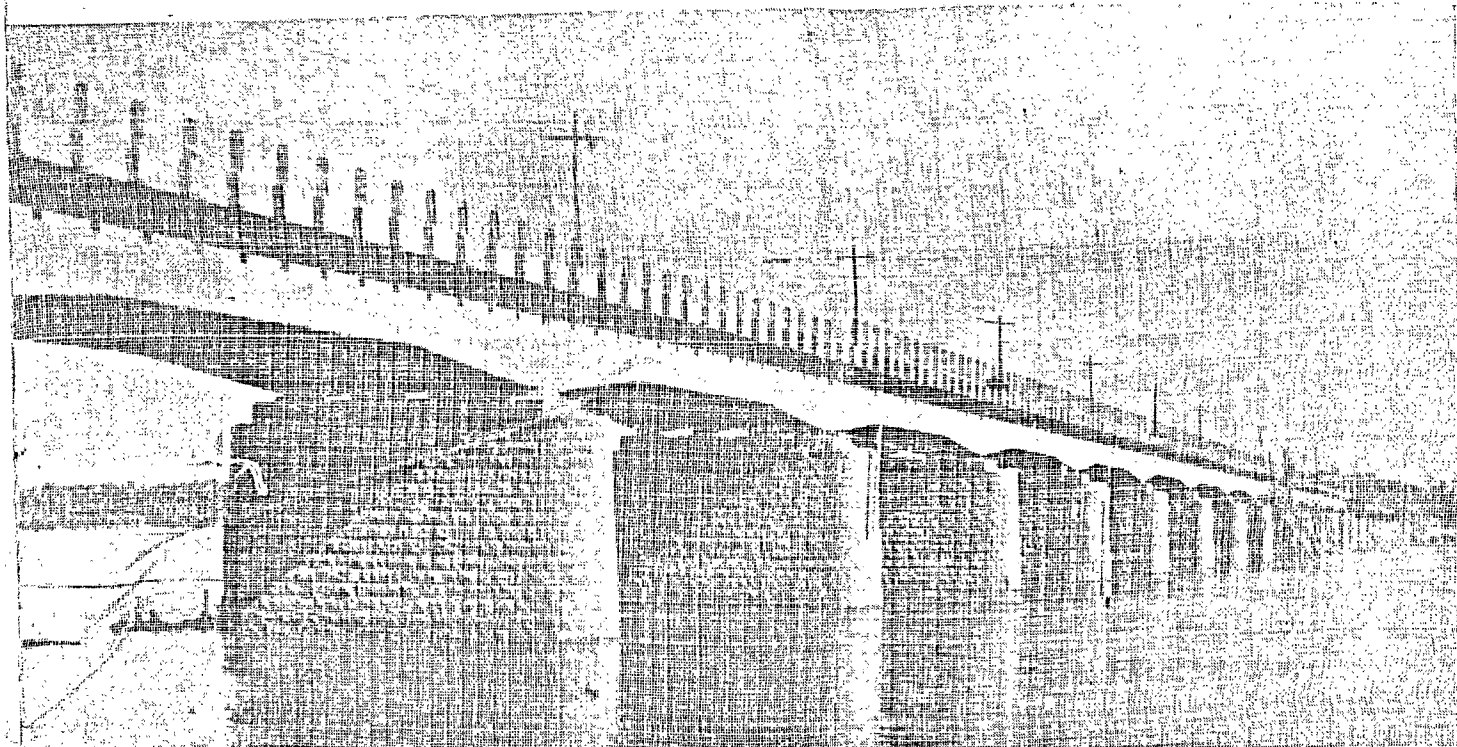
In tapping new resources towards implementing the Plan, my Government propose to follow generally the considered advice of the Land Revenue Reforms Committee to which I shall refer presently. Draft legislation will soon come up for your consideration for the collection of

betterment fees on lands benefited by irrigation works, executed at very considerable expenditure, for the temporary enhancement of the comparatively low assessment on lands growing commercial crops, and for the levy of a surcharge on holdings paying an assessment of over Rs. 150. These additional taxes may no doubt appear burdensome; but we cannot aim at a Welfare State unless we are willing to accept cheerfully the necessary sacrifices.

Supplementary Programme

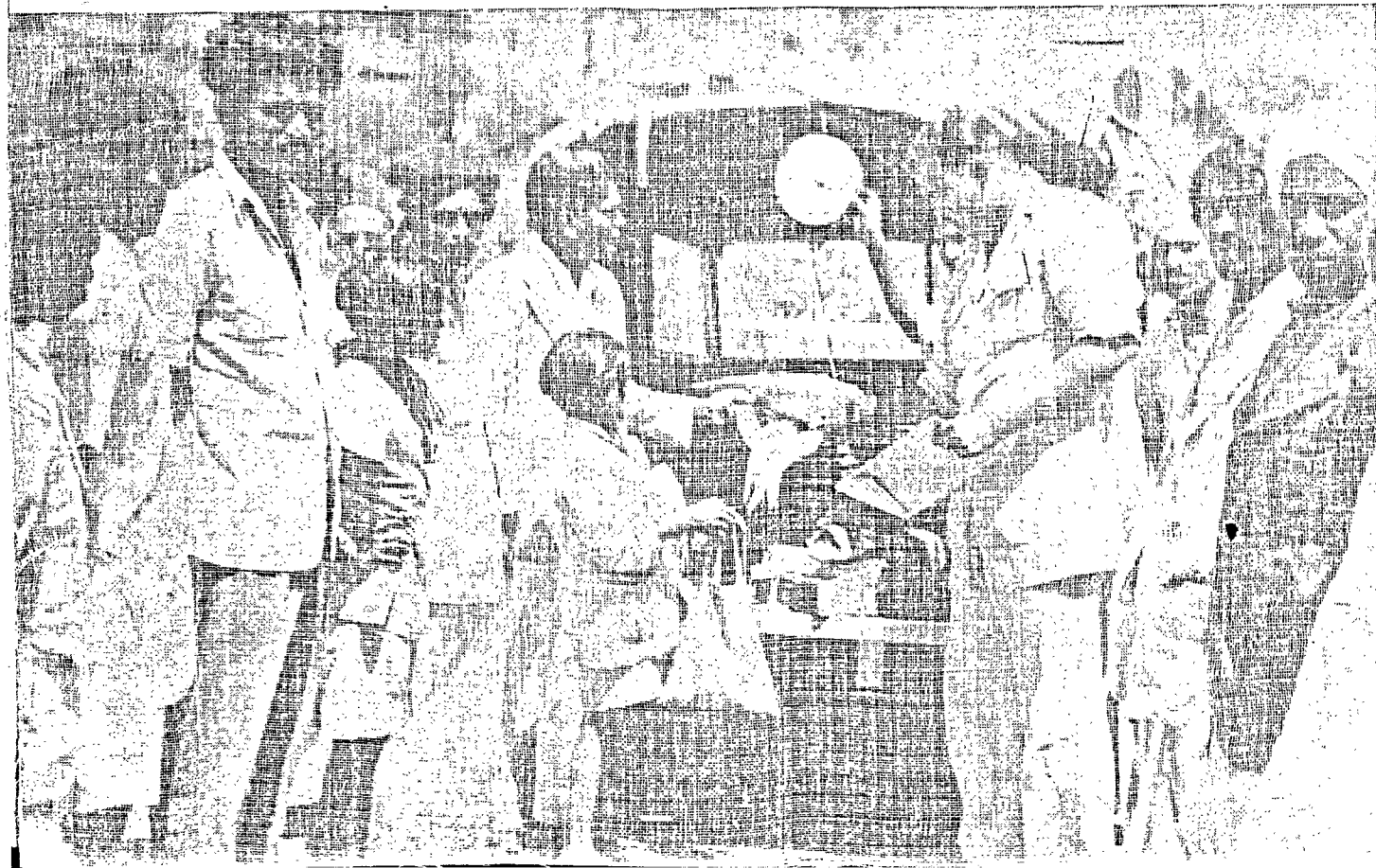
The Planning Commission is preparing a supplementary programme costing about Rs. 300 crores, to be initiated, subject to external assistance being forthcoming. My Government have been pressing on the Commission and the Government of India that this State has a very large food deficit, all of which is in rice, but that this deficit can be met if the Godavari and the Krishna river valleys are developed, that projects to harness these untapped natural resources have been fully investigated, that we have a well-trained engineering and administrative organization capable of implementing this programme without over-much dependence on foreign experts, and that if the necessary financial assistance is forthcoming, these large endeavours could be accomplished before long. I trust that in the apportionment of priorities for schemes to be included in the supplementary programme, the representations of my Government will receive due consideration.

Seasonal conditions have not been very favourable, as, although the south-west monsoon has commenced, its beneficial effects have not yet been felt, with the result that works such as major irrigation works, minor irrigation works, district board works, rural water-supply works and similar other schemes undertaken to provide employment to the agricultural labourers distressed by the failure of the north-east monsoon during fasli 1360 have been continued, and several more works have also been taken up. In parts of Visakhapatnam, Nellore, Chittoor, North Arcot, Coimbatore, Salem and Tirunelveli Districts where the purchasing power of the poorer section of the people has gone low due to four successive years of adverse seasonal conditions, gruel centres have been opened for the supply of gruel by non-official agencies supported by Government aid. A sum of Rs. 1,00,000 has been received from the Honourable Prime Minister of India for this purpose—Rs. 50,000 from the Prime Minister's Relief Fund and Rs. 50,000 from other sources.

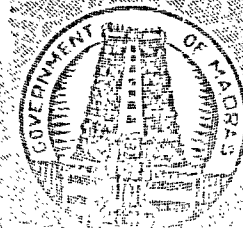


Above: A NEW ROAD BRIDGE across the Cauvery River at Pugalur, Namakkal Taluk. It is about $1\frac{1}{2}$ miles in length and when completed it would connect Tiruchirappalli and Salem Districts. The picture shows the finished portion of the bridge.

Below: EAT MORE FISH.—The Fisheries Department has introduced a new scheme of selling fresh fish at various Hill Stations in the State. The picture shows officers of the Fisheries Department selling fish caught from Mettur Reservoir at Yercaud Hill Station in Salem District at reasonable rates.



MADRAS INFORMATION



Food Position in the State

The food position in the State continues to be difficult. Since the beginning of the current calendar year, we have, with the approval of the Government of India, launched upon an experiment of partial derationing in deficit districts except Malabar and the Nilgiris. To put down prices and relieve distress, the Government have opened fair price shops in those areas. Thanks to the American Aid, the Government of India have been able to increase the overall allotment of foodgrains to this State for 1951 to 10 lakhs tons. Consequently, my Government increased the overall ration to 12 oz. per adult per day in rationed and derationed areas in the State with effect from 24th June 1951. The Government of India have, however, emphasized that it is not possible to increase the rice quota to this State beyond 2 lakhs tons already promised and that the balance of 8 lakhs tons would be in the shape of wheat and millets.

As the rice position is not satisfactory, my Government have been compelled to reduce the rice content of the ration with effect from 12th August 1951, as has been announced recently, the balance to be made up with wheat or milo. The Government of India have increased the pool price of rice and wheat. Consequently, it has been ordered that the imported rice should be sold at the price of rice first sort, in the importing deficit districts and that the loss on account of the increase in the pool price of rice and the disposal of imported rice at the price of first sort rice, should be partially recouped by a uniform increase in the price of rice throughout the State.

National Drive for Self-sufficiency

While my Government are tackling the immediate problem of feeding the population, with vigour and speed, they have also been making sustained and resolute efforts to increase food production as part of the national drive for self-sufficiency in food. A special drive has been launched for the use of chemical manures in the deltaic areas backed up by the grant of larger interest-free loans. Under the Food Production Plan, we have programmed to achieve an additional production of over 6 lakhs tons of cereals (rice and millets) by the end of 1951-52. Actually, during the year 1950-51, the recorded additional production was about 1.82 lakhs tons of cereals which is no mean achievement considering the adverse seasonal conditions during the year.

Fish stands foremost among the protective foods available for supplementing the diet of the people whose staple food is rice. The supplies of fish, however, are not sufficient to meet the demand and the Government have therefore sanctioned a number of schemes for developing the fisheries in the State with the object of increasing the production of fish. In order to encourage fishermen to produce good cured fish under hygienic conditions at the Government fish-curing yards, a scheme has been sanctioned for the supply of salt to the fish-curers at subsidized rates. The Government have also decided to purchase 8 lakhs of rupees worth of materials such as catamarans, boats, nets, etc., and distribute them to the fishermen at 75 per cent of the cost in view of the large increase in the prices of these materials.

Irrigation and Power Projects

Despite financial stringency, the pace of execution of irrigation and power projects has been maintained generally. My Government have also completed the Araniar Project



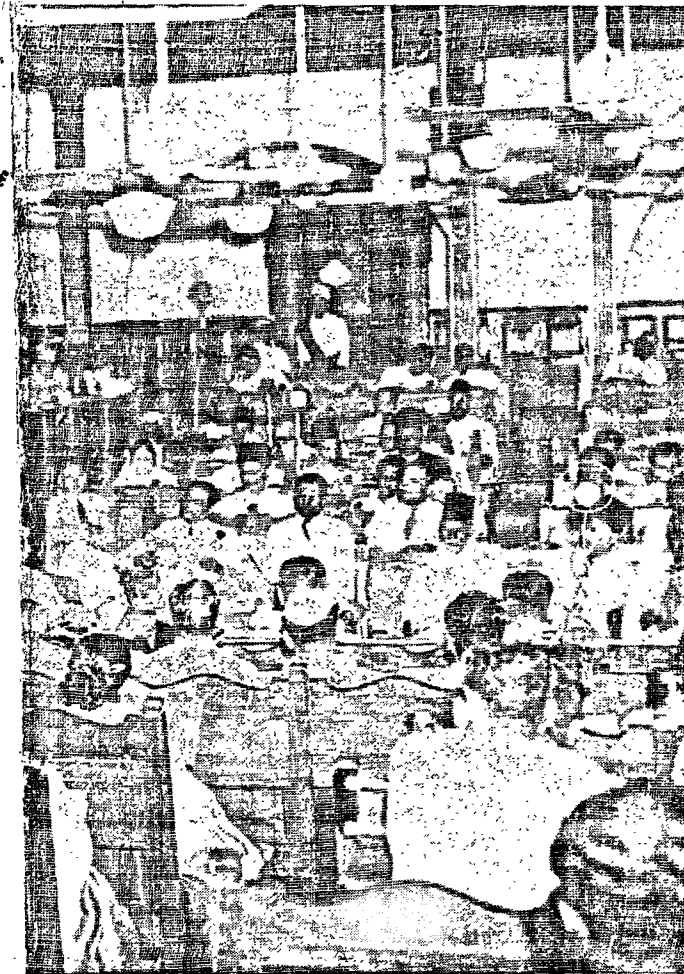
THE JOINT SESSION: His Excellency the Ma
the Joint Session of

in the Chingleput district and the Walayar Reservoir and the Mangalam Reservoir Projects in the Malabar district estimated to cost Rs. 240 lakhs and to benefit 21,000 acres of land. At the instance of the Planning Commission, agreement has been reached between the States concerned over the allocation of the waters of the Krishna and the Godavari and the Government are now in a position to take up, one by one, major multi-purpose projects on the two river systems.

A very large number of major and minor schemes for the extension of electricity to rural areas, particularly for agricultural purposes, have been sanctioned and are under execution. The programme of nationalization of electricity undertakings gathered weight and my Government have so far taken over 13 company and 25 local authority licensee undertakings.

A five-year plan relating to National Highways has been forwarded to the Government of India for sanction, and works estimated to cost Rs. 2.8 crores including several major bridges are under execution. Works on State Roads and District Board roads already sanctioned and estimated to cost Rs. 15 crores are also under execution with the assistance of allocations from the Road Fund.

In May 1950, my Government constituted a Committee called the Land Revenue Reforms Committee to advise



haraja of Bhaunagar, Governor of Madras, addressing
the Madras Legislature

them in the matter of undertaking reforms in the land tenure and land revenue systems prevailing in the ryotwari areas of the State. The Committee has completed its deliberations and submitted two reports. The recommendations made by the Committee are being examined by my Government.

Under the Madras Estates (Abolition and Conversion into Ryotwari) Act, 1948, the Government have so far notified and taken over all the zamin estates in their State and the under-tenure estates pertaining to them except a few which are covered by stay orders issued by the High Court. My Government propose to notify one batch of inam estates shortly. They also propose to amend Section 54-B of the Act so as to provide that post-settlement under-tenure estates are also eligible for the additional compensation provided for in that section.

The pace of the implementation of the comprehensive policy and programme of medical relief and public health is determined by the financial resources of the State. But within these limitations, the policy and programme are being actively pursued. In order to relieve the shortage of qualified medical men, schemes for setting up medical colleges at Guntur and Madurai are under active consideration. The needs of post-graduate training and research are proposed to be met by opening All-India Medical

Institutes in co-operation with the Union Government and also by upgrading certain departments of the Hospitals in Madras and in the Madras Medical College. A scheme in this regard for improving the facilities available in Madras City will be placed before the Legislature.

Educational Policy

The policy of the Government in the sphere of primary education continues to be the spread of Basic Education throughout the State, as early as possible. Accordingly, the existing training schools are being converted into Basic training schools, and new Basic training schools are being opened every year. Special steps are being taken to see that more adult literacy schools are opened throughout the State so as to eradicate illiteracy from the State in the minimum time possible. In the field of Secondary Education, it is proposed to introduce Textile Technology as a subject in the schools. Several new colleges have been opened in the current year including the Government Second Grade College at Srikakulam. The Government College at Cuddapah has been raised to the first grade.

Madras has taken enthusiastically to the National Cadet Corps and young men in colleges and schools are joining the Corps in large numbers. The opening of an Air Wing Unit at Madras and the formation of an Independent Infantry Company at Palghat are special features of the development of the National Cadet Corps organization in the current year.

Harijan Uplift

My Government have been earnestly endeavouring to ameliorate the lot of the Harijans and other Backward Classes. The age-long evil of untouchability has been almost eradicated and every possible step is being taken to raise the level of Harijans to that of the more advanced sections of the population. Free education, hostel facilities, grants of money for purchase of books and exemption from examination fees are serving as incentives for higher education among Harijans. Assignment of lands free of cost, house-sites, provision of pathways and drinking water facilities at State cost are being made to improve their general standard of living. Legal aid is given by Government in deserving cases to save them from mischievous and rich litigants.

Steps have been taken for formulating development schemes for the Agency areas in the East Godavari, West Godavari, Visakhapatnam and Srikakulam districts and for the amelioration of the hill tribes in those areas. Definite schemes will be settled in order of priority after examining the report submitted by the Special Agency Development Officer, and executed from the current year with the aid of a half-grant which the Government of India have been requested to give under Article 275 of the Constitution.

With a view to provide full employment to the village artisans and off-season occupation to the agriculturists in the villages, my Government embarked on certain schemes for the development of village industries during 1950-51 and they are progressing satisfactorily.

Handloom Industry

The handloom industry was facing a crisis mainly due to acute scarcity of yarn in the State consequent on the reduced production and increased exports up to the end of 1950. On the representation of this Government, the exports of yarn to other countries have practically been

stopped and the supply made available for handlooms. Every effort is being made to see that the available yarn is distributed as equitably as possible. The position regarding supplies of mill cloth has improved latterly.

Nationalized Transport

The nationalized Government Transport in Madras City continues to give satisfactory service. As an enterprise which is still in its infancy, it has to grapple with several problems. It is proposed to put on the roads buses of larger seating capacity in replacement of the existing petrol buses of limited capacity and this, it is hoped, will solve the problem of clearance of peak-hour traffic. The Government have deferred for the present the extension of nationalization of Motor Transport to the mufassil with a view to consolidate the experiment in the City.

The Committee constituted last year to go into the question of improvements in jail administration in this State is expected to conclude its labours and submit its final report to the Government by about October next.

Electoral Rolls

The finalization of the electoral rolls for the Madras Legislative Assembly and the House of the People is nearing completion, and these rolls will be finally published soon after the President's Order delimiting the constituencies in this State, as modified by Parliament, is notified. This notification is expected shortly.

The electoral rolls for the Local Authorities, Graduates and Teachers' Constituencies of the Madras Legislative Council are now being revised with reference to 1st April 1951 as the qualifying date as required by the Representation of the People Act, 1950, and the rolls will be published, inviting claims and objections, as soon as these constituencies have been delimited by the President subject to scrutiny by Parliament during its current session. These Council rolls will be finally published soon after the disposal of the claims and objections received within the time allowed under the rules.

In accordance with the latest communication received from the Election Commission, the polling for the General Elections in this State will commence early in January 1952 and will be completed by the 24th of that month, and it is hoped to complete the declaration of the results in respect of all the elections in the State by the end of the same month. A programme is being prepared accordingly and will be forwarded to the Commission shortly. All the elaborate arrangements which have to be made in connection with the conduct of these unprecedented elections on the basis of adult franchise are engaging the careful attention of my Government and will be completed well in time. The Collectors have been instructed to give due publicity to the lists of polling stations which are proposed to be set up for the conduct of these elections, and copies of the lists will be furnished to all the political parties in the State; and any representations received within the time specified will be duly considered before the lists are finalized by my Government and the Election Commission.

I may assure the Honourable Members, and through them the general public, that my Government are determined to do all that lies in their power to ensure that the

forthcoming elections are conducted with absolute impartiality and equal fairness to all the contesting parties and candidates. May I appeal to all parties who intend to participate in the elections to co-operate fully with the officers entrusted with duties in connection with the elections and thus maintain the reputation of this State for even keenly contested elections being conducted peacefully and without any bitterness.

Law and Order

The Police continue to give of their best in districts affected by the activities of Communists as also in other districts, towards the maintenance of law and order, and, barring rare incidents, law and order are being well maintained.

The Government of India have proposed to bring up the Estate Duty Bill for consideration by Parliament. Under the provisions of our Constitution, Parliament can undertake legislation in regard to the levy of estate duties for the whole of India both in respect of agricultural land and property other than agricultural land, if the State Legislatures pass resolutions to that effect. My Government have agreed to Parliament legislating on behalf of this State subject to the condition that the operation of the law to be passed by Parliament, authorizing the levy of estate duties in respect of agricultural lands in this State, should be limited to a period of five years. A resolution under Article 252 of the Constitution will accordingly be placed for your consideration during this session.

Hindu Religious Endowments Bill

As the Honourable Members are aware, a comprehensive Bill dealing with Hindu Religious Endowments, namely, the Madras Hindu Religious and Charitable Endowments Bill, 1951, was passed by this Legislature on the 23rd January 1951. That Bill contained a provision for repealing three temporary Acts, namely—

(1) The Madras Hindu Religious Endowments (Amendment) Act, 1944 (Madras Act V of 1944), as amended by Madras Act X of 1946,

(2) The Tirumalai-Tirupati Devasthanams (Amendment) Act, 1944 (Madras Act XIII of 1944),

(3) The Madras Hindu Religious Endowments (Amendment) Act, 1946 (Madras Act X of 1946), which were due to expire on the 29th April 1951. As the Bill was still under consideration by the President, and as the Legislature was not then in session, I had to promulgate on the 27th April 1951 the Madras Ordinance I of 1951 for the temporary continuance of the three Acts referred to by me. This Ordinance will be laid before the Legislature.

There are also other pieces of legislation under contemplation and they will be introduced in due course.

The measures taken by my Government to implement their policies and programmes and all the items of legislation will duly come under your review. I am sure that in this last session of this Legislature, your deliberations will be conducted with the same high sense of public duty and responsibility as in the past. I pray that you may be guided by faith, courage, and wisdom in your counsels.

I thank you once again for your courtesy and your patience.

MADRAS INFORMATION
BUDGET SUPPLEMENT

BUDGET AT A GLANCE

THE BUDGET FOR 1951-52

	Revised Estimate, 1950-51.	Budget Estimate, 1951-52.
	LAKHS.	LAKHS.
I. A. Revenue	RS.	RS.
B. Expenditure on Revenue Account .. .	59,69.97	59,62.50
C. Surplus (+) or Deficit (—) (A minus B) .. .	59,06.94	60,29.78
II. Capital Expenditure Outside Revenue Account .. .	+ 63.03	— 67.28
III. Loans and Advances by the Madras Government—Net disbursements .. .	15,51.70	22,58.07
	1,98.92	1,99.99

HIGHLIGHTS

Provision for important Progressive, Nation-building and Ameliorative Programmes during 1951-52.

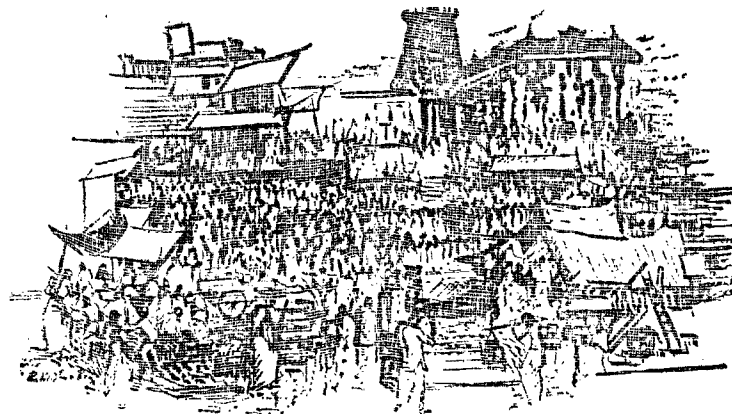
	LAKHS OF RS.
Harijan Welfare .. .	118
Education (New Schemes) .. .	62.4
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Relief— Removal of Sales Tax on inter-State trade .. .	70
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From Village Reconstruction and Harijan Uplift Fund .. .	11
Ultimate cost of new schemes— Recurring .. .	88
Non-recurring .. .	615

Expenditure on Nation-Building Services

The following figures indicate the progress of expenditure since 1945-46 on nation-building services, excluding expenditure on buildings :—

Services.	1945-46.	1946-47.	1947-48.	1948-49.	1949-50.	Revised Estimate, 1950-51.	Budget Estimate, 1951-52.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
	LAKHS.	LAKHS.	LAKHS.	LAKHS.	LAKHS.	LAKHS.	LAKHS.
Education	4,59.72	5,90.27	7,03.70	8,85.93	9,58.41	10,31.54	11,39.42
Medical	1,80.00	2,15.98	2,38.49	2,76.54	2,96.14	3,13.06	3,12.14
Public Health	54.48	87.37	1,90.51 (a)	90.54	1,14.47 (a)	1,07.68	1,31.47
Irrigation works (Revenue and Capital Accounts).	97.42	1,54.68	2,54.39	3,96.31	6,33.70	9,66.62	10,66.30
Agriculture	74.06	1,05.70	1,16.93	1,26.74	1,82.73	3,14.42	2,89.02
Veterinary	23.64	26.95	31.81	40.58	49.67	53.82	57.10
Co-operation	30.93	44.33	42.69	53.41	73.64	80.15	78.99
Industries	72.49	97.78	1,12.75	1,20.36	1,29.00	1,85.63	2,10.75
Electricity (Capital Account).	69.10	1,00.85	4,24.76	4,24.55	5,63.85	7,00.00	9,37.31
Total ..	10,61.84	14,23.91	21,16.03	24,14.96	30,01.61	37,52.92	42,22.50

(a) Rs. 100 lakhs in 1947-48 and Rs. 10 lakhs in 1949-50 represent contributions to the Rural Water-supply Fund.



Madras Information

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"WE SEEK TO SERVE AND NOT TO COMPETE"

September 1951

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INDEPENDENCE DAY: Photo on the cover page shows H.E. the Maharaja of Bhavnagar, Governor of Madras, taking the salute at the Independence Day Parade on August 15, at the Island Grounds, Madras City.

While presenting the Budget estimates for 1951-52 before the Legislature, I had explained at some length the salient features of the administration of this State, with special reference to their cost to the general tax-payer. As I had indicated in my speech, the Budget presents few surprises, either pleasant or unpleasant. You will be relieved to learn that I have not proposed any measure of new taxation. On the other hand, the Budget provides for some little relief from taxation. The Sales Tax on newspapers has been discontinued and that on handloom cloth has been reduced by 50 per cent. Petrol required for civil aviation has been given full rebate of the Sales Tax. The Entertainment Tax on dramatic performances will be abolished, and I hope that this will lead to the revival of that ancient art which has still great potentialities for the elevation of the people. Our Sales Tax, as you all know, is a multiple point tax, which means that tax is being levied on all transactions, as the commodity passes down from the producer to the consumer. Even a transaction taking place outside the State is liable to tax, if after that transaction, the commodity moves into the State.

Similarly, tax is leviable on a deal by which a commodity is exported from the State. In compliance with the provisions of our new Constitution, inter-State transactions of this kind will in future be exempt from tax, and this exemption may give relief to tax-payers of this country, to the extent of Rs. 70 lakhs. In the merged areas of Sandur and Banganapalle, the incidence of land revenue was heavy, and it is being reduced by about one-fourth, so as to be on a par with the adjacent ryotwari lands, thereby giving relief to large sections of the people in those areas. For the fourth consecutive year, we are having adverse seasons and therefore liberal provision has been made for remissions of land revenue and grants for relief works in the affected areas.

Revenue Anticipated

Even though we have foregone certain items of taxation, the revenue anticipated for the coming year is Rs. 59.63 crores, which is about the same as the current year. The expenditure on Revenue Account is estimated to be Rs. 60.30 crores, which means we are faced with a deficit of Rs. 67 lakhs. However, since the estimates were finalised, I have received information from Delhi that our share of Income-tax would go up by Rs. 44 lakhs over the sum originally intimated by India. Consequently, the anticipated deficit is brought down to Rs. 23 lakhs. A deficit of this order is of no great significance, in view of the fact that the transactions of last year (1949-50) resulted in a surplus of Rs. 35 lakhs and that the transactions of the current year are expected to result in a surplus of Rs. 63 lakhs. I have therefore proposed to leave the small deficit for next year, uncovered for the present.

The total cost in 1951-52 of the new schemes which have been included in the Budget is Rs. 574 lakhs. The ultimate cost of all the schemes is Rs. 88 lakhs recurring and Rs. 615 lakhs non-recurring. As usual, the Education Department gets the largest allotment for new schemes (Rs. 62 lakhs), which includes Rs. 5 lakhs for additional grants to the three Universities and Rs. 5 lakhs for the expansion of elementary education. Provision has been made for the development of basic education, introduction of bifurcated courses in more secondary schools, expansion of the adult education scheme, opening of new courses in some Government colleges, and teaching, building and

BUDGET



FOR 1951-52

Broadcast Talk by the Hon'ble Sri B. Gopala Reddi, Minister for Finance

equipment grants to new educational institutions. The total expenditure on education in 1951-52 (excluding expenditure on buildings) is estimated at Rs. 11.40 crores, which is nearly 20 per cent of our present total revenue. Token provision has been made for the opening of a second grade Arts College in Srikakulam District, pending the preparation of detailed plans and estimates.

As usual, a large number of schemes are meant to assist local bodies which include Rs. 45 lakhs for the construction of new roads, Rs. 8 lakhs for improved surfacing of roads and Rs. 5½ lakhs for the improvement of village communications. The total provision made in the Budget for the construction and maintenance of roads is over Rs. 5 crores.

Among the new schemes of the Medical Department are: the unification of the cadres of the Civil Assistant Surgeons, Classes I and II, training of 100 additional midwives, purchase of special drugs like Chloromycetin and Aureomycin for the treatment of poor patients in Government medical institutions, opening of a Tuberculosis sanatorium in the Madurai District and increase of bed strength in the General Hospital, Madras, Lady Goschen Hospital, Mangalore, Government Headquarters Hospital, Ramenathapuram, Erskine Hospital, Madurai, and the Headquarters Hospital, Nellore. Provision has also been made for the taking over by the Government of six Local Fund Taluk Headquarters Medical institutions and improvements to taluk headquarters hospitals. Token provisions have been made for the acquisition of additional lands in the Government Tuberculosis Sanatorium, Tambaram, acquisition of a site for the Infectious Diseases Hospital, Madurai, and the opening of Medical Colleges at Madurai and Guntur.

The special programme for accelerating the progress of water-supply and drainage schemes in urban and rural areas of this State will be in full swing during next year, for which liberal provision has been made both as grants and as loans.

Provision for Food Production

No doubt, our food position is at present causing us great anxiety. But I hope that the Government of India

will be able to import sufficient quantity of foodgrains to see us through the critical months ahead. But for the continued failure of rains for four years, our food production programme would have considerably eased the situation. The provision made in the next year's Budget for the important items of this programme are—Rs. 150 lakhs for the renovation of irrigation tanks, Rs. 70 lakhs for small irrigation schemes and Rs. 38 lakhs as loans under the Well Subsidy Scheme. In connexion with lift irrigation, the supply of 1,200 oil engines and the connecting up of 3,000 new electric pump-sets have also been provided for.

Apart from the short-term measures for food production, the Budget provides for the execution of large irrigation and electricity schemes which are of long-term value. The total capital expenditure anticipated on these schemes is nearly Rs. 19 crores.

Harijan Welfare and Housing

The fact that the Government have continued to bestow special attention for Harijan welfare will be clear from the fact that the total provision of Rs. 118 lakhs has been made for the purpose in the next year's Budget, including a separate provision of Rs. 7½ lakhs for the backward classes.

As part of a programme for relieving the shortage in house accommodation, the Government have provided Rs. 80 lakhs for loans to building societies, and Rs. 15 lakhs for rural housing societies. A token provision has been made for contribution to a poor man's housing fund.

Those of you who are employees of the Government will be interested to hear that the Government have decided to raise the rates of House Rent Allowance now given and to extend the concession to new areas. This involves an extra cost to the Government of about Rs. 20 lakhs per annum. While sympathizing fully with the general conditions of the Non-gazetted Government officers, I am sorry that the Government have not found it possible to give further concessions just now.

Revenue and Expenditure

Let me now give you a glimpse of the rapid growth of our Revenue and Expenditure in recent years. Our total Revenues which were of the order of Rs. 16 crores in 1937-38,

rose to Rs. 48 crores in 1945-46 and is now of the order of Rs. 60 crores, notwithstanding the loss of about Rs. 17 crores of Excise Revenue on account of the introduction of Prohibition. Our Expenditure also has more or less kept pace with the Revenue, on account of the expansion of the welfare activities of the Government. The total outstanding debt of this Government will be about Rs. 33 crores by the end of this year, which will be only 55 per cent of the present annual Revenue. Against this debt, there will be about Rs. 18 crores due to this Government from local bodies, agriculturists, etc., and about Rs. 31 crores in the shape of cash and securities in the Cash Balance Account and the Revenue Reserve Fund.

Sound Financial Position

You will now see that our financial position is quite sound, and that the Government have made provision in the Budget for the continued development of the welfare services. Our real anxiety is to find the money for our capital needs. We have now under execution a substantial programme of Irrigation and Electricity development, the details of which you might already be familiar with. The cost of this programme is about Rs. 80 crores, of which we have already invested one half. This programme is expected to be completed in the next two years and this will be possible only if we can raise about Rs. 20 crores in each of the years. We have the necessary resources in the shape of our Reserve Funds, but as these are invested in Government of India securities, we can realise only a portion of our requirements by selling them, having regard to the general condition of the securities market.

It is therefore necessary that this Government should be able to obtain sufficient loans from the Central Government and from the open market. This year, we were able to raise an open market loan of Rs. 440 lakhs, including the special contribution made by the Tirunelveli ryots for the Manimuthar Project. The Government of India also gave us about Rs. 1½ crores as special loans for Grow-More-Food schemes. I earnestly hope that the public will come forward to help this Government in this endeavour.

Amelioration of Common Man

With the full co-operation of the public and the Legislature, the Madras Government have been able during the last five years to introduce far-reaching measures for the amelioration of the common man, but much still remains to be done. The Government, by themselves, can do little, unless the people extend their hearty support and deem it a privilege to join together and work hard for the welfare of the State and the country.

I am sure that you, as enlightened citizens of the State, will not allow yourselves to be overcome with the present difficulties, which are bound to pass away. It is said that 'God helps those who help themselves'. Let us therefore join together and labour earnestly for the common good, so that we may truly pray to the Goddess of Prosperity in the language of the Vedic hymn—

*"May hunger, thirst and dirt,
the foes of Lakshmi perish, and
poverty and destitution vanish
from our land."*

JAI BHARAT!

(By Courtesy, A.I.R., Madras.)

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PROGRAMMES

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MADRAS INFORMATION

The Essence of Freedom

By SRI P. S. KUMARASWAMI RAJA, Chief Minister of Madras

It is with pride and pleasure that I address you on this historic day. Today you and I feel proud of our destiny. We are proud that to us has fallen the task of laying the foundations. A nation is being built up and we are the architects.

But, are the foundations being well and truly laid? In other words, are the representatives of the people sent to offices of power carrying out the mandate given to them by the people? Are they worthy of the trust and confidence placed in them by the people? It is the right of every citizen of this land to seek and be enlightened on these all-important questions.

Before we attempt an answer to these questions, I feel it will not be out of place if we have an idea of what freedom means to the people, the large masses of people who live intensely and who give life and significance to the otherwise geographic entity, the nation. What does freedom mean to these people? To them freedom attains significance only when it touches them in their day-to-day life, in a sense of elevation, both in the spheres of human dignity and material prosperity. Viewed this way, has the Popular Government succeeded in making the people feel or assimilate the essence of freedom? Now let facts answer this question, facts free from sentiment and wishful thinking.

Land for the Tiller

What do you think is the significance of the Zamindari legislation carried through by Government? Scanning through newspapers, have you ever paused to visualise the event behind the news, the meaning and significance of the reform in human terms? This legislation has secured to the tiller of the soil—and there are millions of them—a right denied over centuries, the right of ownership of the land cultivated by him. Today in Zamindari areas the right of possession, that all powerful sentiment that moves the ryot to put in an extra ounce of energy into the field, has been secured to him.

Today no man-made wall separates the Harijan from God. No institution, private or State-owned, is barred to him just for the reason of his caste. Now what of Prohibition? There is so much of ill-informed criticism about it. What I, as the people's representative, am about to say is that no longer is the State responsible for fostering the beast in man, for, through the reform of Prohibition, liquor has been denied to him. The drunken men of yesterday are today sober and industrious. And let us not bemoan the loss of this immoral liquor revenue, for what the people have gained materially, morally and socially is several times the value of the revenue lost.

Fighting on the Food Front

One of the foremost problems that faced and still face the Popular Government is the problem of food. Our country as a whole is deficit in food. Madras State is one of the worst in this regard. Added to these, even Nature wanted to test the mettle of our people. For the last four years, either the failure of the monsoons or the occurrence of floods or cyclones, reduced or seriously affected the normal food crops of the State.

* August 15, 1951.

The problem of food is being faced and tackled on many fronts. Through an effective system of procurement and control what is got from outside and what is produced internally is equitably distributed. Secondly, the Grow More Food Campaign is pushed through vigorously, a many-sided campaign in which the co-ordinated efforts of the various departments are put through for the maximum results. The campaign aims at maximum production through better seeds, better implements, more manure, greater irrigation facilities and above all through the infusion of a new spirit into the mind of ryot on the all-important role he is playing in the nation's life.

Programme of Irrigation Works

The third, and the most important measure, is the programme of irrigation works.

This programme falls roughly into three parts. The first part concerns three hundred small irrigation schemes at an aggregate cost of Rs. 6 to 7 crores in five years. So far 288 schemes have been sanctioned at a cost of Rs. 385 lakhs.

The second part of the programme concerns minor rivers, the waters of which may be impounded or trained. Ten projects at an estimated cost of nearly Rs. 24 crores have already been sanctioned and are progressing. Among these, the Lower Bhavani Project, the Maianpuzha Project, the Mettur Canals Scheme, the Rallapad Reservoir, the Upper Pennar Project and the Bhairavanitippa Project may be mentioned.

The third and most ambitious part in the irrigation programme comprises the multipurpose projects with the development of Godavari, Krishna and Tungabhadra river valleys. The Tungabhadra Project which will irrigate in the first stage, 300,000 acres of land in Bellary and Kurnool districts, and develop 35,000 Kilowatts of power, is already progressing.

There is a landmark in the history of irrigation in the State to which I want to invite your special attention. And that is the Manimuthar Project in Tirunelveli district. The ryots of Tirunelveli have taught us the great lesson of self-help in the sphere of national regeneration. Towards the execution of the three-crore project they have contributed more than a crore of rupees. It was a willing, spontaneous gesture. If this spirit spreads through the length and breadth of the country, the regeneration and reconstruction of our nation is assured and will not be far off.

Highways and Power

For developing communications in the State, a five-year programme of road development involving an expenditure of Rs. 16.3 crores, has been drawn up and is now under implementation. An idea of the extent of expenditure may be gauged from the fact that the pre-war expenditure on capital works was on an average of Rs. 21 lakhs as against Rs. 318.28 lakhs in 1950-51, and the pre-war expenditure on maintenance on an average of Rs. 57 lakhs as against Rs. 521 lakhs in each of the years 1948-49 and 1949-50, and Rs. 473.69 lakhs in 1950-51. A fifteen-fold increase in expenditure on new works and an

Loan to West Godavari Weavers

Poor weavers of West Godavari District who are outside the co-operative fold will be given an interest-free loan of Rs. 25 each, to enable them to pay the requisite share-capital and become members of the Co-operative Society and thus have assured supply of yarn. A sum of Rs. 25,000 is placed at the disposal of the Registrar of Co-operative Societies for the disbursement among the poor and deserving weavers. The amount lent out to the weavers will be recovered from their wages in twelve monthly instalments.

eight-fold increase on old works is the substantial contribution that the Government have made to the important subject of communications.

Appreciating the role of electricity in increasing the productive capacity, the Government are today working a five-year plan costing 30 crores of rupees. Immediately after war the Government sanctioned several schemes constituting a five-year plan of development. These schemes will add 180,000 Kilowatts of extra generating capacity to the Grid, i.e., doubling the existing generating capacity. Before these works are completed, a second five-year plan now under preparation will have been inaugurated. Already the Tungabhadra Hydro-Electric Scheme for developing 37,500 K.W. has been sanctioned. Important among the other schemes of the next five-year plan will be Kundah Hydro Scheme (100,000 K.W.), Periar Hydro Scheme (50,000 K.W.), Muchkund Hydro Extension (35,000 K.W.), and the Madras Thermal Extensions (30,000 K.W.).

Extension of electricity to rural areas has also received the attention of the Government. Today there are 1,700 villages electrified and Madras can claim to have the largest number of villages under electrification in all India.

KNITTING AS A PROFESSION: Sri Jagjivan Ram, Central Labour Minister, and Sri B. Parameswaran, Minister for Rural Development, Madras, watch the work of trainees at a knitting class at the Industrial Training Centre for Women.



Public Health Services

The progress in Medical and Public Health activities too has been steady. Expenditure on these department has increased from Rs. 234 lakhs in 1945-46 to about Rs. 450 lakhs at present. A modest building programme costing over Rs. 3 crores for the overcrowded hospitals in the State, has been launched. Side by side with the building programme, steps are also being taken to increase the bed strength of the various hospitals.

The provision of water-supply and drainage all over the State is also engaging the earnest attention of the Government. The Government have embarked on a five-year plan for municipal towns on the first stage of a twenty-year plan. Rural water-supply has also been given special attention and a ten-year plan is under execution. An expenditure of over Rs. 50 lakhs is being incurred every year.

Education and Co-operation

Now let us see what the people's Government have achieved in another equally important sphere, the sphere of welfare activities. Considerable progress has already been achieved towards the total reorganization of education in keeping with the genius of the nation. From elementary education to the realms of higher research in the halls of Universities, this new spirit has begun to permeate. Through basic education, reorganization of secondary education and instruction in mother-tongue a new orientation is being given to education, the aim being the total, many-sided and comprehensive education of the individual. Naturally, the expenditure too has risen. The Rs. 5.9 crores set apart in 1946-47 has increased to Rs. 11.39 crores, which is the provision for 1951-52.

The progress of the co-operative movement in the State is another notable achievement of the last few years. The working capital of the co-operative movement during the year 1950-51 was larger than the revenues of the Madras Government. The Urban Banks disbursed about Rs. 9 crores as loans and the Rural Credit Societies about Rs. 7 crores. The Co-operative Stores movement with its Central Stores and its primary stores sold goods to the extent of Rs. 49 crores. Handloom goods worth six crores of rupees were produced by the Co-operative Weavers' Organisation. The Milk Supply Co-operative societies distributed over a crores of rupees worth of milk. The Marketing Society helped agriculturists to dispose of four lakhs of rupees of agricultural produce.

It has been found that co-operation has reached 64.6 per cent of the villages in the State and 17.28 per cent of the rural population are members of the co-operative Societies. The number of individuals helped by the entire movement in the State works out to 16 millions, which is roughly 32.7 per cent of the population.

Uplift of the Harijans

Another sphere in which your Government have achieved remarkable progress is Harijan Welfare. As soon as the popular Ministry came into power, a sum of Rs. 1 crore was set apart for Harijan Uplift as apart from the sums allotted from the general revenues. The Madras Removal of Civil Disabilities Act and the Temple Entry Authorization Act removed once for all, for the Harijans, the barriers erected before God and fellow human beings. The one primary disability under which Harijans were suffering and which accounted for their backwardness was the non-availability of educational facilities for them.

Relief to Unemployed Agriculturists

With a view to providing relief by way of employment to agriculturists thrown out of work, owing to the failure of rains, the Government have sanctioned a grant of Rs. 78,000 to the Tirunelveli District Board, to lay roads, one from Nagalapuram to Kadalgudi via Doraiswamipuram, another from Atangarai to the district frontier and a third from Mailmundai to Tatanneri. The Government have also sanctioned two works costing rupees one lakh and Rs. 1.90 lakhs for execution in the Guntur and Bellary Districts respectively, for providing employment to agricultural labourers affected by the failure of rains.

Because education was denied to them, they were kept steeped in ignorance and backwardness. One of the first responsibilities of the popular Government was to remove this disability and afford them the necessary facilities. Education was imparted on an ever increasing scale, the number of Harijan Welfare schools in the State being nearly 1,300 in 1949-50 with a total strength of one lakh of pupils.

More and more sums are being allotted for provision of scholarships, boarding grants and free supply of mid-day meals. In 1949-50, a sum of Rs. 12,84,035 was sanctioned as boarding grants, an increase of over Rs. 10 lakhs over the 1945-46 figure. An almost equal sum is being spent on provision of mid-day meals in Harijan schools all over the State. The scheme for the assignment of house-sites and lands for cultivation is also being energetically pursued by the Government for raising them to the level of their more fortunate brethren in society.

Rural Reconstruction

The Rural or Firka Development Scheme is one of the pioneering measures adopted and successfully worked by the people's Government in this State. The Rural Welfare Scheme contains within it Gandhiji's idea that each village or groups of villages can develop to its utmost and attain self-sufficiency if the people so will it, only minimum help and guidance being required from the Government. The people are fast grasping the idea and proportionate results are visible to an increasing measure. More and more roads, more and more bridges, more and more wells, libraries and adult education centres are coming into being in selected firkas, the people themselves contributing liberally towards cost and labour. This is a great experiment in democracy, the full implications of which are yet to be grasped fully by the people.

Our State has been the first to take up on a Government level a social reconstruction work like women's welfare. In this, as in several other fields, I am proud to say, our State has led the way and has stood first and foremost in achievement. Happy homes alone produce great citizens. And happy homes are built only by women who have the necessary mental and moral equipment. The Women's Welfare Department is aiming through its various centres in the State at bringing about a new life among the women of the State.

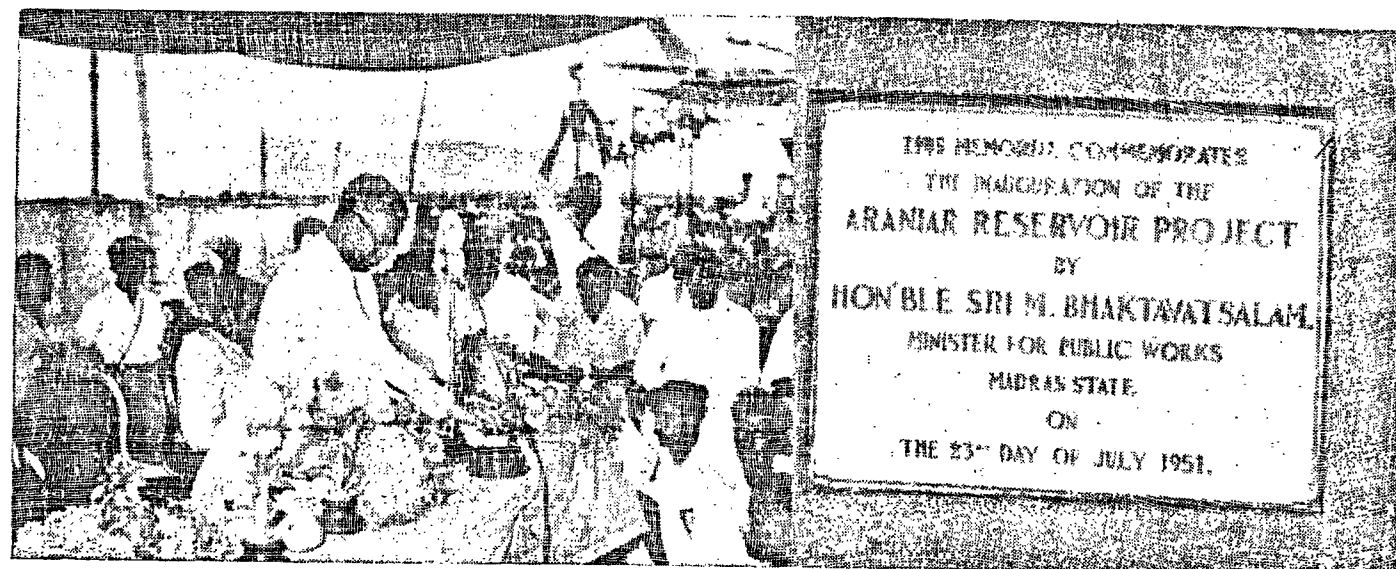
Plea for Patience

This in short is a brief review of this State's activities and achievements under your own Government. I am conscious what has been achieved has not been as much as we would wish, and there is still the long hard way to go to sit back and say with satisfaction: "That is our State and there it is—a fully developed national entity." What we have achieved so far is not inconsiderable, considering the odds we had to face, the traditions that were handed down to us, not to mention the various facts which are beyond human control. If, therefore, we may not have achieved cent per cent success in our endeavours to make every one happy, prosperous and contented, it is certainly not due to lack of will or effort on our part.

Let me now conclude on a note of appeal. The regeneration and reconstruction of a nation is not achieved in a day or even by the efforts or measures its Government is able to take. It is a mighty enterprise requiring consistent and constructive effort on the part of every one.

TRAINING IN TAILORING: A view of the Tailoring Section (Cutting Department) of the Government of India Industrial Training Centre for Women, Madras. Sri Jagjivan Ram, Central Labour Minister, and the Women's Welfare Officer, Government of Madras, observe the work in progress.





PROJECT UNDER WAY : Sri M. Bhaktavatsalam, Minister for Public Works, presses a switch to inaugurate the Araniar Reservoir Project in Chingleput District. The scheme, which will cost Rs. 95.22 lakhs and take three years to complete, is expected to add 5,000 tons of rice, worth about Rs. 15 lakhs annually, to the food resources of Chingleput District.

The Araniar Project

Nature has a way of bestowing her bounties on those who have the will and strength to tame her. In her elemental fury she has all the aspects of a goddess of destruction. Just imagine the destructive capacity of the untamed waters of a river. But tame Nature and you find the once turbulent waters peacefully flowing through green fields smiling with golden crops; electricity lighting up your homes and moving the wheels of industry. But this requires planning, requires money and above all an idealistic fervour for national regeneration in a big way.

It is only a combination of these that has enabled the Madras Government to sanction and carry out various irrigation schemes even within the limitations of the present day economy, limitations over which any State Government, however enterprising, has no absolute control. And the Araniar Project in Chingleput District is the latest on the list.

The project was inaugurated on 23rd July 1951 by Sri M. Bhaktavatsalam, Minister for Public Works, at a function presided over by Sri B. Gopala Reddi, Minister for Finance.

Boon to a "Dry" District

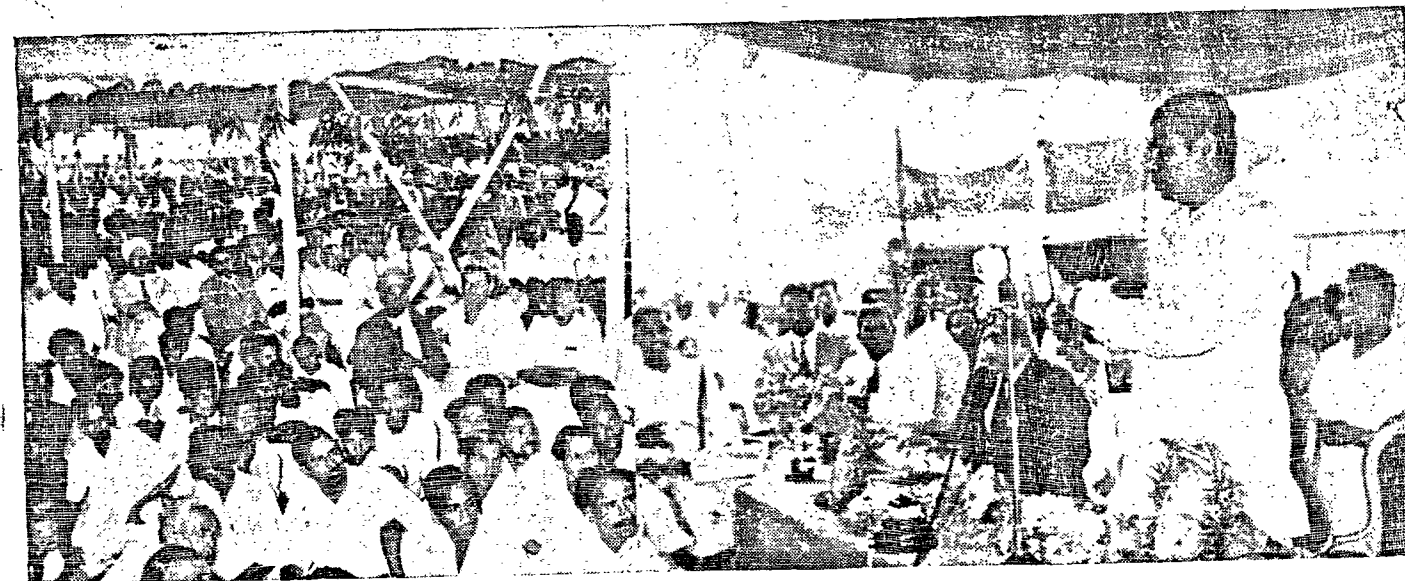
The inauguration of the Araniar Project is a great event in the history of Chingleput District, as was rightly pointed out by Sri A. R. Venkatachari, Chief Engineer, on the occasion. Chingleput is a proverbially 'dry' district depending for its water-supply on the uncertainties of the erratic monsoons. The main irrigation sources of the district are its rain-fed tanks and lakes, most of which have gone dry in recent years. The district is not blessed with large rivers flowing through it to feed its soil and the few rivers or rivulets that it has, are but wild streams which are dry most of the year; during the rainy season,

they carry the flood water which is drained into the sea and thus wasted. Among the three important river basins in the State, the Palar, Kortaliar and Araniar basins, the Araniar River alone had so far no reservoirs or anicuts constructed. The Araniar Project is the first large irrigation project to be undertaken in the district. Water from the river is being taken through flood or spring channels to supply wet ayacuts under existing tanks, but the quantity so utilized is much less than what can be obtained by a planned conservation of the river waters by putting up storage reservoirs or anicuts across the river. It is with this object of conserving the available supply that the Araniar Reservoir has been taken up, which when completed will go considerably to improve the condition of irrigation in the purely rainfed taluks of Tiruvallur and Ponneri through which Araniar flows.

The scheme finally drawn up is for the formation of a reservoir across the Araniar at Pisathoor and construction of an anicut at Suratapalle, about 11 miles downstream.

Earlier Proposals

The need for a reservoir across the Araniar seems to have been felt as early as the beginning of this century and investigation of a reservoir scheme was taken up as early as the year 1905. It was then proposed to form a reservoir by throwing an earthen bund across the river near Pulukundram village (more commonly known as Nandavanam village) so as to store water for the irrigation of about 10,000 acres with a capacity of about 3,000 million cubic feet. But in view of the prohibitively heavy cost of compensation to be paid for the submersion of the valuable lands, zamin villages and the Government village of Nagalapuram, the proposal was dropped.



UNDER TWO FLAGS: Sri B. Gopala Reddi, Minister for Finance, observed: In the entire period of British rule—150 long years—the amount spent for irrigation in the State was Rs. 18 crores, including Rs. 6 crores on the Mettur Project; an almost equivalent amount has already been spent by the Popular Government in the last four years.

As an alternative to this reservoir scheme, a scheme for constructing an anicut across the river at Suratapalle, with two channels, one on each side of the river, to supply certain tanks, was investigated for execution as a famine relief work; but the return of 1.25 per cent, then anticipated, did not satisfy the criterion for productive works prescribed in the old days. Since then no further steps were taken to develop the Araniar valley until the present popular Ministry took office.

Project now under Way

The scheme was again taken up for investigation early in 1947, with a view to improving the irrigation facilities in accordance with the general policy of the Government to give priority to all schemes aimed at improving the food resources.

In the present scheme the site of the reservoir has been fixed at Pisathoor, a village at the western border of the Chingleput District, just below the junction of the Iyankalva, the largest tributary of the Araniar. The river has a combined catchment area of 173 square miles at this site, of which 150 square miles are free. The site has been so chosen as to cause the minimum amount of submersion of existing lands and villages, consistent with the utility of the work. It is therefore proposed to form a reservoir with a waterspread of 5.42 square miles and a gross capacity of 1,863 million cubic feet, the net capacity being 1,734 million cubic feet, about three-fourths of the size of Poondi Reservoir.

An earthen bund, 2½ miles long, will be thrown across the river in which will be absorbed the bund of the existing Pisathoor tank, a Public Works Department source, which will also be absorbed into the reservoir. At the river crossing portion an earth-dam will be built and the flood water will be diverted and passed through a regulator of seven vents of 20' x 10', fitted with radial type of shutters, capable of discharging 30,500 cusecs, located immediately to the left of the river bed in the

left margin. Irrigation will be carried on through two channels, one on either side, for irrigating 5,500 acres of first crop and 3,600 acres of second crop, taking off through masonry head sluices to be built, one on either side of the river.

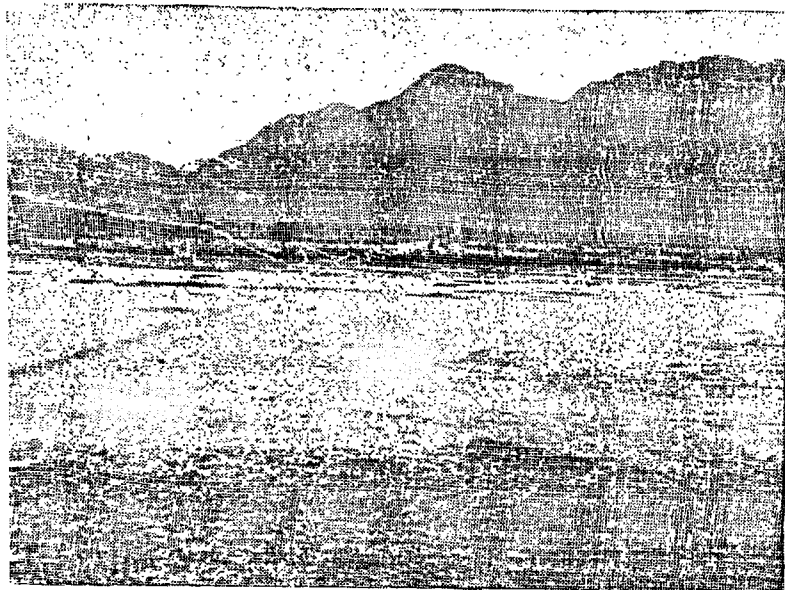
There will be a pick-up anicut at Suratapalle, 11 miles below the site of the reservoir, which will be 520 feet long and intended to supply water through a channel on the left side for 5,000 acres under existing tanks. The anicut will rest on well foundations and will have a body wall three feet high fitted with two feet falling shutters.

The total cost of the project is Rs. 95.22 lakhs. The scheme is programmed to be completed in a period of three years. The project on completion will stabilize supply to about 10,000 acres of existing irrigation in Tiruvallur and Ponneri Taluks and will also bring in new ayacut of about 2,500 acres in the Tiruvallur Taluk directly under the reservoir. The project is expected to add 5,000 tons of rice, worth about Rs. 15 lakhs annually, to the food resources of this district.

Priority for the Peasant

The question of payment of compensation to the submerged lands, the Minister for Public Works said in the course of his speech, was also going to be tackled in a manner most beneficial to the landowners. As far as possible, attempts will be made for payment of compensation in kind and not in cash, that is, by grants of lands.

A factor that stood in the way of the project being taken up earlier was also pointed out by the Minister. He said that during the Advisors' Regime when the question of taking up the project came, it was said that the waters of the river should be preserved for supply to the City of Madras. But, the Minister said, the present Government decided to give priority to the needs of agriculturists.



ARANIAR SITE: A view of the Arantur Project Site. The Project when completed will stabilize supply to about 10,000 acres of existing irrigation in Tiruvallur and Ponnéri taluks, and also bring in new ayacut of about 2,500 acres in Tiruvallur Taluk

Irrigation Facilities Under Grow More Food Scheme

The Government have sanctioned seven minor irrigation works under the Intensive Cultivation Scheme of the Grow More Food Campaign in West Godavari, Nellore, South Arcot, Chingleput, Krishna and Visakhapatnam Districts at a total estimated cost of about Rs. 9.74 lakhs, to benefit an extent of 3,786 acres of land which are expected to yield 1,893 tons of foodgrains.

The details of the schemes are given below:—

West Godavari District.—Excavation of a straight cut from the tail-end of the Polimaritippa drain into the Upputeru for provision of irrigation and drainage facilities to 1,000 acres of land cultivated by the Land Colonization Co-operative Society and the Circars Agricultural Development Corporation, Limited, at a cost of Rs. 56,925.

Nellore District.—The construction of an anicut across Chippaleru with a view to improving water-supply to the ayacut under Zaladanki tank, to irrigate about 900 acres of land at a cost of Rs. 61,100.

South Arcot District.—The construction of a dam across Kaludur Odai in Vridhachalam Taluk, to benefit 300 acres of land at an estimated cost of Rs. 1,27,505.

Chingleput District.—To improve and renovate Reddi Thangal Tank in Arudur village, Ponnéri Taluk, to irrigate 50 acres of land at a cost of Rs. 41,372.

The construction of a masonry dam with flood bank across the Maddu in Varadarapuram village in Sriperumbudur Taluk, to irrigate 370 acres of land at a cost of Rs. 45,500.

Krishna District.—To provide irrigation facilities by pumping water to a dry block of 500 acres of land lying

River Pumping Schemes

The Government have sanctioned two pilot installations of river pumping sets in each of the West Coast Districts of Malabar and South Kanara. It has been suggested to the Government that the two districts of South Kanara and Malabar, dependent as they are on the monsoon precipitations, offer vast potentialities for river pumping installations.

It may be recalled in this connexion that river pumping sets had already been installed in Chingleput District near Pinayur village on the banks of the Palar River and at Nelvay Madugu. These river pumping installations, it is reported, have become popular and there is an increasing demand from the cultivating ryots in the surrounding areas for similar aid from Government.

between Bundar and Ryves Canals in Pattamata and Gundala villages in Vijayawada Taluk, at an estimated cost of Rs. 1,47,524.

Visakhapatnam District.—The formation of a reservoir across the Upper Varaha River in Ravanapallo village, Golukonda Taluk, to irrigate an area of 1,666 acres of land at an estimated cost of Rs. 4,94,154.

Repair and Renovation of Tanks

The Government have sanctioned repairs and renovation of 14 tanks under the Tank Improvement Scheme in Nellore, Guntur, Krishna, East Godavari Districts to irrigate 1,541 acres of land yielding 770 tons of foodgrains at an estimated cost of Rs. 1.32 lakhs.

The details are given below:—

Nellore District.—(1) To repair Kalavalapudi Tank at a cost of Rs. 16,650 to benefit 100 acres of land. (2) The repair of Panjam Big Tank at a cost of Rs. 8,980 to irrigate 30 acres. (3) Repair and renovation of Akka Cheruvu at a cost of Rs. 7,285 to irrigate 30 acres.

Guntur District.—The repair of Dhenuvukonda Tank at a cost of Rs. 5,335 in Ongole Taluk to irrigate 152.5 acres.

Krishna District.—(1) The repair of Gajula Cheruvu at a cost of Rs. 14,305 in Tiruvur Taluk to irrigate 500 acres. (2) The repair of Edula Tank at an estimated cost of Rs. 8,197 to irrigate 1.7 acres. (3) The repair of Yerra Tank at an estimated cost of Rs. 7,937 to benefit 3 acres. (4) To repair Kakithalamma Tank at an estimated cost of Rs. 1,379 to irrigate 100 acres. (5) The repair of Bavula Tank at a cost of Rs. 3,513 to irrigate 6.20 acres. (6) The repair of Venkatanayanamgari Tank at a cost of Rs. 13,922 to irrigate 24 acres.

East Godavari District.—(1) The repair of the supply channel of Naragara and Venkatesetti tanks at a cost of Rs. 1,913 to irrigate 158 acres. (2) The repair of Jagayya Tank at a cost of Rs. 23,810 to irrigate 190 acres. (3) The repair of Kotha Tank at a cost of Rs. 3,513 to irrigate 37 acres. (4) The repair of Raju Tank at a cost of Rs. 15,092 to irrigate 50.5 acres.

Progress of Power Projects

By SRI S. R. KRISHNAMURTHY, Chief Engineer (Construction), Electricity Department

Electricity has become popular and is in great demand all over the country. Even small villages look forward to the day when they can have electric lights, pumps for irrigation and motors for small industries. Electric power is becoming increasingly essential for modern life, both for producing wealth and for providing amenities. In fact, the standard of living of people may be measured in terms of per capita consumption of electricity. In this standard India occupies a low place. Per capita consumption in India is only 14 K.W.H. compared with 3,500 in Canada, 2,400 in Sweden, 2,300 in the United States of America and 2,000 in Norway. Very little was done to develop our resources until our National Government came into existence in 1947. Since then development programmes have been framed on all-India basis and work put on hand in various places.

In the development of power resources, Madras State has been more fortunate than most other States in India. It has shown initiative and gone ahead of them. Many may recall that 25 years ago this State had only some private agencies in some places for producing power thermally to a small extent and distributing it mostly for lighting purposes. Then few people visualized the need for developing power resources and the great benefits that would accrue from such power. The Electricity Department was formed in 1927 with a few engineers under Major (now Sir) Henry Howard and the Pykara Hydro-Electric Scheme was commenced in spite of certain amount of opposition and pessimism overcome only by the vision and perseverance of Sir C. P. Ramaswami Ayyar, the then Member of the Governor's Executive Council. The department has grown like a banyan tree, building more and more schemes and extending its activities throughout the State. Wherever hydro power is not available, thermal stations have been put up.

Rapid Expansion of Activities

Starting from nothing 25 years back we have now an installed capacity of 187,000 K.W. with 4,500 miles of high tension lines and 3,200 miles of low tension distributing lines conveying the power to wherever required. The Pykara Scheme, the first hydro-electric project in Madras State with the high head of 3,080 feet, was undertaken in 1929 and started giving its wealth producing power to Coimbatore and neighbouring places in 1933. It is well known to all that the present phenomenal prosperity of Coimbatore is due to Pykara power utilized to the fullest extent by the enterprising people of the place. Next came the Mettur Powerhouse using the irrigation discharge from Mettur Dam and giving power to several districts. This was closely followed in 1938 by the Papanasam Project which was intended to be a power project but is actually a boon to the ryots of the Tirunelveli District who now derive an assured supply of water for their irrigation. Simultaneously, thermal stations were put up at Vijayawada and Visakhapatnam. These schemes may be said to have formed the first stage of development of power resources to the extent of 184,000 K.W. generating capacity.

Recognizing the need for rapid expansion of power facilities, the Madras Government in 1946 sanctioned a five-year plan costing Rs. 30 crores. Some of these schemes have been completed and works on the rest are progressing well. Owing to delay in receipt of machines from overseas the programme could not be adhered to, but we expect to complete all these schemes by 1953, thus adding 180,000 K.W. to the installations and doubling the existing generating capacity. The Nellore Thermal Scheme with 5,000 K.W. capacity was completed and put to use in October 1950. The Madurai Thermal Scheme with 4,000 K.W. unit was completed in February 1951 and was in time to relieve the power shortage which has been recurring for the past two years owing to failure of monsoons and the consequent inability of hydro stations to meet the growing demand. The Papanasam Plant Extensions are just now completed and the fourth unit installed.

Construction and Installation

Work in the Machkund Project is proceeding and the first generating set is expected to supply power in 1953. As everyone knows, this is a joint undertaking between Madras and Orissa States. The works are located in Jeypore Agency far away from the railway and in unhealthy tract. Much difficulty is experienced in getting men and materials to that place. Work is, however, progressing as well as possible. An interesting feature of this scheme is the construction of two tunnels 4,000 feet and 3,000 feet long to convey the water from river to penstock head. At Moyar the tail waters of Pykara Power Station is being utilized at the fall of 1,280 feet in Moyar ditch which separates Mysore and Madras States, thus utilizing Pykara waters for a total fall of 4,360 feet. Construction is progressing satisfactorily on the Moyar Project and Pykara Plant Extensions, where one additional penstock line and two generating sets are being installed. The first unit in Moyar is expected to go into service in 1952.

The Madras Power Station which was taken over from the Madras Electric Supply Corporation in 1947 is being expanded considerably. Its capacity will be doubled by 1953. Already 5,000 K.W. capacity has been added. One 15,000 K.W. set will be put to use in 1952 and another of the same capacity in 1953. Mettur and Madras have been joined in the Grid, thus enabling exchange of power according to seasonal demand and availability, by Mettur helping Madras during irrigation period and Madras returning the help during closure period.

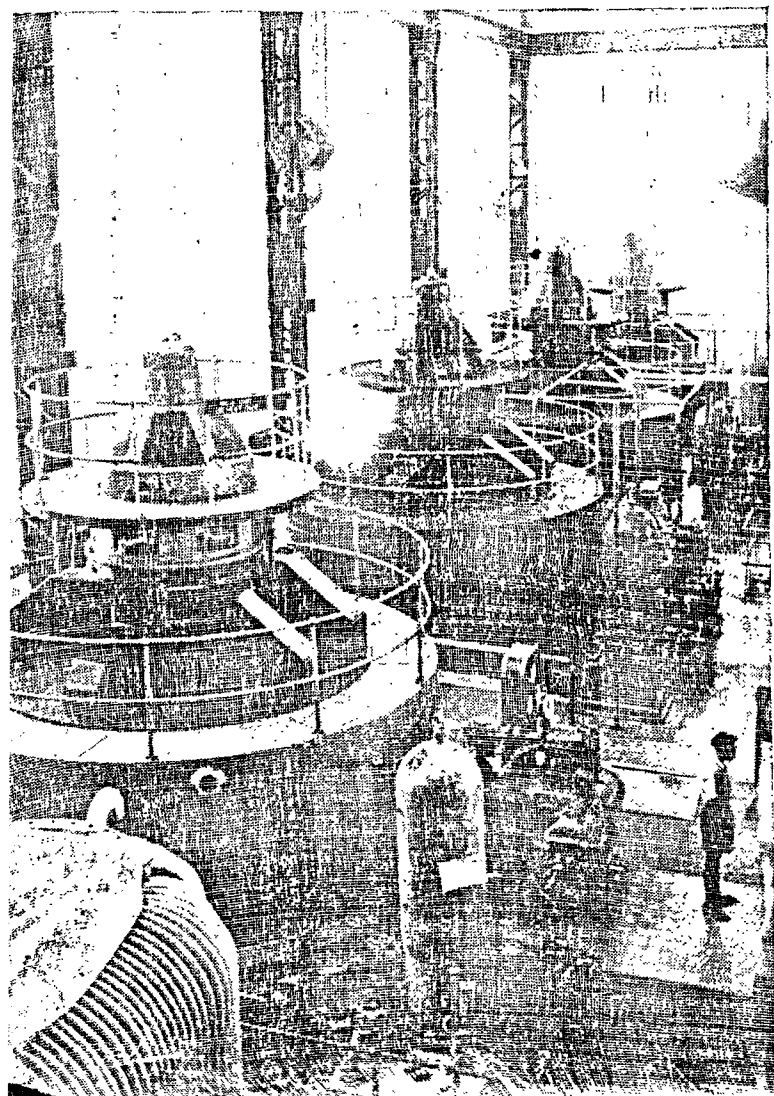
Extensions to Vijayawada, Kakinada, Visakhapatnam and Madurai Thermal Stations are in progress. At Vijayawada two new 3,000 K.W. sets with necessary boilers are being added. Two sets of 1,500 K.W. steam turbo-alternators are being installed with two more boilers in Visakhapatnam. Diesel sets are being put up for Nandyal and Tadpatri. Additional sets are being installed at Cuddapah, Kurnool and Anantapur to improve supply in those areas. Much work has been done on the construction of transmission lines resulting in addition of several hundred miles to the net work of the grids. The

Vijayavada-Rajahmundry line, the Madras-Mettur line, the Sokko-Hospet-Bellary-Guntakal line and the Pykara-Moyar-Erode line have been completed. Works are in progress on Machkund-Vijayavada line and some other lines which when completed will add 1,650 miles of new high tension lines to the grids. Several distribution schemes are under construction to spread the supply as far as possible. South Kanara to which Pykara power cannot be conveyed owing to the distance, is proposed to be supplied by taking power from Jog Falls Station in Mysore State.

Second Five-Year Plan

To meet the needs of the immediate future, the second five-year plan has been drawn up for execution. This plan envisages execution of the Tungabhadra Hydro-Electric Scheme, the Kundah Hydro-Electric Scheme, the Periyar Hydro-Electric Scheme, the Machkund Powerhouse Extensions and the Madras Station Extensions. These will add about 242,000 K.W. of installed capacity and cost Rs. 30 crores. Of these, the Tungabhadra Scheme has been sanctioned and work on it is being taken up. The Kundah and Periyar schemes will be submitted shortly to Government for sanction. The Machkund Extensions will follow completion of first stage work. Madras Station Extensions will also be taken up on completion of present extensions.

PAPANASAM: The four generating sets of the Papanasam Power Station. The Papanasam Plant Extensions have just now been completed and the fourth unit installed



Along with these schemes, hundreds of miles of high tension lines will be added to the grids to help convey the much needed power from generating stations to the consuming centres. The Tungabhadra Scheme will supply power to Bellary, Guntakal, Gooty, Kurnool, Nandyal, Cuddapah, Kadur and intervening places, thus serving and enriching the Rayalaseema. When the second five-year programme is completed, the whole of Madras State will be practically covered with a network of transmission lines conveying power to every district.

Our State is not rich in hydro-electric resources like the northern States of Punjab, Uttar Pradesh and Bengal. We have no oil deposits. Recently, lignite deposits have been discovered in South Arcot District. It is found difficult to mine the coal owing to presence of underground water. We have therefore to plan carefully and make full use of available water power resources. For this purpose, detailed hydrometric study and long-range plans are necessary. We have expanded considerably the hydrometric activities so as to gather necessary data and have planned to cover the whole State for investigating the possibilities. We shall be making out a long-range plan for an orderly development of our resources to meet the growing demand for power in every region of the State. The multipurpose schemes like Ramapadasagar and Krishna-Pennar Schemes will be adding considerably to our power supplies.

Process of Integration

The Government have decided to have in their hands the generation and distribution of electrical energy. At present about 99 per cent of total power is generated by Government installations and the Government are directly distributing 70 per cent of the power. It was felt that planned and adequate supply, particularly to rural areas, was possible only if the Government took over the whole business of generation and distribution. Accordingly, the process of integration has been started and is expected to be completed in three years. It will be realized that great benefits will accrue to the public by this integration and unified agency. This will enable the Government to push through its cherished policy of extending electricity supply to every part of the State, particularly to backward areas which have been neglected to private agencies and to the agriculturists with their ever-growing demand for power for their pumps.

This change-over will greatly help cottage industries to be set up through the availability of cheap and convenient power at the doors of the villagers. The public at large will derive the various benefits of electricity to much greater extent than hitherto. Though energetic action is taken to increase power supply, the demand is going ahead of the supply. The growing demand for power is a welcome sign of economic advancement. Our dependence on foreign countries for machinery and the tight monetary situation are coming in the way of our desire to push ahead with the schemes. At least the difficulty about finance can be overcome with the willing co-operation of the public who will be benefited by the schemes.

Leading in Rural Supply

Madras State stands third, giving place to Bombay and Bengal, in the installed capacity of generating units both hydro and thermal—and second in generation of hydro-power; but it leads all States in India in rural electrification with over 1,816 villages receiving electric supply.

16,500 electric pumps for lift irrigation and over 1,500 rural industrial connections for ginning cotton, hulling rice, shelling nut, pressing oil, crushing cane, etc.

It is our desire and earnest effort to maintain this lead and extend the benefits of electric power for setting up numerous other industries which are possible with cheap power. Extension of power to rural areas will enable decentralization of industries and the setting up of cottage industries by which the people can stay in their beloved villages, leading cheap and healthy lines and yet improve their standard of living and derive all the amenities brought in by electric power to cheer up and brighten their homes.

(By Courtesy, A.I.R., Madras)

Electricity for Agriculture

Extension of the supply of electricity from the Pykara System to Kasba-Ayyampalayam village, selected for intensive rural reconstruction work in Palladam firkā, Coimbatore District, for 38 agricultural pumpsets has been sanctioned at an estimated cost of Rs. 84,000.

Mineral Resources of Araku Valley

Sri S. Krishnaswamy, Geologist, Geological Survey of India, after touring Araku Valley and surrounding areas in Visakhapatnam District, has submitted a note on the mineral resources of the area.

Araku is a broad east-west trending valley nine miles long and two miles wide, lying about 65 miles to the west-north-west of Visakhapatnam. Its average elevation is 3,000 feet and it enjoys a salubrious climate, the average annual rainfall being 51.86 inches. The prevailing soil is a reddish to brownish coloured clay loam suitable for raising truck garden vegetables and large varieties of fruits. This valley and areas adjoining it carry a number of bands of lithomarge of grayish white, purplish white and yellow colours, in addition to a few occurrences of red and yellow ochers. Close by Anantagiri near the well-known Borra caves, there is a large deposit of crystalline limestone, including thick bands of statuary marble and small occurrence of phlogopite mica.

Small occurrence of impure iron ores of no economic importance have been found in association with either the lateritic formations or the khondalite rocks in a number of places.

The Geologist visited the Machkund Project which was started a few years back under the auspices of the Governments of Madras and Orissa States to harness the waters of the Machkund River for hydro-electric power supply. The Geologist is of the view that a slight change in the alignment of this dam-site further to the downstream would be necessary. Referring to the Gandikonda Project site, the Geologist has opined that the project site appears to be quite satisfactory.

Highways Taken Over

The Government of Madras have taken over the Madras-Tiruppur and the Tiruppur-Mahabalipuram roads to the extent of about 26 miles from the control of the Chingleput District Board, to provide a direct coastal route from Madras to Mahabalipuram for the tourist traffic.

Extension of Electricity to Rural Areas

The Government have sanctioned the extension of supply of electricity from the Pykara Electric System to 18 agricultural pumpsets at Othakal-mandapam and Chettipalayam villages, Coimbatore Taluk, Coimbatore District, at an estimated cost of Rs. 54,400; to 25 agricultural pumpsets at Kullichettipalayam and Sendaigovindanpalayam, Pollachi Taluk, Coimbatore District, at an estimated cost of Rs. 69,300; and to eight agricultural pumpsets and one industrial load at Uthupalayam village, Palladam Taluk, Coimbatore District, at an estimated cost of Rs. 31,700.

The Government have sanctioned the extension of supply of electricity from the Andhra Power System to six agricultural pumpsets and 143 domestic services at Ramabhadrapuram village, Visakhapatnam District, at an estimated cost of Rs. 63,000.

An extension of supply of electricity from Mettur Electricity System to Tirumalaisamudram, Nesal and other villages in Arni Jagir, North Arcot District, for agricultural and industrial purposes at an estimated cost of Rs. 1,56,400 has been sanctioned.

The Government have sanctioned the extension of supply of electricity from the Madras Electricity System to Goparasanallur near Poonamallee for agricultural purposes at a cost of Rs. 33,800.

Sanction has also been accorded to the extension of electricity supply from the Mettur Electricity System to Kallur, Pakkam, Katterikuppam and the rural parts of Gudiyatham town in North Arcot District for agricultural and industrial purposes at an estimated cost of Rs. 80,100.

Extension of supply of electricity from Papanasam Electricity System has been sanctioned to Watrap, Sundarapandian, Pudupatti villages in Srivilliputhur Taluk, and Anaiyur, Maraperi, Duraiswamyapuram, Mohamed Sahib Puram, Kakivadam, Puliparaipatty, Subramanyapuram, Edikottai, Ettakapathy, Kandayiruppu, Kongankulam, Sankaramurtipatty, Alankulam, Gopalapuram and Karisalkulam villages in Sattur Taluk, Ramanathapuram District, for agricultural, industrial, domestic and street lighting purposes at an estimated cost of Rs. 13,698 lakhs.

Extension of supply from Mettur Electricity System to Tirupachur and Siruvanoor villages in Tiruvellore Taluk, Chingleput District, for agricultural purposes has also been sanctioned at an estimated cost of Rs. 1,27,300.

Government have sanctioned the extension of supply from Madras Electricity System to Thiruvanniyur village, Saidapet Taluk, Chingleput District, for agricultural, industrial and domestic purposes at a cost of Rs. 80,300.

The Housing Problem in Madras

By SRI J. C. RYAN, Registrar of Co-operative Societies

Today there are 250 Urban Co-operative Housing Schemes in the State, which are now producing two houses a day. The public should therefore get acquainted with one or two impediments which are obstructing a more rapid development of housing schemes in this State, and consider ways and means of overcoming them. In the course of my talks with members of housing societies, I have met with nothing but praise for Government. They are thankful to Government for having selected suitable sites for housing colonies and for having acquired them on their behalf. They are grateful for the long-term loans provided at the cheap rate of 3½ per cent for putting up houses. They recognize the facilities given in the supply of cement, iron and steel at controlled rates and timber at concessional rates. They appreciate the help rendered by lending officers of Government to function as Engineers and as Secretaries of societies, in some cases even free of cost. The free inspection of their buildings by the Public Works Department during their construction and their valuation on completion, give them a sense of security which they deeply cherish.

But they have nearly everywhere complained that the demands of the local bodies are extravagant and in some cases almost merciless. Not only have the societies to lay out roads in the colonies, provide them with drains and equip them with lights, but they have, in addition, to pay heavy taxes to the local bodies. The Madras Society, for instance, had to spend in Gandhinagar nearly Rs. 9 lakhs on a land costing only Rs. 16 lakhs to satisfy the requirements of the Corporation. It has had to spend for the same purpose nearly Rs. 2 lakhs in this colony of Venkatesapuram on a site which costs only Rs. 2.24 lakhs. Burdensome as this expenditure is, the poignancy of the suffering attains its zenith when the two colonies are asked to pay every year Rs. 1,13,500 as property tax and another Rs. 2,000 as company tax.

Need to Revise Levy Law

If Government had not provided 87 lakhs of rupees as loans to the Society and if the members of the Society had but put up their own capital of 23 lakhs of rupees in a mutual effort to provide themselves with their own houses, the Corporation would not have secured a permanent recurring income of Rs. 1,15,500 per annum from this enterprise. The legality of the levy is not questioned. But its appropriateness is open to doubt. The taxes are levied in pursuance of a law which was enacted for other times—times when building materials and labour were cheap, when house construction was a profitable proposition, and when housing scarcity was not as serious a problem as it is now. Present conditions call for a speedy multiplication of houses to abate overcrowding in our cities and towns, and unless

[From the speech delivered by Sri J. C. Ryan, M.A., Registrar of Co-operative Societies, when His Excellency the Governor of Madras opened the second colony built by the Madras Co-operative House Construction Society]

and until old laws are brought in conformity with modern needs, efforts at relieving housing scarcity will not produce appreciable results.

Foreign countries which addressed themselves to the task of relieving housing scarcity have done their best to lighten the burden of local taxes. In France, after the first world war, all new buildings for housing were exempted from land tax and local taxation for a period of 15 years after completion. In the Paris area, these charges reached about 25 per cent of the net yield from housing. The present value of the allowances calculated at five per cent would be equivalent to about 15 per cent of the cost price of new buildings. In Belgium, any person of modest means buying, building or improving a dwelling for his own occupation, has enjoyed certain tax reductions and other exemptions applied to dwellings built with State assistance.

In Denmark, communes have the right to exempt all new buildings from all or part of the house-property tax levied by the local authorities. Under the Law of 1938 houses built by large families are exempt from all house-property taxation. In Norway, a number of local authorities including the Municipality of Oslo, took advantage of a Law of 1921 to exempt all new buildings from the property tax. In Oslo where this tax represents 0.7 per cent of the rateable value of buildings, tax exemption applies for 5 to 15 years from the date of completion of the buildings.

Case for Reduction in Taxation

The examples I have cited will justify fresh legislation in our State for exempting housing schemes from local taxation at least for a time. It is not my intention that the legislation should be in the interests of co-operative societies alone. These organisations have their limitations. During the last four years, they have completed only 1,739 houses and 1,863 more are under construction now. It is not possible to speed up or expand the progress much further, because we are limited by the availability of funds and other factors. The Madras Provincial Housing Committee estimated in 1947 that we needed in this city 1,65,000 more houses and in other towns 1,31,900. If this need is to be satisfied expeditiously, private enterprise should play its part. A reduction in taxation will provide the necessary impetus in this behalf.

But it is possible that local bodies will not relish the idea. I have even heard it said in responsible quarters that local bodies are in need of funds and they should not be deprived of a new source of revenue which the State sponsored housing schemes have provided them. Here again the practice in foreign countries is different. Far from making an income out of housing schemes subsidised by the State, they assist them further in various ways. In the United Kingdom, the local authorities co-operate with voluntary housing organisations in providing dwellings not only in connection with slum clearance but also in regard to abatement of overcrowding.



VENKATESAPURAM COLONY: H.E. the Maharaja of Bhavnagar, Governor of Madras, performed the opening ceremony of Venkatesapuram Colony of the Madras Co-operative House Construction Society. To his left is Sri J. C. Ryan, Registrar of Co-operative Societies. Today there are 250 urban co-operative housing schemes in Madras State, building two houses a day.

The Housing Act of 1935, with its provision for such co-operation, introduced the comprehensive term "Housing Association" to include bodies such as public utility societies, Housing Companies and Trusts which do not trade for profit or whose constitution or rules prohibit the issue of share or owned capital with interest or dividend exceeding the maximum rate of five per cent prescribed for charity societies. Under arrangements made with local authorities with the approval of the Ministers, these voluntary bodies provide dwellings at approved rents and receive through the authorities the Government subsidies which would have been payable, and these authorities themselves provided the accommodation. In some cases the authorities make additional contributions out of rates.

Housing in Other Countries

In Norway, the Municipality of Oslo formerly erected and managed cheap dwellings through organisations of its own; but this work has recently been taken over by a public utility society organised on a co-operative basis. In Sweden, every extensive independent action in the matter of housing is taken by municipal authorities of large towns. The Stockholm Municipality has granted sites on favourable terms to co-operative building societies, public utility companies and in some cases private entrepreneurs.

Under a scheme operated by Stockholm from 1929 to 1933, entrepreneurs and even private persons were offered sites at a 50 per cent reduction in price, temporary credits for the building period, and second mortgage advances, the municipalities reserving the right to nominate the tenants and control the rents. More than 5,000 dwellings were erected under this scheme, representing a quarter of all the dwellings built in Stockholm during these years. The cost in land to the City was 3 to 3½ million Kroner.

These instances of local bodies in other lands assisting organisations interested in relieving housing scarcity show that it is recognised in these countries that local bodies

have a duty towards relieving housing scarcity within their jurisdiction. The aid they give enable particularly the lower income groups to acquire houses of their own with ease. Will it be too much to request the local bodies in our State to come forward with special assistance of this kind to non-profit seeking organisations in their efforts to provide particularly the men of small means with houses? They need more assistance than the State can provide; for experience has shown that D class and E class houses costing Rs. 4,500 and Rs. 3,500 respectively have not evoked sufficient response from the classes for whom they are intended.

Co-operative societies alone cannot solve the housing problem in the State. Other agencies should be enlisted for the purpose. State aid alone is not enough; public bodies like the local boards should help.

The Venkatesapuram Colony

The Venkatesapuram Co-operative Housing Colony at Ayanavaram was declared open by His Excellency the Governor of Madras on 14th July 1951. This is the second colony established by the Madras Co-operative House Construction Society, the first being Gandhinagar in Adyar. The Venkatesapuram Colony is situated in the Konnur High Road and is intended to provide 135 lower middle-class houses ranging from Rs. 6,700 to Rs. 10,800 in cost. The Society acquired an extent of 21 acres at a cost of Rs. 2.2 lakhs and after setting apart about seven acres for common purposes such as roads, streets, etc., parcelled out the area into 135 house sites. The estimated cost of a plot of two grounds, inclusive of the cost of amenities, etc., is Rs. 3,200. The Society has provided underground drainage, street lighting and roads for the colony. About 65 houses have been completed and 25 of them have been occupied. The remaining houses are expected to be completed by September 1951.

Multipurpose Rural Credit Work

The Yedapalli Society

Yedapalli is a small village in the Coonoor Taluk of the Nilgiris District. It is a small village situated in a compact area consisting of about 100 houses. The main occupation of the villagers is cultivation, potato being the chief crop. Every visitor is instantly charmed by the green dale around the village where the cattle graze freely. Though the small houses, built up in rows, are proof against cold weather, the people in the village are nowadays learning to live in better types of houses under better surroundings. The villagers are now educating their children and some of them have even sent their children to college.

Agricultural operations mainly need finance. Before the Yedapalli Co-operative Rural Credit Society came into being, most of the peasants were in the habit of borrowing money from usurious money-lenders at very high rates of interest. They were receiving such aid either by way of money or by way of manure on credit. Even for a small amount of loan they had to come to the nearest town, Coonoor or Ootacamund, meeting their own expenses for this purpose. Money-lenders naturally will not give loans to the peasants without adequate security of lands or houses since their aim seems to be to seize the property of the poor. Hence some of the poor peasants

EX-SERVICEMEN'S SOCIETY: General K. M. Cartappa, Commander-in Chief, Indian Army, recently visited the North Arcot District Co-operative Motor Transport Society for Ex-Servicemen. The Society has 20 lorries and one bus, and operates a bus service from Vellore to Virudhunagar.



had to lose their lands and houses. After the rural credit society was started in this village, many peasant members have been benefited. They received loans at cheaper rates of interest for their cultivation purposes and domestic expenses.

The Society was registered on 2nd October 1917 and started work on 1st December 1917. The following figures will show the steady progress of this Society for the last few years:

Year.	Membership	Paid-up share capital.	Reserve fund.			Loans issued.		
			RS.	A.	P.	RS.	A.	P.
1940-41	95	701	3,306	11	0			
1941-42	99	1,133	3,452	7	0	7,500	0	0
1943-44	111	1,470	3,858	6	0	1,412	6	0
1945-46	109	1,496	4,004	2	0			
1946-47	109	1,805	4,502	9	0	9,450	0	0

Especially in this hilly district, the expenses towards cultivation for purchasing chemical manure, seeds, etc., are too high and the poor peasants rarely have sufficient cash on hand for this purpose at the required time. To help them in this respect, the Society took to multipurpose rural credit work and undertook the business of supplying agricultural requirements to its members on credit.

The peasants used to sell their produce at cheaper prices for want of accommodation for storing their produce till favourable prices prevail. The Society has therefore constructed a godown for the benefit of the members. This godown-cum-community centre was built at an estimated cost of Rs. 11,400; Government sanctioned a loan of Rs. 3,000 which was drawn on 26th March 1951 towards the cost. A sanction of subsidy of Rs. 5,000 is under consideration. According to the Public Works Department valuation of the building, it has spent well over Rs. 10,000. The godown has accommodation enough for storing produce, preparing good manure mixture, and room for a community centre where people can meet in the evenings and on holidays to exchange ideas, discuss matters of common interest and mould public opinion.

Arecanut Co-operative for Ponnani

The Government have sanctioned the formation of the Arecanut Processing and Marketing Co-operative Society at Ponnani, Malabar District. The Government have sanctioned a grant of Rs. 38,000 as interest-free loan to enable the Society to repay its dues to the Malabar District Co-operative Bank. The Society will cure arecanut and arrange for its marketing. The grant was given at the instance of the Indian Central Arecanut Committee. Special staff in connexion with the formation of the Society has been sanctioned.

The Nidigatla Society

Seven miles from Rajahmundry in the Burugupudi firka is the village of Nidigatla. It has a population of 1,432 (1951 Census figure). A co-operative credit society with its area of operations limited to the village, was established in the year 1919. About 55 per cent of the population of the village is being served by the Society. The present membership is 157, and the paid-up share capital Rs. 2,205 as on 31st May 1951. In the beginning the Society catered to the credit needs of its members. The maximum borrowing power of the Society has been raised to Rs. 20,000 and the individual borrowing to Rs. 1,000 after the introduction of the reorganization scheme to provide its members with facile credit facilities to the fullest extent. Outstanding under Central Bank loans is Rs. 16,460. There are 186 loans amounting to Rs. 18,460 against 118 members as on 31st May 1951.

The Society has a reserve fund of Rs. 1,244-6-0 out of which Rs. 1,214-11-0 is invested in the Co-operative Central Bank Limited, Rajahmundry. The Society has invested Rs. 1,000 under shares in the Central Bank. It has introduced the scheme of savings through hundi boxes and distributed 32 boxes to its members. An amount of Rs. 362-5-3 was thus collected. Twelve thrift days were celebrated during the year.

The Society earned a net profit of Rs. 475-8-0 during 1949-50 and has the following reserves to its credit which are merged in its working capital at present :-

RS.	A.	P.	
363	6	0	under bad debts reserve.
607	12	0	under undistributed profits.
45	3	0	under dividend yet to be distributed.
51	11	0	under common good fund.

Under the scheme of reorganization of rural credit societies, the Society has undertaken multipurpose activities after suitably amending its by-laws. For this purpose the Society has a cash credit accommodation of Rs. 1,500 from the financing bank. The Society has undertaken non-credit activities such as sale of handloom cloth and the revival and development of the brass industry in the village. The number of members benefited on account of these activities are eleven and four and the volume of transactions Rs. 55 and Rs. 237-13-0 respectively. This is one of the societies under the intensive food production scheme selected for the distribution of chemical fertilizers and iron and steel. For the construction of a godown, the Society purchased a site of seven cents in the heart of the village for Rs. 1,000.

Calendering Plant for Handloom Society

The Government have sanctioned Rs. 1,40,000 towards the cost of a calendering plant for glazing cloth, to be installed in the Madras Handloom Weavers' Provincial Co-operative Society, Madras, which is estimated to cost Rs. 5-60 lakhs. The Government of India also have sanctioned Rs. 2,15,700 to the Provincial Handloom Weavers' Co-operative Society, Madras, for the above purpose, from the Handloom Development Grant.

Developing Paint and Lithopone Industries in Rayalaseema

With a view to investigate the possibilities of developing the paint and lithopone industries in the Rayalaseema districts, the Government appointed Sri P. Gopala Rao, Managing Director of Jyothi Paint and Varnish Industries Limited, Madras, as an officer on special duty for preparing a project report for the establishment of paint and lithopone industry in the area.

In his report of the investigations, Sri Gopala Rao has suggested the establishment of two separate plants, one for the manufacture of paints with an annual capacity of 2,000 tons at Thimmancherla near Guntakal, Anantapur District, and the other for the manufacture of lithopone of 2,500 tons annual capacity at Vempalle in Cuddapah District. The financial implications of the scheme as reported by Sri P. Gopala Rao are :-

	Paint Plant.	
	Non-Recurring.	Recurring.
	RS.	RS.
First Year	5,29,000	Nil.
Second Year	3,71,000	6,12,000
Third Year	Nil.	21,88,000
Fourth year	Nil.	28,00,000
A profit of Rs. 4,00,000 per annum is expected from the third year onwards.		

	Lithopone Plant.	
	Non-Recurring.	Recurring.
	RS.	RS.
First year	8,08,000	Nil.
Second year	7,92,000	Nil.
Third year	Nil.	20,70,000
A profit of Rs. 3,00,000 per annum is expected from the third year onwards.		

The report gives full details regarding the location, raw materials required and available, production schedule, machinery and equipment, working cost, etc., in respect of both the proposed factories. The Government have decided that the proposed paint and lithopone factories should be advertised for private enterprise, which the Government will be prepared to help financially and otherwise. Persons or companies who are desirous of starting the factories may apply to the Secretary to the Government, Development Department, Fort St. George, Madras, before 1st October 1951, giving detailed information regarding their financial standing, business experience and the assistance that they require for the establishment of the factories.

Any further information regarding the details of the project report prepared by Sri Gopala Rao may be obtained from the Director of Industries and Commerce, Madras.

To Advise Reserve Bank

Sri T. A. Ramalingam Chettiar and Sri J. C. Ryan, Registrar of Co-operative Societies, will represent Madras on the Advisory Committee of Co-operative Experts, constituted by the Reserve Bank of India to be associated with the Agricultural Credit Department of the Reserve Bank. The Committee will meet once in six months or oftener to advise the bank on matters pertaining to agricultural credit and allied matters.

Campaign against the Drink Evil

The following is the report on the working of Prohibition in the State during the quarter ending 31st March 1951.

Cases.—During the quarter 25,440 cases were detected as against 21,018 in the previous quarter. All districts except the Nilgiris contributed towards increase in the figures of detection.

Illicit distillation and kindred offences.—Of the total number of cases reported 8,420 cases related to illicit distillation and kindred offences. Of these, 2,951 related to illicit distillation and the rest to possession and sale of illicit distillation spirits.

Illicit tapping.—The total number of cases reported under this head was 2,874 for the quarter. The Board of Revenue (Excise) has issued necessary instructions to the subordinate officers to conduct incessant raids and prevent malpractices.

Smuggling of liquor.—During the quarter 365 cases were reported of which nine related to smuggling from district to district. The prohibition staff at Mahe borders booked some influential people of Cannanore who were smuggling eight gallons of arrack in a taxi. At Vijayawada the prohibition staff detected a good case of smuggling of 59 bottles of foreign liquor from Hyderabad State. All the three accused in the case were sentenced to three months rigorous imprisonment each and the car worth about Rs. 20,000 was confiscated to Government.

Intoxicating drugs.—During the quarter 517 cases were reported. Of these four related to cultivation of hemp plants, one to smuggling from district to district, 18 to bringing of drugs from other States and the rest to the possession of drugs.

Denatured Spirit.—Twenty cases of rendering denatured spirits potable were reported during the quarter.

General.—Public co-operation towards prevention and detection of offences continues to be wanting. The work of the enforcement staff was on the whole satisfactory during the quarter.

PAUM GUR STALL: Under the auspices of the Tirunelveli Municipality, a National Exhibition was held at Tirunelveli recently, in which the Palm Gur Branch of the Co-operative Department took an active part. Two stalls were taken for exhibition of samples of palm gur, palm candy, palm sugar, palm honey and fancy products and toys from palm leaf. Improved implements and tapping tools were displayed. A model furnace for boiling sweet juice in the manufacture of jaggery was erected and demonstrated to the public.



AMELIORATION

Provision of employment to ex-tappers.—During the quarter 96 jaggery manufacturing and five milk supply societies and 18 other types of societies were registered in the districts for the benefit of ex-tappers. The jaggery societies produced 8.3 lakhs maunds of jaggery to the value of Rs. 39.91 lakhs during the quarter.

The Government have extended the concession of sale of sweet juice for consumption as beverage to the taluks of Aruppukottai, Tirupattur, and Sivaganga in Ramanathapuram District. They have also granted permission for the tapping of palmyra trees for jaggery manufacture to the members of 22 jaggery societies in the Edakkanad area in the Madurantakam Taluk in the Chingleput District.

At the Cottage Industries Exhibition held at Salem, six jaggery manufacturing co-operative societies participated and the Esaupur Jaggery Manufacturing Co-operative Society won the rolling cup for producing the best jaggery.

A total number of 9,362 ex-tappers were provided with work by the organization of co-operative societies for them. Six hundred and sixty-six ex-tappers were found employment during the quarter also as agricultural labourers, as unskilled workers in commercial concerns and in various other capacities.

Palm Gur Development Scheme.—During the quarter training in the improved method of jaggery manufacture was conducted in 78 centres and 474 ex-tappers were trained. Twelve thousand four hundred and thirty-four ex-tappers other than the trainees were employed in the production centres.

The Palm Gur Section participated in the Madras Park Fair Exhibition. The stall attracted a large number of visitors.

Rural Credit Societies and Grama Sangams.—During the quarter 15 grama sangams were organized in the districts. At the end of the quarter 4,793 grama sangams were active. Providing counter-attractions to drink, construction of parks and community centres, repair of roads, organising cattle shows and running of night schools were some of the salient features of the programme of work undertaken by the grama sangams.

The rural credit societies served 20,660 villages and a population of 59.23 lakhs. Eight thousand and twenty-one rural credit societies have adopted special by-laws for providing social and recreational activities.

Substitute for Drink.—Coffee and tea stalls conducted by private individuals continue to be popular among the ex-addicts.

Harijan Welfare.—Harijan Days were celebrated in almost all the districts. The amelioration staff explained the benefits of co-operation, thrift and sanitation to the Harijans.

Propaganda.—The ameliorative staff carried on propaganda on Grow More Food, Intensive Food Production and compost manure through the medium of propaganda vans.

President's Assent

The President has accorded his assent to the Madras Estates (Abolition and Conversion into Ryotwari) (Amendment) Bill, 1951.

White Palm Gur

By SRI GANGADHAR PANDHARE

Gur, rab, sugar and sugar candy are manufactured from the sweet sap—Neera—of Palmyra, Date, Coconut and Sago palm. At present palm jaggery prepared in the land is of generally reddish dark or reddish yellow colour. If no improvement is effected in its colour, the palm gur is likely to suffer in the long run. But with a little concentrated effort, it is possible to produce a superior quality which can be a match to cane gur.

According to Botany, the roots of the palms obtain water, minerals and other ingredients from the bowels of the earth. These ingredients are converted into sweet sugary sap. It is photosynthesis that is responsible for this phenomena. Photosynthesis is the effect of the sun's rays on the green leaves of a tree. Sugar is mostly manufactured in the uppermost portion of the tree.

In order to obtain the sweet sap, we tap the spathe of a palmyra palm or the uppermost tender portion of the trunk of the date palm. Even like cane gur, palm gur is subject to changes on account of the quality of the land and season. Cane gur manufactured in November is less sweet and it enhances its qualities in March. The same is the case with palm gur too. However, palm trees are credited with some special features. They are:

The palmyra is mature and fit to be tapped for its sweet sap when it is about 15 years old. This occurs with the date palm when it is ten years old. The date palm which is tapped daily is likely to deteriorate even when it has become mature and strong. This also adversely affects the sucrose content of the juice and the inversion and the fermentation take place earlier than usual. This tells again on the resultant gur which is charred; more fuel is also consumed in boiling the juice. Consequently, incidence of gur or Neera is less. We have, therefore, to carefully note the following suggestions:

(1) A date palm must be rested at least for three days; if a tapper owns 100 date trees, he should divide them into four groups of 25 each. Let us name these A, B, C and D. If the A group is tapped on the first day, its turn will come again on the fifth day.

(2) The tappers' tools must be clean and sharp. After each tapping the tools have to be cleaned with a clean cloth so that the bacteria or germs that may be present on the tools may not be transferred to another tree which is being tapped. We have to follow the same rules here as those followed in the case of patients suffering from skin diseases.

(3) Neera pots should be very clean. Slaked lime is necessarily to be added to the pots. One can do without addition of lime in cool countries, but this results in the decline of sugar percentage. It is also illegal not to add lime.

Now we have to face the problem of taking out lime from the juice before we boil it. We know that if lime were not taken out the resultant gur will be dark in colour and bitter in taste.

Lime is present in Neera in two forms: (1) suspended matter; (2) mixed with the juice. Superphosphate triple has to be used to neutralise the effect of lime on Neera. Superphosphate has the quality of being acidic while

limed palm juice is alkaline. These qualities are antithetic. Correct addition of superphosphate neutralises the juice, i.e., it is now neither acidic nor alkaline.

Before boiling Neera it is necessary to decant Neera to remove the residue. In order to find out the acidity or alkalinity of Neera, litmus paper is a suitable means. Red litmus dipped in limed Neera turns blue. Blue litmus dipped in alkaline Neera turns red. But when Neera is neutral, both the above papers retain their original colour when dipped into Neera. Finely powdered superphosphate has first to be mixed with a little hot Neera and the mixture has to be gradually added to the juice in the pan. This is the correct way of adding superphosphate. The juice has to be made warm before superphosphate is added.

Now the Neera mixed with lime and superphosphate has to be kept for settling for half an hour in a drum or a bucket. The gur manufacturer may attend to other work meanwhile. Many people, instead of letting the Neera rest for a while, immediately commence the boiling process. This is wrong, and a good artisan will avoid this mistake at all cost. All haste is violence, and violence does not lead to welfare.

Now let us consider the boiling process:

(1) The furnace has to be fed without a break.
(2) The combustion has got to be faultless. The chimney will show us whether the combustion is good or otherwise. White smoke is a sure sign of good combustion, while black smoke indicates a bad combustion. A good combustion makes for satisfactory boiling.

(3) When the juice attains the thickness of honey, the fire has to be controlled. The hot pan will do the rest of the work. The pan can be removed from over the furnace once or twice, if necessary.

The gur is now nearly ready; it can be put into the moulds.

The manufacturer has to attend to all the above details very carefully. He is creating food for the teeming millions of the land. This is a Yaksha Narayan worship and it calls for pointed devotion.

(Tad Gud Khabar)

Preliminary Investigation of Irrigation Sources

The Special Engineering Staff in charge of works under the Tank Improvement Scheme have completed preliminary investigation in respect of 801 irrigation sources including flood affected sources. Estimates have been sanctioned so far in respect of 280 sources amounting to Rs. 31,18,075. It is expected that an area of 11,068 acres will be benefited when all these sanctioned works are completed, resulting in an additional yield of about 5,534 tons of foodgrains.

Highlights of New Measures

Elementary Education.—The Government have provided a sum of Rs. 5 lakhs specially for bringing more children under instruction, and orders have since been issued as to how this provision should be utilized. The Director of Public Instruction had proposed two methods: (1) Giving special subsidies to certain District Boards towards the cost of opening new schools in school-less centres with a population of 1,000 to 2,000; or (2) Introducing the shift system in existing elementary schools.

The Government have approved both the proposals but directed that proposal (2) should be adopted ordinarily and that proposal (1) should be given effect to only in such areas where it is not possible to introduce the shift system. The teachers employed under the shift system will be paid a special allowance of Rs. 10 per mensem in addition to their usual pay and allowances. But the special allowance will be paid only if every standard or section has an average attendance of not less than 25 pupils.

In 1945, the Government approved the Director's proposal that candidates leaving the elementary school (appearing with English as optional) may be made eligible for admission to elementary grade school training course even though they failed in English. This approval was then given as a temporary measure. Recently, the concession has been sanctioned as a permanent measure from 1951-52.

Secondary Education.—The Government have approved the introduction of Textile Technology as a subject to be taught under the system of bifurcated courses of studies, as an experimental measure, and steps are being taken for its introduction in the Government Madrasa-i-Azam, at Madras.

Education of Defective Children.—Last year the Victory Memorial School for the Blind at Poonamallee was taken over by Government from private management. Recently the Government have approved the deputation of two officers of the Education Department to the United Kingdom for special training in the education of the blind and deaf-mute respectively.

A revised scheme for the award of Diploma in Teaching the Blind and Deaf has been approved by the Government. The aim of the scheme is to raise the standard of the teaching of the blind and the deaf. There will be two types of training, one for teaching the blind, and the other for teaching the deaf, and two grades of Diplomas, Senior for B.T. Teachers and Junior for secondary grade teachers.

Collegiate Education.—Revised instructions regarding the selection of candidates for admission to the Government engineering and arts colleges and aided colleges have been issued and the Press has already been informed of the changes introduced.

As usual there has been a rush for admissions to colleges. The Government have approved the Director's proposal that the strength of the Science groups of the Intermediate class of the Queen Mary's College should be raised. Sanction has also been accorded to the opening of a Government Second Grade Arts College in the Srikakulam District with effect from the current academic year.

Oriental Schools.—The Government have approved the proposals of the Director of Public Instruction for the reorganization of the Oriental Schools, i.e., schools solely devoted to the study of Sanskrit, Tamil, Telugu or Arabic. Under the reorganized scheme which will be given effect to from 1951-52, grants on the basis of two-thirds of the net cost of maintenance will be given to the managements of the new schools. The special elementary schools which were imparting instruction in these languages have no place in the reorganized scheme.

The status of these special schools has been raised to that of ordinary secondary schools and the pupils studying in them will sit for the S.S.L.C. Public Examination, answering the same question papers in English, Social Studies and if the candidate chooses, in Hindi, in addition to the question papers in the special Oriental language. The examination has been declared as qualifying for eligibility to the college courses in the Oriental and general colleges.

Alteration of Entries Pertaining to Date of Birth in the S.S.L.C.

The Government have reason to believe that the rules governing the alteration of the entries pertaining to the date of birth of a candidate in the Secondary School-Leaving Certificate are not widely known. They therefore wish to make the position regarding these rules clear for the information of the public.

Under the rules relating to the Secondary School-Leaving Certificate Scheme, care is taken to ascertain the correct date of birth and enter that date in the Secondary School-Leaving Certificate of a candidate at the time when it is opened on behalf of the pupil at the commencement of the IV Form course. If the date of birth proposed to be entered in the S.S.L.C. does not differ from the date already entered in the admission register of the school, no fresh evidence is demanded from the parent or guardian of the pupil; but a declaration to the effect that the date of birth entered in the school register is the correct date of birth of the pupil, and that no alteration of that date will be demanded in future on the plea that the correct date was not given at the time of admission, is invariably taken from the parent or guardian; in any event, alterations in the date of birth of the pupils will not ordinarily be sanctioned after they reach Form V and applications for alterations in the date of birth will not be entertained after the pupil has appeared for the S.S.L.C. Examination.

Provision has however been made for special cases in which an alteration in the date of birth in the certificate may be called for in exceptional circumstances, viz.—(1) when an obviously absurd entry has to be set right, or (2) when a civil court directs correction in any individual case. The alteration in such cases will be made in the S.S.L.C. only under the orders of the Director of Public Instruction and will be attested by an officer of the Education Department not lower in rank than a District Educational Officer or the Inspectress of Girls' Schools.

Training for Intensive Cultivation

With a view to popularise methods of agriculture, to educate conservative agriculturists on the application of organic and inorganic manures and to obtain quick results by direct mass contact with the villages, training courses are being conducted at several convenient centres in each taluk of all the districts.

South Kanara District

In South Kanara District, a training course was conducted for a number of ryots, elementary school teachers, village officers and Revenue Inspectors. During the classes instructions were given on the following subjects: Manure: preparation, preservation and application of compost, Government subsidy for compost pits; lessons on the importance of fertilizers and their proper use to different crops, classification of soils, soil formation and soil erosion, improved paddy strains suitable for first and second crops, necessity for using departmental strains; the average yield and period of growth of different varieties. Preventive measures against pests and diseases of paddy crop were also explained to the ryots. During the training course, ryots were also informed of the availability of tractors, pumpsets and their economic and efficient use. The ryots of Bantwall village were also taken to Mangalore to visit Kankandy Paddy Breeding Station.

At Uppinagady, Sulliya and Bellere a small exhibition of paddy varieties was conducted and all the ryots paid a visit to the exhibition. At Kasargod, departmental leaflets on paddy crop were distributed to ryots. At Kokkada, the newsreel which was available with the Prohibition Department was obtained and screened in the presence of 150 ryots. Oral and written examinations were conducted amongst ryots of different villages on the improved methods of agriculture, and certificates were issued to successful trainees.

North Arcot District

In North Arcot District training courses were so far conducted at 45 centres. In each centre, there was regular attendance of village officers, school teachers, ryots and other officials interested in agricultural work. The Agricultural Demonstrator and the Additional Agricultural Demonstrators gave instructions on improved methods of agriculture to ryots. The ryots took keen interest in the classes and gained good knowledge about new implements and their uses. In Polur Taluk, the Agricultural Demonstrators, during classes, explained the advantages and economy of the compost manure and its preparation and application. In some centres practical demonstrations like manufacture of compost, application of chemical fertilizers and controlling pests were demonstrated. Magic lantern shows were given.

In Arkonam, the Agricultural Demonstrator gave a talk on the proper methods of preparation and preservation of farmyard manure, maintenance of pure strains, importance of labour-saving implements, and suitability of various ploughs for different soils. Agricultural Demonstrators also explained, during training classes, the reclamation of alkaline soil both by agronomical and chemical methods.

In Tiruvannamalai Taluk, ryots of Mathure were taken to the holdings of Sri Seetharama Reddiar and details about cultivation of paddy, ragi, cholam, and strains of the Agricultural Department were explained to them. During the training, the cultivation of short duration crops was stressed. Instructions on the proper use of fertilizers, the value of improved strains, soils suitable for different crops, soil erosion, reclamation of land, use of oil engines and pumpsets on hire purchase system, growing of cotton, poultry rearing, etc., were also given. Oral examinations were conducted in almost all centres and prizes were distributed to successful trainees.

Tanjore District

In Tanjore District, such training classes were conducted at 36 centres so far in all taluks. The classes were organised by the Agricultural Demonstrators of Kodavasal, Kumbakonam, Mayuram, Sirkali, Pervuni, Papanasam, Mannargudi and Nannilam. In each centre there was a regular attendance of village officers, school teachers, mirasdars and other ryots. The Agricultural Demonstrators, who conducted the training classes, gave lectures on the agricultural improvements, improved methods of cultivation, climate, season, soils, use of implements and improved seeds, pests and diseases on crops and remedial manures on them, horticulture and subsidiary occupation, etc.

In Kodavasal Centre alone, there was an attendance of 40 to 50 village officers, two to four school teachers and 15 to 25 mirasdars at the class daily. In Koradacheri training centre 40 village officers, 10 teachers and 11 mirasdars attended the classes. The District Agricultural Officer, Tanjore, and the Agricultural Demonstrator, Papanasam, gave lectures during the classes held at Saliamangalam on improved methods of agriculture and also stressed the necessity for growing sweet potato and tapioca. Village officers were told the need for imparting the knowledge they had gathered to the ryots of their village.

Sixty village officers were present during the training class held at Peralam. All the improved variety of paddy seeds and other seeds such as cotton and groundnut were exhibited to those who were present. Pesticides and fungicides were exhibited and their use and correct dosage was also explained. All the village officers in the district showed keen interest by attending the training classes. The training classes have been a great success in Tanjore District.

Irrigation Facilities for Villages

The Government of Madras have sanctioned the repairs and renovation of 28 tanks in Srikakulam, Krishna, West Godavari, Chittoor, Nellore, Visakhapatnam, Anantapur, North Arcot, and Tirunelveli Districts under the Tank Improvement Scheme of the Grow More Food Campaign at an estimated cost of about Rs. 5.3 lakhs to irrigate about 2,810 acres, which are expected to yield about 1,405 tons of foodgrains.

Breeding Better Paddy Strains

In the context of national reconstruction, a shifting of emphasis takes place from Committee Rooms and Conference Halls to Research Stations and competition farms. This shifting has great significance and sooner the nation realises it and acts up to it the better. It is then that the evolution of a new paddy strain assumes national importance. And Paddy Specialists and their Assistants whose existence was till then unnoticed, suddenly assume significance, noticed by thinking men and alert citizens.

Sri K. M. Munshi, Union Minister for Food, recently visited the Paddy Breeding Station at Coimbatore. An accompanying layman was able to gather scraps of information which unfolded before him a picture of a few hardworking men wooing Nature for her favours—a task that needs patience, perseverance and faith. To educated layman and to the average citizen “Co-25 or Co-26” mean nothing and sound just so many digits or symbols. But ask any cultivator in Tanjore or Tiruchirappalli and see how his face lightens up—and he would be able to enlighten his more educated townsman that these symbols

are synonymous with two new varieties of paddy evolved by the Coimbatore Agricultural Research Station.

It took eight years to evolve the strain. And sometimes, it was said, to evolve a perfect strain, it would take even double that period. It is here that research in the field differs from research in the laboratory. With the best will in the world no one can make a seed to sprout, grow and yield according to one's whims. You either make your observations at the pace set by Nature and discover the secret or you just don't. The task admits of no theories, guess-work or hit-and-run methods; it is a test of patience, scientific skill and practical insight.

Resistance Qualities

Hybridisation between wild varieties and cultivated varieties is another experiment going on at the station. The idea is to introduce into the hybrid the rare resistant qualities of the wild variety. The hybridisation takes place, in the language of the layman, by mixing up the pollen of both.

Experiments were also going on at the station for evolving drought resistant and saline resistant varieties of paddy. For developing the drought resistant varieties, experiments are mainly carried on with the aid of the Root Development Apparatus. Water level is kept at different depths of 3", 6", 9" and 12" below the soil surface for measuring the differential development of the root system to assess the comparative resistance of plants to droughts. Or to put it in other words, again in the language of layman, to see how far the roots will go down into earth in search of water in case of drought! With over so many acres of dry land spread over the State and with all sorts of seasonal uncertainties, has not the experiment some significance?

Use of Green Manure

The question of green manure is also engaging the attention of the station. A way for the ryots to attain self-sufficiency in green manure was also shown at the station. *Sesbania* was planted 6" apart on the edge of paddy field bunds along with the planting of paddy. The seedlings establish evenly in the puddle and in three months time the yield of green manure obtained is about 4,500 lb. per acre. Planted in the first crop, it would be useful for the succeeding crop or in the case of single crop, the plants could be used for the next crop.

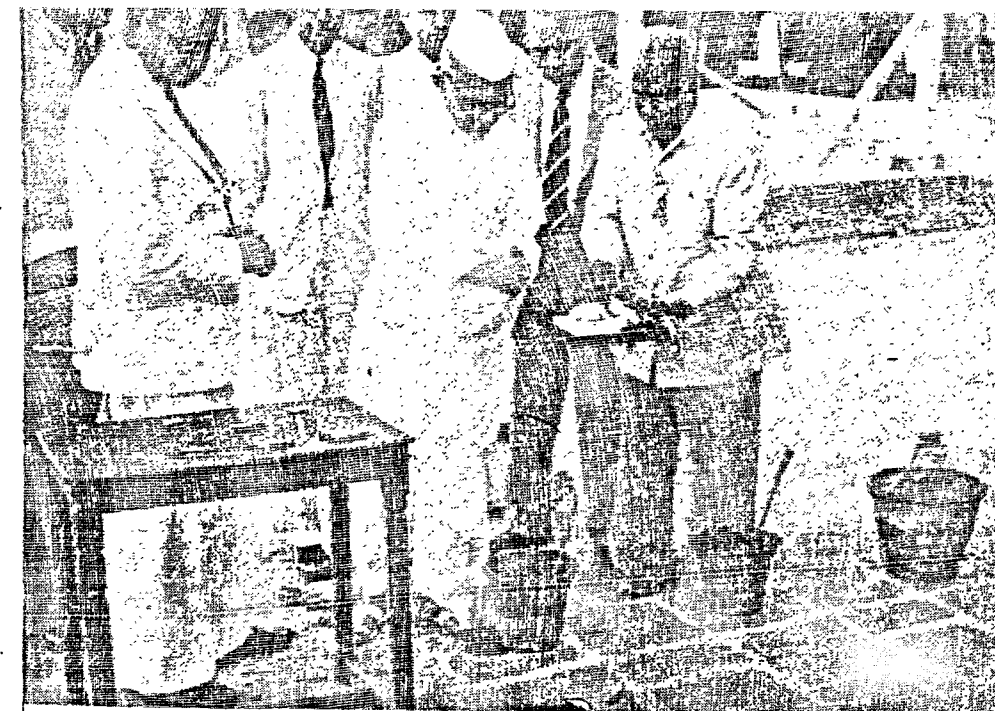
The time is not far off when we will be hearing more and more of our research stations and how the farmers and cultivators make the maximum use of them. Already the strain evolved at the stations are extremely popular, and demands are coming from the public in increasing numbers. The cultivators who recently won prizes in the crop competitions invariably used the strains supplied by the research stations. These research stations manned by patient and industrious workers contribute silently towards national progress and regeneration in a field which sustains the very life of the nation by yielding better and more food crops.

Crop Competition for 1951-52

The Government have directed that the crop competition, sanctioned in their orders dated September 26, 1950, and November 11, 1950, be held this year (Fasli 1361, 1951-52), only in respect of short duration varieties of paddy (*viz.*, paddy crops grown and harvested within a period of five months) under any system of cultivation.

The rules for the crop (paddy) yield competition of Fasli 1360 shall be followed in general, subject to the following modifications in respect of competition during the current fasli:—

- (1) The competition will be held at the Firka (Revenue Firka) Taluk, District, Regional and State levels.
- (2) The Firka competition will be the basis for deciding the winners for the Taluk, District, Regional and State Competitions.
- (3) No Firka competition will be held unless there are at least 50 entrants in each firka.
- (4) The following prizes will be awarded to the successful competitors: (a) State Prize, Rs. 500 in cash plus a gold medal worth about Rs. 100; (b) Regional Prize, Rs. 200 in cash plus a gold medal worth about Rs. 50 (for each of the eight Agricultural Regions); (c) District Prize, Rs. 100 in cash (for each of the 27 Agricultural Districts); (d) Taluk Prize, Rs. 50 in kind for each taluk; (e) Firka Prize, Rs. 25 in kind for each firka.
- (5) The method of judging the results will be as in the previous year.



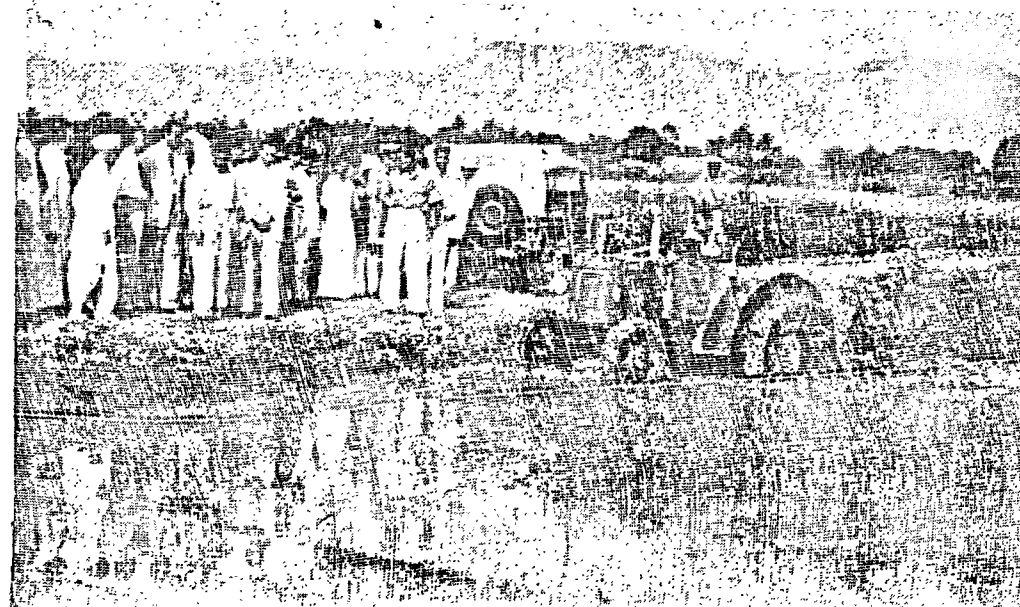
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Breeding Better Strains
of Paddy

Sri K. M. Munshi, Union Minister for Food, recently visited the Paddy Breeding Station at Coimbatore. Here after eight years of research the two new varieties Co-25 and Co-26 were evolved. The experiments at the station include hybridisation between wild and cultivated varieties, development of drought resistant and saline resistant qualities, and schemes for attaining self-sufficiency in green manure.

Top: The Paddy Specialist displays some specimens to Sri K. M. Munshi, to explain the work of the station.

Right: Close-up of a field, showing *sesbania speciosa* (green manure) planted with six-inch spacing, after the planting of paddy.

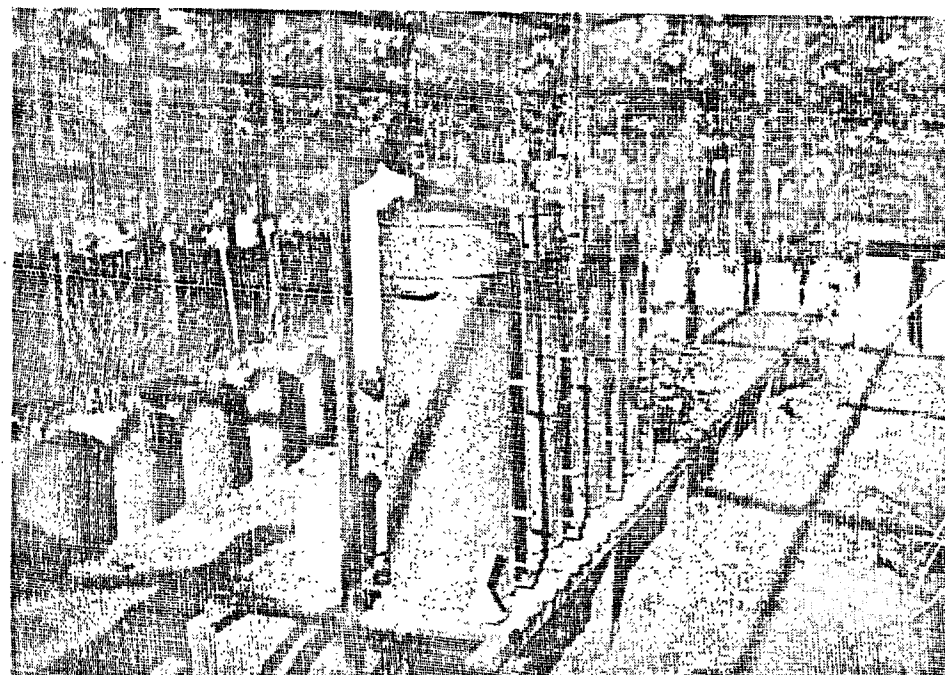
Bottom: Puddling with rotavator.





Developing Paddy Varieties

Hybridisation between wild varieties and cultivated categories is a main line of experiment at the Paddy Breeding Station, Coimbatore. The aim is to introduce into the hybrid the rare resistant qualities of the wild variety. In lay terms, this is done by mixing up the pollen of both. Picture at left shows a researcher checking on the hybrid strains.



How far will the roots go down into the earth in search of water, when there is a drought? The Root Development Apparatus (shown at right) measures the differential development of the root system, to assess drought resistant qualities.



Along the edges of paddy field bunds *sesbania speciosa* (a variety of green manure) is planted six inches apart. In three months the yield of green manure obtained is about 4,500 lb. per acre.

AGRICULTURE

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MADRAS INFORMATION

Agricultural Round-up

Weights and Measures Act.—Salt is sold in this State by manufacturers and wholesale dealers in terms of weight and by retail dealers in terms of measures. The Salt Experts Committee appointed by the Government of India in 1949 suggested that, with a view to improve the quality of the salt produced in this State, the sale of salt, both wholesale and retail, should be only by weight and not by measure. The Government of India have also stressed the need for the early introduction of the system of selling salt by weight in this State, as in Bombay, in order to benefit the consumers. There is, however, no provision in the Madras Weights and Measures Act, 1948, which provides for the Government regulating the sale of salt or any other commodity by weight only.

With a view to enable the Government to regulate all transactions, dealings or contracts in any specified trade or class or trades by weights only, or by measures only, and also to prescribe the weights, measures, or weighing or measuring instruments that may be used therein, legislation is being undertaken to amend the Madras Weights and Measures Act, 1948, suitably. The Amending Bill in this regard [viz., the Madras Weights and Measures (Amendment) Bill, 1951] has been published in the *Fort St. George Gazette*, dated 22nd May 1951, and is awaiting introduction in the ensuing session of the Legislative Assembly.

Facilities for Lift Irrigation.—The best possible efforts were continued to be made by the Agricultural and Food Production Departments to maximise production by providing better irrigational facilities, increased supply of fertilisers and manures, and the like. Up to the beginning of July 1,216 oil engines and 230 electric motors were issued under the hire-purchase scheme in respect of sanctions accorded for 1950-51 releases. More than 50,000 feet of pipes were sold to ryots in April and May alone. During 1951-52, the Government propose to supply 1,500 oil engines to ryots under the hire-purchase system. The Government have recently sanctioned the purchase and distribution of 300 oil engines to the ryots under the hire-purchase system complete with pipes and fittings, to enable the ryots to get the plant and equipment during the season.

Tractors.—A scheme for the supply of tractors under the hire-purchase system has also been sanctioned by the Government to provide easy credit facilities to agriculturists who are in need of tractors. To start with, the Government have sanctioned the purchase of five tractors for supply to ryots under the above scheme at a cost of about Rs. 83,300.

The Agricultural Department tackled a total extent of 15,811 acres by tractors in April and May 1951. An interesting improvement in tractor work is the use of the 'Rotavator' attachment to tractors lately received from the manufacturers, for puddling, green manure trampling and levelling in wet lands. This has been tried on a regular field scale in the districts of Coimbatore, Chittoor and Tanjore. In all these districts, the performance has given complete satisfaction, as it has been possible to effect considerable saving in time and expenditure. It can now safely be said that a tractor with a "Rotavator" attachment is the best answer to the demand for machinery for wet cultivation.

Distribution of Manures and Seeds.—The progress made in the several manure and seed schemes during 1951-52 is as shown below :—

Scheme.	Quantity in tons distributed from	
	1st April 1951 to 15th June 1951.	Target.
	TONS.	
1 Ammonium Sulphate ..	3,089	116,000
2 Phosphatic Manures ..	221	28,000
3 Rural Compost ..	21,626	104,706
4 Urban Compost ..	8,702	232,000
5 Green Manure Seeds ..	171	3,214
6 Paddy Seeds ..	3,532	14,572
7 Millet Seeds ..	71	2,030
Total ..	37,412	500,522

Premia for Improved Strains of Seeds.—The Government have sanctioned the continuance of payment of premia during 1951-52 to seed farm ryots who undertake multiplication of improved strains on behalf of the Department. The rates of premia are :—

	PER CENT.	
(i) Paddy Seeds—		
(a) Samba ..	25	Over the village-site price.
(b) Kuruvai ..	27½	
(ii) Millet Seeds ..	35	

Ten per cent of the premium is recoverable through sale price when sold to ryots for sowing.

Soil Erosion Prevention and Contour Bunding.—In Bellary and Anantapur Districts, where the soil erosion problem is acute, 19,933 acres have been topographically surveyed and the work of putting up bunds has been taken up already. Contour bunding and trenching of a total area of nearly 1,800 acres has so far been completed in these two districts, out of a planned extent of 4,800 acres. It is observed that with the provisions of waste weirs no breaches have occurred in any of the puddled areas during the recent heavy rains in the district amounting to over 5" in one day, although at the commencement there was a certain noticeable amount of reluctance on the part of the ryots to have their areas contour bunded.

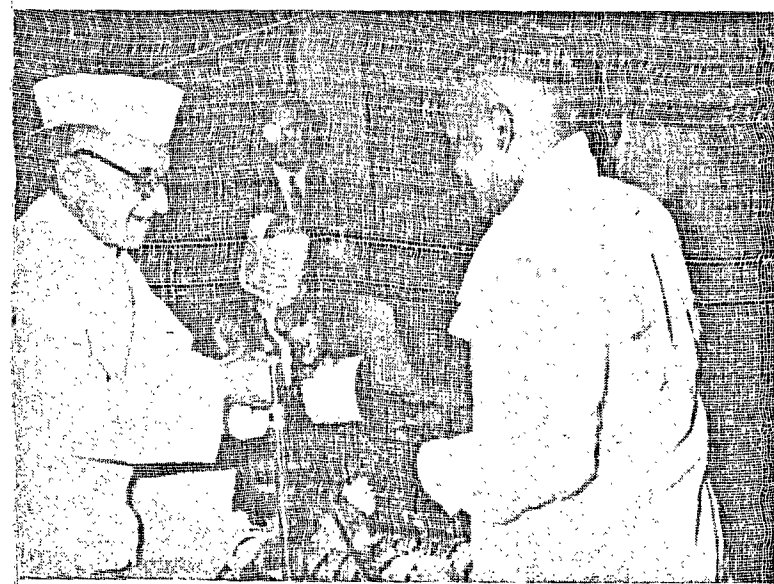
Paddy Yield Competition.—The competitions instituted in order to create a healthy rivalry among the farmers to put forth their best efforts to produce more have been conducted in all the districts except Bellary, with very great success. Prizes were instituted at Taluk, District, Regional and State levels. The results were very encouraging and the differences between the normal yield and the yield obtained by the successful competitors was very significant, the range being from about three to over four times. The much-coveted "State Prize" was won by Sri K. Vellayya Gounder, son of Sri Kuppaswamy Gounder, Thatampatti village, Barur P.O., Krishnagiri Taluk, Salem District, for obtaining an yield of 12,000 lb. (wet weight) of paddy per acre.

Deducting 15 per cent for moisture content and another 18 per cent for errors in alignment and calculations, the



12,000 Lb. of Paddy from one Acre

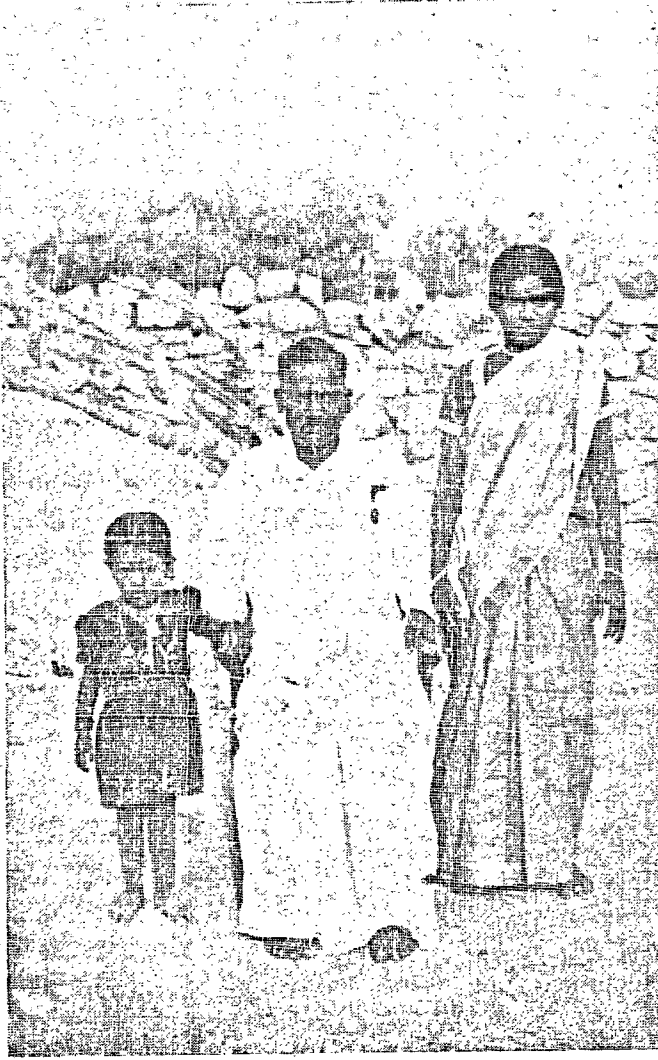
Sri Vellayya Gounder's Achievement



Sri K. Vellayya Gounder of Thathampatti village in Krishnagiri Taluk, Salem District, recently achieved the apparently impossible . . . he produced 12,000 lb. of paddy in one acre of land. A farmer of twenty years standing, Sri Vellayya Gounder was awarded the State Prize and Medal for maximum production. He attributed his success to hard work with better seeds, better manure and better implements. His paddy stalks stood erect with lodging to heights of five feet above, even with water in the field, confounding the experts.

The entire effort was a well-deserved commercial success too. Item by item the expenditure was calculated and checked, and the expenses (including preparatory cultivation with levelling and ploughing, manures and manuring charges, compost, bonemeal and chemicals, nursery seeds, transplanting and intercultivation, harvesting, thrashing and winnowing) added up to Rs. 538-4-0. Yield per acre—80 bags of 150 lb. each (wet) at Rs. 20 per bag. Net income per acre—Rs. 1,061-12-0.

Pictures show: (Top) The seed farm where Sri Vellayya Gounder grows quality seeds on behalf of the Government. (Right) Sri K. Vellayya Gounder with his wife and daughter. (Left) Sri K. M. Munshi awards the State Prize and Medal. (Bottom left) Ploughing; (centre) Transplantation; (right) The man and the miracle: Sri Vellayya Gounder stands in his Kuruvai second crop field; note the ear of paddy fluttering over his head.



After planting and providing 'primary' shade, steps should be taken to raise what is known as 'secondary' shade. This is done by planting banana suckers or Gliricidia seedlings between every two cocoa trees. These plants will afford the necessary shade and protection to the young cocoa plants. The trees should be provided constantly with a mulch of vegetable matter. This can be of leaves or other trash placed six to nine inches deep around each tree, leaving a space of six inches clear just around the stem. The ground should be kept clean and free from weeds; about four to six hoeings in a year are desirable but they should not be so deep as to injure the roots.

Pruning the Trees

The tree should be allowed to grow freely when young. When the branches of two neighbouring trees begin to meet, they are kept in form and well balanced by pinching out the points of the shoots from time to time. All weak branches should also be removed and no part of the tree should be allowed to grow so thick as to prevent free circulation of the air. All decayed and diseased wood should be removed at once.

The trees begin to bear in their third year while the pods can be seen on the trees almost any time of the year; the two major crops of the year are usually borne once in the summer (April-May) and for a second time in about December.

The pods should be ripe when picked. They would then have developed their full colour. The Criollo bears a red pod. The pods should be harvested with a sharp knife and never pulled or torn off the tree by hand, as this injures the cushions on which successive crops are borne. The pods are broken in half with a sharp knife and the beans which number from 20 to 30 are scooped out from the two halves of the pods with a spatula, pulling off the stringy core which holds the beans together.

Fermenting the Beans

The way to ferment the beans is to place them straight from the pods into a box which has holes in the bottom to let the "sweatings" run away. The box should be large enough to hold one or two cwt. of beans. The beans are left in here for two days. During this time the temperature rises to about 50°C. At the end of the two days, the beans are turned either out of this box into another or turned out and put back again. This gives the aeration necessary in the development of the right colour in the beans and prevents an aerobic fermentation from occurring.

The beans should continue at about the temperature of 50°C during the next two days and then are again turned as before and left for two more days, then dried slowly in the sun. The boxes should be covered with banana leaves during the period of fermentation. At the end of the fermentation the cocoa beans should be deep brown in colour, and not containing any purple. In this condition they are ready for the market.

Efforts are now under way to rapidly increase the production of the cocoa plants for supply to persons interested in a trial of this crop. Since the demand is expected to be heavy, indentors are advised to register their indents for supply of cocoa plants in advance directly with the Assistant Fruit Specialist, Coonoor P.O., the Nilgiris.

Control Orders in Force

In continuation of the lists of control orders in force in Madras State, published in the June issue of *Madras Information*, and the supplementary list published in the July 1951 issue, the control orders in force on 6th Aug 1951, are given below:

FOOD AND AGRICULTURE DEPARTMENT THE MADRAS FOODGRAINS PROCUREMENT ORDER, 1947.

The Madras Foodgrains Procurement Order, 1947, as corrected up-to-date incorporating all amendments, has been republished for the benefit of the Malabar public. The Order controls and regulates the procurement, sale and purchase of notified foodgrains in the Malabar District.

THE MADRAS RICE MILLS LICENSING ORDER, 1951.

The Madras Rice Mills Licensing Order, 1947, has been reissued as the Madras Rice Mills Licensing Order, 1951. This order extends to the whole of this State and came into force on 19th April 1951. Under this order, a licence from the District Collector is necessary for running a rice mill and no licensee can increase the hulling capacity of his mill by installing additional machinery or in any other way except with the permission of the District Collector. Licences issued under this order have to be renewed year after year. A licence fee of Rs. 24 is levied for every licence and for every renewal thereof. The licensee will have to deposit with the District Collector such sum as may be specified by the latter for the due performance by the former of his duties as a licensee under this order. This District Collector has power to order the forfeiture of the deposit mentioned above either in whole or in part for breach of any of the provisions of this order or any of the conditions of the licence without prejudice to any other action that may be taken against the licensee. The Commissioner of Civil Supplies or any other officer authorized by him can suspend or cancel the licence for contravention of any of the provisions of the order or any of the conditions of the licence.

RESTRICTIONS ON MILLING OF PADDY.

The restrictions on milling of paddy are in force in the surplus areas of the surplus districts, in Malabar, the Nilgiris and South Kanara and in the areas in South Arcot, Madurai, Tiruchirappalli and Srikakulam districts where procurement by levy is in force. According to these restrictions, a permit from certain specified officials is necessary for hulling paddy. The Commissioner of Civil Supplies has extended these restrictions to the villages in belt areas lying within a belt of six miles from the sea-coast in the districts of Ramanathapuram and South Arcot, from where smuggling is likely to take place, and to the 15 firkas and centres where the Government have ordered that paddy or hand pounded rice alone should be sold in ration shops.

FIXATION OF THE PRICES OF SALT.

District Collectors and the Commissioner of Civil Supplies are empowered by the Central Government to fix the prices of salt in the State of Madras subject to any directions of the State Government.

(Continued on page 26)



AGRICULTURAL RESEARCH: The joint meeting of the Boards of Research and Extension of the Indian Council of Agricultural Research, which was held in Coimbatore under the presidency of the Honourable Sri K. M. Munshi, Minister for Food and Agriculture, Government of India, discussed a number of research problems bearing on the production of rice and wheat. It finalised a ten-year programme for land transformation which has as its objective the maximum utilisation of the resources of the country in land, water and livestock. The meeting also adopted a constitution for the 'Bhoomi Seva' which is being raised by the Government. Photo shows Sri K. M. Munshi addressing the meeting. Seated to his left is Sri A. B. Shetty, Minister for Agriculture, Madras.

Food Gifts to Madras State

Care Food Packages.—Intimation has been received from Mr. E. T. Greaves, Chief of CARE Mission in India, of a gift of 58 CARE food packages donated by 41 donors in America for free distribution among poor and needy people in the Madras State. This is in addition to the 40 packages already received. Arrangements are being made for taking delivery of the food packages and distributing them in the scarcity areas of this State.

Foodgrains.—Sindhi youths of Singapore are sending by S.S. *Jalagopal* a gift of 20 bags of rice for distribution in scarcity areas of the Madras State. Arrangements have been made for taking delivery of the gift on arrival at the Madras Port and for distributing it through "Kanjis Thetties" in Coimbatore District.

The Defence Services have made a donation of 73 tons of rice ex *S.S. Nurjahan* and 73 tons of wheat ex *S.S. Henry D. Thoreau* for distribution in the Madras State. The wheat gift has already been taken delivery of by this Government and arrangements have been made for taking delivery of the rice gift. The rice and wheat are to be distributed in scarcity areas of Coimbatore District through the charitable institutions in that district.

Intimation has been received from the Government of India of the arrival of 250 tons of rice, as gift by some merchants in Burma for distribution in famine-stricken areas of the Madras State. The arrival of the gift rice is awaited.

Cash.—Sri Lacchmandas Nanumal of Shukrawarpet, Poona, has made a donation of a sum of Rs. 35 (rupees thirty-five only) for famine relief in scarcity areas of the Madras State.

Rice Content of Ration

The Government of India have definitely informed the Madras Government that it is not possible to increase the ceiling quota of rice to this State beyond two lakhs of tons already promised. They have also directed that, with effect from 9th July, the pool price of rice will be enhanced by 11 annas a maund, and of wheat by Rs. 2 a maund. They had also supplied some rice classified as 'fine' at the non-subsidized price of Rs. 26-8-0 a maund, and wherever this rice was issued, people had protested against its high price. The issues arising from these facts were discussed at a conference of food officers presided over by the Hon'ble Chief Minister and the following decisions were taken:—

(a) The rice content of the ration should be reduced from 8 to 6 oz., in all the rationed areas both statutory and rural as well as in respect of the essential personnel in the de-rationed areas, the balance to make up the 12 oz., being supplied as wheat or milo. (b) The rice content of the ration to card holders in the upland taluks of the surplus districts should be reduced from 8 to 4 oz. (c) Rice classified as 'fine' by the Government of India should be sold at the price of ordinary rice first sort. (d) To partially recover the loss on account of the enhancement of the pool price of rice by 11 annas a maund, by the Government of India, and the loss arising from selling 'fine' rice at the price of first sort rice, the price of rice should be enhanced uniformly by annas 14 a maund, or 7 pies a Madras measure throughout the State, including the four industrial towns of Madras, Madurai, Visakhapatnam and Coimbatore. (e) Wheat should be sold at actual cost price based on the pool price of Rs. 18-6-0 a maund, in all parts of the State including the four industrial towns where it is now being sold at special subsidised rates.

The above decisions are effective from 12th August 1951.

"corrected" yield, viz., 8,000 lb. is much higher than the average yield in Spain about 5,900 lb. highest in the world. Besides, the corrected yield, viz., 8,000 lb. per acre compares very favourably with 1,795 lb. the average yield of the Madras State. The State Prize comprising Rs. 500 in cash and a Gold Medal worth Rs. 100 was awarded to Sri K. Vellayya Gounder by the Hon'ble Sri K. M. Munshi, Minister for Food and Agriculture, Government of India, at Coimbatore.

Intensive Cultivation Schemes.—The progress made in the assessment of additional production on account of the Intensive Cultivation Schemes (Grow More Food Schemes) is generally watched till the end of June each year with reference to units of works or supplies actually achieved up to the end of the preceding March. On this basis, an additional production of 2.68 lakhs was estimated to result from the units achieved during the year 1950-51 up to the end of March 1951. The total acreage covered as verified by the Collectors under all the Grow More Food Schemes for 1950-51 up to the fortnight ended 15th June 1951 was about 22.61 lakhs acres, as against 22.58 acres achieved up to 30th April 1951, compared to a total finalized target acreage of 24.88 lakhs acres. The additional production verified by the local Revenue Officers up to the end of 15th June 1951 was 1.78 lakhs tons of cereals (rice and millets) compared to 1.74 lakhs tons achieved up to 30th April 1951 or about 66.4 per cent of the estimated additional production of 2.68 lakhs tons.

Cotton in Tanjore Fallows.—One of the many items under the Cotton Extension Plan is a scheme for raising cotton in 7,500 acres of rice fallows in Tanjore District during the off-season between January and June. It was started early in 1951 and sufficient quantities of the early duration cotton strain P216F were imported from East Punjab and distributed to the ryots. The important qualities of this strain compared with other Cambodia strains are shown below:

Name of variety.	Season of growth.	Staple length.	Estimated spinning value.
		INCH.	COUNTS.
P216F ..	Summer ..	15/16 ..	37
Uganda 1 ..	Winter ..	15/16 ..	38
Cambodia 2 ..	Do. ..	7/8 ..	34

LUSCIOUS: Close-up of a branch bowed with succulent Sathugudi oranges, a sweet citron. The tree of plenty is one of many on the lands of Sri K. Vellayya Gounder, winner of the State Crop Yield Competition



Experiments done at the Aduthurai Research Station, during 1949-50 and 1950-51, have also indicated that the paddy grown after cotton gives 50-55 per cent increased yields, as compared with paddy grown in lands left fallow.

Agricultural Research.—Very frequently some interesting and valuable items of work done by the Agricultural Department are overshadowed by matters purely relating to food production. Given below are a few items of interest reported by the Director of Agriculture.

Cocoa Production.—Cocoa has been found to thrive very well under the humid conditions on the slopes of the Nilgiris and Agency Tracts Hills. Very recently, a sample of the cocoa produced in the State was analysed by Messrs. Cadbury Chocolate Co., United Kingdom. This firm has certified that the cocoa produced by this State is of very attractive colour and of the best criollo variety that the firm has seen for many years. The cocoa produced in Madras State is of a specialised type and is thus capable of finding a ready market. It may be recalled that the Department of Agriculture introduced the plantation of cacao some years ago at Kallar Fruit Station at the foot of the Nilgiri Hills.

Mesta Production.—Bengal jute has been tried on a large scale in the State. The net result has been discouraging. However, the Agricultural Department tried Mesta cultivation with greater success in Srikakulam and Visakhapatnam Districts than elsewhere. Mesta is similar to jute and is largely used by jute mills for mixing with jute. At present, one lakh acres are under mesta cultivation. Though grown largely as a dry crop, mesta is also sometimes grown on wet paddy lands.

Deep-water Paddy Strains.—The Government sanctioned a scheme for work on deep-water paddy, for a period of five years. A small Research Station for the work was started on about ten acres of leased land at Malaki-Muhammedpuram near Pulla Railway Station in West Godavari District in December 1950. The object of this station is to determine and find out a suitable strain of paddy, by pure line selection and hybridization work, which would fit in with the water-logged condition of vast areas in East and West Godavari Districts. It is reported that in the Godavari deltas there are about 40 to 50 thousand acres of paddy land which get submerged by floods up to four to five feet in flood seasons.

The selected place for the sub-station borders the Kollar Lake where experimental work can be carried on without risk of undue submersion or heavy floods. When a suitable strain to withstand the water logging condition is evolved, it will be very advantageous to multiply and distribute seeds and thereby increase paddy production in the Godavari Delta, especially in the second-crop season.

Improved strains of Virginia Tobacco.—To maintain the purity of Virginia tobacco seed (F.S. 9) by the production of pure seed in Guntur District, a scheme has been sanctioned by Government recently. The production of improved strains of chillies is also combined under this scheme. The target for the production of H.S. 9 tobacco seed will be 6,000 lb. and G. 1 chilli seeds, 4,000 lb.

Cocoa in South India

Cocoa is both a beverage and food crop obtained from the cacao tree. The world consumes about 500,000 tons of cocoa every year in one form or another. Cocoa powder, butter, paste, chocolate and nut and milk chocolates are some of the more important products that have become now so popular the world over. British West Africa till recently produced half of the world's requirements, the rest being supplied by Brazil, Nigeria, Colombia, Venezuela, Trinidad, Sao Thome, Costa Rica, Santo Domingo, Nicaragua and Ceylon.

For the past few years the leading cocoa industry of the world, British West Africa, has been suffering from one of the most serious threats to its existence in the form of a virus disease known as 'swollen shoot'. It is reported that several millions of cacao trees are dying due to this cause every year. The disease has been found to be very difficult to prevent or control. As such the world markets for cocoa are already in search of other regions or countries for their supplies. In fact British interests in Africa are now shifting to Malaya which is considered to offer a congenial home for cacao. The other countries will also, no doubt, step up production under the stimulus of demand.

Of the two chief botanical varieties of cacao, it is the Forestero that contributes about 95 per cent of the world's supply, leaving only five per cent to the other variety Criollo. The former, though hardy and more abundant in bearing, is a coarse variety, while the latter yields one of the finest products. In the cacao producing regions, due to incontinent mixing of the two varieties, the Criollo has now become almost extinct, leaving therefore no choice except to fall back upon the coarser types. If therefore any country is in a position to market the Criollo exclusively, it can easily assume the leading position in the markets for cocoa.

Favourable Growth in the Nilgiris

Cocoa which was introduced in India more than 30 years ago, has found ideal conditions for its cultivation at the foot of the Nilgiris at Kallar and Burliar. The only variety that happened to be introduced was Criollo and it has therefore remained in a pure form. Recent studies of its performance have shown that its yields are in no way inferior to those of even the Forestero elsewhere. Further, happily enough, no incidence of any serious pest or disease has so far been noticed. The commercial opinion on the beans, of no less an authority than the Chemist of Messrs. Cadbury Brothers Limited, Bournville, an extract of which is reproduced below, has been entirely favourable:—

"The beans weighed 1.11 grams which is rather small for Criollo cocoa. This, however, is no serious defect. The shell content is 9.3 per cent. Internally the beans are a beautiful cinnamon colour and have been obviously well fermented. In this character they are the best Criollo cocoa I have seen for many years. Made up into chocolate these beans made very bland pleasantly flavoured chocolate, equal to any good Criollo cocoa.

"The beans are in my opinion equal to much of the best Criollo cocoa and should find a ready market. Perhaps it is necessary to draw attention to the fact that this is a specialised cocoa of which the present supply is only

about five per cent of the normal cocoa production. The market price of Criollo is approximately 30 per cent higher than the normal type such as Forestero."

Ideal Conditions

It is thus seen that India is in an unique position to meet the world's demand for a superior cocoa, if a serious effort is made at this stage to effect a rapid extension of the area under this beverage crop in all such regions which are assessed as suitable for it. For this, however, it is necessary to know where and how cacao can be grown. The following brief notes are given to assist prospective cacao growers:—

Cocoa likes heat and humidity. It does not endure droughts or frosts. An elevation ranging from 1,000 to 2,500 feet is about the ideal for its cultivation. The temperature range suited to it is from 80°F to 100°F for the maximum, and 45°F to 60°F for the minimum. A rainfall from 60 to 80 inches well distributed over the two monsoons, assists considerably in promoting vigorous growth of the trees. It revels in a retentive soil but drainage is essential. On these considerations, Wynaud, the Lower Palnis, the Agency tracts, the West Coast, the Nilgiris (lower slopes), Kolli Hills, Yercaud, the Javadi Hills may all be considered as of possible interest for cacao cultivation.

Providing Necessary Shade

The land intended for cacao should be cleared of all scrub growth, leaving only such trees as are required to provide the necessary shade. The cleared surface of the ground should be thoroughly turned over. Pits of 2 feet × 2 feet × 2 feet size are then dug at fifteen feet both ways keeping the rows as straight as possible. If vacant land without any tree growth has been taken over for cacao planting, it is necessary to plant shade trees preferably of the leguminous types. In either case, when the cacao plants are set out, it is necessary to provide them with a 'primary' shade by raising small pandals covered with dry leaves. There are two ways of planting. The seeds can be sown on the spot where the tree is to permanently remain or seedlings can be raised in seed beds and afterwards transplanted to the permanent positions. Planting is best done during moist weather in June or July.

TRIM: In regular array, evenly spaced, the Sathugudi trees bloom in the grove of Sri K. Vellayya Gounder



Food Offences and Punishments Awarded

During the fortnight ending 15th May 1951, 468 cases of prosecutions against food offences were disposed of in Madras State except in the districts of Coimbatore, Cuddapah, Kurnool, Visakhapatnam and Srikakulam. The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines ranging from Re. 0-8-0 to Rs. 1,000 and sentences of imprisonment up to one year were imposed.

P. Radhakrishna Rao, Proprietor, Sri Seetharamanjaneya Rice Mill, Gopavanipalem, Krishna District, was fined Rs. 200, for working a mill without possessing a licence.

For possession of 222 Madras measures of boiled rice and 29 Madras measures of ragi without maintaining any account, P. Krishniah Chetty, tailor, Greamespet, Chittoor, was fined Rs. 200.

In the West Godavari District, B. Musalayya of Pantapadu was fined Rs. 200 and also sentenced to undergo rigorous imprisonment for one year, in two cases of illicit transport of rice during nights.

For illicit transport of paddy in Tanjore District, Veeravadiyan (karnam), Saivaraj, Ponnuswamy, Mariyappa and Sadanandam were each fined Rs. 200 and Singara Visundar (V.H.M.) and Somiah Visundar were each fined Rs. 300.

A fine of Rs. 1,000 was imposed on C. Kandan, Peruvemba amsom, Malabar District, for failure to sell surplus paddy. In the same district Nediyruppu who transported paddy illegally was awarded rigorous imprisonment for six months.

During the same fortnight, other Departmental punishments such as fines, forfeiture or enhancement of security deposits, cancellation of retail and wholesale licences, etc., were also awarded in 185 cases.

During the fortnight ending 31st May 1951, 635 cases of prosecutions against food offences were disposed of in Madras State except in the districts of North Arcot, Chingleput, Nellore, Coimbatore and Srikakulam. The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines ranging from Re. 1 to Rs. 300 and imprisonment up to six months were imposed.

Natarajan, ryot of Tanjore District, was fined Rs. 200, for illicit transport of 18 marakkals of rice.

For failure to deliver the quantity of foodgrains demanded under the provisions of the Madras Foodgrains (Intensive Procurement) Order, 1948, Subbappa Shetty of South Kanara District was fined Rs. 225.

A sentence of imprisonment of six months was awarded to Sheik Khaja Sahib, East Godavari District, for possession of rice without a permit.

Arumugam and Periyasamy were each fined Rs. 200, Periasamy and Karuppanna Gounden were each fined Rs. 250, Lakshmana Muthuraja was fined Rs. 300 for illicit import and transport of foodgrains in Tiruchirappalli District.

In West Godavari District, V. Venkata Subba Rao was fined Rs. 200 for selling jaggery above the ceiling price, G. Chellareddi, Kavittam, was fined Rs. 200 for illicit transport of paddy and P. Rama Rao of Bomidi was fined Rs. 300 for illicit storage of rice for sale.

Two accused, A. Narayana Reddy and Y. Chithambari, cultivators of Anantapur District, in one case were each fined Rs. 200, for disposing of nine bags of rice without authorisation from the Collector.

During the same fortnight other Departmental punishments such as warnings, fines, forfeiture and enhancement of security deposits, cancellation of retail and wholesale licences, etc., were also awarded in 218 cases.

Gift of Rice from Malaya

Labourers, working in the rubber estates of Selangor in Penang, Malaya, and a few other philanthropists in Malaya, have donated 83 bags or eight tons of Siamese rice to the Madras Government, for free distribution in scarcity areas in the Madras State.

(Continued from page 24)

PUBLIC WORKS DEPARTMENT MADRAS CEMENT CONTROL ORDER.

Amendments issued to the Madras Cement Control Order on 1st June 1951 fix the sale price of loose cement at Rs. 71 per ton (Rs. 78-8-0 in the case of Indian cements) and provide for the charge of containers as old and new gunny bags and paper bags up to the ceiling of Rs. 26 per ton.

Levy Scheme of Procurement

The Government have received representations to the effect that the Levy Scheme of procurement applicable to the districts of South Arcot, Madurai, Tiruchirappalli, Srikakulam and South Kanara contemplates procurement at the prescribed scale only once during the year, except in respect of Madurai district, and that it does not authorize procurement from the second and third crops. These representations proceed on an incorrect interpretation of the Order. It will be noticed that the common heading given for the different groups to which different rates of levy apply is "Extent of paddy cultivated." This heading makes it clear that the prescribed rate of levy is applicable whenever paddy is cultivated on the same piece of land whether as first, second or third crop. The rates of levy are thus applicable to each crop cultivated on the same lands.

Medical Education in Madras State

For purpose of assessing the progress that has been made in the direction of medical education, the position of medical education in 1940 is compared with that existing in 1950-51 over a period of ten years.

Medical Colleges: In 1940, there were three Medical Colleges, viz., Madras Medical College, Stanley Medical College and the Andhra Medical College. The first two institutions are affiliated to the University of Madras and the last to the Andhra University and the degree given by these Universities have been recognized by the Indian Medical Council, New Delhi. The degrees awarded by the Andhra University were recognized by the Indian Medical Council with retrospective effect, i.e., from the date the University conferred the M.B.B.S. degree.

Number of students:

In 1940, the number of students admitted in each college was as follows:—

Madras Medical College	120
Stanley Medical College	70
Andhra Medical College	50
	240

Courses of study available in 1940:

1. Training of medical students for M.B.B.S.
 2. Training of students in the following special degrees and diplomas:—
 - (a) University degree of B.S. Sc.
 - (b) Diplomas: Tuberculosis Diseases Diploma, Licentiate in Public Health, Clinical Laboratory Science and Sanitary Inspector's course.
- (Two hundred candidates are admitted each year for Sanitary Inspector's course.)

Expenditure on medical education:

Each of the Medical Colleges was spending the following amounts:—

	1940.	1949-50.
	RS.	RS.
Madras Medical College	3,27,138	5,87,804
Stanley Medical College	1,20,847	2,83,747
Andhra Medical College	2,20,820	4,02,164
Total	6,68,805	12,73,715

The average cost per student in these three different colleges was as follows:—

	1940.	1949-50.
	RS.	RS.
Madras Medical College	326	474
Stanley Medical College	272	528
Andhra Medical College	928	1,005
[Average cost per student (three colleges)—Rs. 669.]		

Admissions—1950:

Total number of admissions to the M.B.B.S. course:	
Madras Medical College	125
Stanley Medical College	100
Andhra Medical College	55
Guntur Medical College	50
	330

Courses of study available: (1) M.B.B.S., (2) B.S.Sc., (3) B.Sc. (Phar.), M.D., M.S. (Special coaching).

University diplomas: (1) T.D.D., (2) D.G.O., (3) D.L.O., (4) D.O.

Government diplomas: (1) L.P.H., (2) Cl. Lab. Sci., (3) Dip. Mat. Chl. Wel. (4) D.M.R., (5) L.O., (6) Sanitary Inspector's course.

Excepting the coaching of students for M.D., and M.S., there is no other medical diploma at present for which training is given at the Stanley Medical College.

Andhra University degrees: M.B.B.S., M.D. and M.S.

University diplomas: D.G.O. and D.L.O.

The Government of Madras appointed a special committee in 1944, on account of the extreme shortage of medical men available to man the different medical institutions properly, to consider the question of immediate expansion of medical education and other allied matters. The Committee submitted its report and orders of Government thereon were passed in G.O. No. 1950, Public Health, dated 13th November 1944.

Health Survey Committee

In October 1943, the Government of India appointed the Health Survey and Development Committee to tour the whole of India and suggest measures for improvement of medical education and medical relief. The terms of reference were:

"To make a broad survey of the position in regard to the health conditions and health organization in India and to make recommendations for their development."

As a result of the deliberations of this Committee, a short-term programme covering a period of ten years was drawn up, during which period it was suggested that efforts should be directed towards the provision of adequate number of trained staff in all categories to facilitate the progressive development of health services with the least possible delay. The recommendations of the Committee were as follows:—

Medical Education:

- (a) Expansion and improvement of the existing medical colleges;
- (b) the establishment of new medical colleges in different parts of the country;
- (c) the creation of an All-India Medical Institute;
- (d) the sending out of carefully selected persons for overseas training in order to equip them for filling teaching, research and administrative posts in the country; and
- (e) the development of post-graduate teaching and centres in the provinces so as to enable these centres to function on an all-India basis.

Dental Education: The Committee suggested the training of (1) Dental Surgeon, (2) the Dental Hygienist and (3) the Dental mechanic.

Pharmaceutical Education: In order to improve pharmaceutical education, the Committee suggested the provision of educational facilities for three types of training, viz., (1) Licentiates in Pharmacy, (2) Graduates in Pharmacy and (3) Pharmaceutical Technology. Measures taken under each head of the recommendation of the Health

Survey Committee by the Madras Government are given below:

Schemes Sanctioned

Expansion and improvement.—The Government have sanctioned a number of schemes for improving the facilities for the training of students in the Medical Colleges and the attached hospitals. The more important of them are given below:

Andhra Medical College: The new buildings for men's hostel for the Andhra Medical College are almost complete and the same will be occupied shortly.

Women's hostel

Twin operas theatres. The works are almost finalised.

Three medical wards. Work in progress.

New steam laundry. The work is completed and steam laundry is being installed.

Stanley Hospital. The construction of an infectious diseases ward and installation of steam laundry are under consideration. Extension to Hope block is under consideration.

Guntur Medical College. Plans and estimates for converting the Guntur Medical College and the Headquarters Hospital, Guntur, into a full fledged and self-contained teaching institution are under consideration.

Madurai Medical College. The question of starting the College is under consideration and plans and estimates are under consideration.

Madras Medical College. A new hygiene block has been sanctioned and the construction is in progress; the total estimate sanctioned for this block is Rs. 5,41,000. A new nurses' home for the General Hospital is nearing completion.

New Medical College:—There were only three Government Medical Colleges in this State till 1946. The Government started two Medical Colleges from July 1946, one at Guntur and the other at Madurai. The Madurai Medical College functioned at the premises of the Stanley Medical College pending completion of buildings in Madurai. Owing to the financial stringency, these schemes received a setback. The Madurai Medical College scheme had to be deferred completely for lack of funds and the functioning of this College at Madras was abolished in April 1950. The number of admissions in the Stanley Medical College was increased from 72 to 100. The Government are desirous of starting the Madurai Medical College as soon as possible. Plans and estimates for the proposed new College at Madurai and for the expansion of the Erskine Hospital, Madurai, are under consideration.

The Guntur Medical College was temporarily started in the old Medical School buildings at Guntur after remodelling the same to serve the immediate needs of a college. The scheme of Guntur Medical College was also deferred by Government on account of the financial stringency in 1948, but in view of the public agitation for a second Medical College in Andhra Desa, the Government finally decided to continue the Medical College at Guntur. The Government are now considering plans and estimates for the

expansion of the Guntur Medical College and the Headquarters Hospital at Guntur so that the college may become a full fledged and self-contained institution. The Guntur Medical College is now teaching students only in the pre-clinical subjects in the first two years of the M.B.B.S. course. The students take their remaining three years training in clinical studies in the Andhra Medical College.

The National Planning Commission has approved a total expenditure of Rs. 147.73 lakhs to be spent on medical education and improvements to Medical Colleges and Collegiate hospitals during five years, 1951-52 to 1955-56 as detailed below:

	RS. LAKHS.
(1) Improvements to Andhra Medical College and King George Hospital, Visakhapatnam	33.09
(2) Improvements to Stanley Medical College and Stanley Hospital, Madras	32.64
(3) Madurai Medical College	41.00
(4) Guntur Medical College	41.00
	147.73

Reorganization of Pharmacy Department.—The Madras University revised the curriculum for the Pharmacy Degree course. The Government have therefore sanctioned the reorganization of the Pharmacology Department of the Medical College, Madras, sanctioning additional staff. The teaching as per revised curriculum will take effect from July 1951.

Overseas training.—Selected Medical Officers were deputed for overseas training in order to equip them for filling teaching, research and other important posts in the State. Eleven Medical Officers were deputed by Government for specialising in certain specified subjects. Ten Medical Officers have been recommended for award of World Health Organization scholarships. Intimation regarding final selection of officers has not been received. Besides the above, Medical Officers have been recommended to the following Fellowships:

- (1) Nine Medical Officers have been recommended for overseas training under the study rules;
- (2) Five Medical Officers under Commonwealth Technical Co-operation scheme;
- (3) Ten Medical Officers under the Rockefeller Foundation Fellowship; and
- (4) One Medical Officer under the Vincent Massey Scholarship.

Post-graduate teaching.—In Madras, there are post-graduate courses provided in the different Medical Colleges for training candidates for M.D., M.S. and B.Sc. degree as well as for Diplomas in Gynaecology, Obstetrics, Ophthalmology, Oto-Rhino Laryngology, Tuberculosis, Clinical Science, etc. The University of Madras has been requested to grant recognition for training post-graduate students for the M.S. degree in Orthopaedics in the Madras Medical College and the Government General Hospital, Madras. The curriculum for the B. Pharmacy degree course has been revised and the duration of the degree has been raised from two to three years, and the reorganization of the Pharmacology Department of the Madras Medical College has been sanctioned from 1st July 1951. The starting of the B.D.S. course has also been sanctioned. The King Institute, Guindy, though not ordinarily a teaching

institute, has made arrangements for training laboratory assistants and technicians and medical and science graduates in general bacteriological technique.

Pharmacy Council.—The Pharmacy Registration Tribunal was constituted in April 1950 to prepare the first register of Pharmacists for the Madras State. The last date for the receipt of applications for first registration was extended up to 28th February 1951. After the completion of the first register and after issue of rules for the State Pharmacy Council, the first Pharmacy Council will be constituted by Government.

All-India Medical Institute and upgrading.—The recommendation of the Bhoze Committee for the establishment of an All-India Institute for medical research has been accepted in principle by the Government of India. A Committee was appointed under the Chairmanship of Dr. A. Lakshmanaswami Mudaliar to report on the general plan and stages of the development of the Institute and on matters relevant to such development. For this purpose a Committee under the Chairmanship of Dr. A. Lakshmanaswami Mudaliar was constituted to consider the question of upgrading of certain branches of teaching and research in the existing Medical Colleges and institutions in India. The Upgrading Committee has, in the first instance, recommended the upgrading of the following departments of the Medical Colleges in this State as All-India Centre of Post-graduate teaching and research:

- (i) Obstetrics and Gynaecology, Government Hospital for Women and Children, Madras;
- (ii) Anatomy Department, Medical College, Madras;
- (iii) Venereal Diseases Department, Medical College, Madras.

The questions relating to the above are under the consideration of the State Government and the Government of India, and it is hoped that the scheme will be implemented during the course of the current financial year itself.

Nursing Service

For a very long time, the State has taken the responsibility for the training of adequate number of nurses with the idea of utilising their services in the hospitals maintained by the State. This view is now very much widened and today the main object is to provide adequate number of nurses to man not only medical institutions run by the State but also to give sufficient number of nurses for running private hospitals, nursing homes, etc. The Mission Hospitals are also training nurses in regional languages.

The Health Survey and Development Committee drew pointed attention to the extreme inadequacy of trained nurses in the country as a whole and to the deplorable conditions under which nurses have been required to carry on their profession. According to the short-term programme of the Committee, 80,000 nurses will be required instead of the existing number of 7,000 in the whole of India; the number of midwives available in the country as a whole was only 5,000. The Committee therefore recommended the establishment of a large number of training centres for nurses. A large number of training centres for midwives was also advocated in order to provide one midwife for every 100 births.

The total number of nurses on the Register of the Madras Nurses and Midwives Council is approximately 4,750. The total number of nurses employed in the various hospitals in the State is 1,250. Seven hundred and fifty candidates are undergoing training in the various training centres in the State. The Government have also sanctioned

the training of midwives on payment of stipends. Midwives are trained by payment of stipends by the Labour Department and also by local bodies. The training of 100 additional midwives on payment of stipends has been sanctioned by Government this year.

Training Centres for Nurses

The object of Government is to make every headquarters hospital a training centre for nurses. There are at present 12 training centres for nurses in the State (nine complete training centres and three partial training centres). In the partial training centres, training is given for a period of 18 months.

The period of training of a nurse pupil extends to 3½ years (three years in general sick nursing and six months in midwifery). The last six months should be spent in a women and children hospital by women nurses.

The Government passed orders that the training given to men nurse pupils in the Venereal and Genito-Urinary Department of the General Hospitals for three months be included in the three years' training in general Nursing, that instead of the present three months' training in Mental Hospitals, the men nurse pupils be given training in Psychiatry for six months after their successful completion of three years' training and that an examination be held for men nurse pupils in Psychiatry at the end of six months' training.

Qualifications.—A woman candidate for training should have completed S.S.L.C. or E.S.L.C. (European School Leaving Certificate) and should not be less than 17 and not more than 30 years at the time of admission for training. She should be unmarried or a widow without children. A male candidate for training should have been declared eligible for the University course or for public service and he should not be less than 17 and not more than 22 years of age at the time of admission for training.

Training Abroad.—In order to provide nurses with a better type of basic training so that they may in due course develop into leaders of their profession and help to promote the cause of nursing on sound lines, two steps have recently been taken. Five nurses were sent to the United Kingdom in 1946 and 1947 to take the basic course in nursing in that country. They have been admitted to some of the best English hospitals where they will not only learn good nursing but also will have opportunities of widening their interests and gaining general knowledge.

Post-graduate training.—Post-graduate courses for nurses including a Nursing Tutors' course and hospital administration course are conducted in the General Hospital, Madras. A B.Sc. degree course in Nursing has been started in the Christian College for Women, Vellore. The proposal to start a B.Sc. degree course in the General Hospital, Madras, and the Madras Medical College, Madras, has been deferred for want of trained personnel to start the course and also for financial reasons.

Training in Specialities.—Nurses are deputed for training in special departments, viz., (1) for theatre work, (2) blood transfusion work and for work in X-ray and Ophthalmology.

School of Nursing.—A school of nursing is attached to the Government General Hospital, Madras. This school is intended to give training to the newly selected candidates. Seventy pupils are at present posted to this school of nursing for six months and posted to the various training centres for further training afterwards.

Review of Local Administration

There are at present 98 municipal councils, 25 district boards and 485 major panchayat boards. The number of villages with a population (1941 census) of 5,000 and above is 900. Under the Madras Village Panchayats Act all the panchayats which existed on the 1st April 1951 have become panchayats under the new Act. Steps are being taken to constitute such of those villages as have a population of over 2,000 into panchayats under the new Act. Particulars regarding expenditure incurred on the maintenance of various services, and the amount of Government grants given for the maintenance of various services, are given in the appended statements.

Dearness allowance.—Even since 1943-44, Government are paying grants to local bodies to the extent to which they are unable to meet from their own funds the cost of paying dearness allowance to their staff. Such grants in 1950-51 totalled Rs. 10 lakhs.

Local Taxation on Railway Properties.—Before a local body can levy a tax on a railway property, a notification of the Government of India declaring the liability of the railway administration is necessary. In regard to service taxes on railway properties, the following principles are followed in this State:—

(1) Water and Drainage Tax—

(a) Where a railway administration derives no direct benefit—one-third of the tax;

(b) where a railway administration derives only partial benefit—half of the tax;

(c) where a railway administration derives full benefit—full tax.

(2) Scavenging Tax—

(a) Where a railway administration has made efficient arrangements of its own for the daily removal and disposal of rubbish, filth, etc., from its premises—no tax;

(b) where the railway administration has made efficient arrangements for removal of filth, etc., but where the local authority is responsible for its final disposal—one-half of the tax.

(3) Lighting Tax—

(a) Where the railway administration does not take power from the local authority for lighting its premises and where the roads leading to the railway station are not lit by the local authority—no tax;

(b) where the railway administration does not take power from the local authority for lighting its premises, but the roads leading to the railway station are lit by the local authority—half the tax;

(c) where the railway administration takes power from the local authority for lighting its premises—full tax in addition to the charges for energy consumed.

Compost manufacture.—Ninety-five municipal councils and 240 panchayats are now manufacturing compost manure. The target of compost manufacture for 1951-52 in this State is 232,000 tons. From the progress so far made, it is expected that the target will be exceeded.

Panchayat Boards.—Particulars regarding the half-grants drawn by the panchayats in the State for the five years

for the improvement of village communications in their areas for the years 1946-47 to 1950-51 are given below:

	In lakhs of rupees.			
1946-47	..	..	..	1.90
1947-48	..	..	..	2.02
1948-49	..	..	..	2.26
1949-50	..	..	..	2.99
1950-51	..	..	..	3.52

Grant is sanctioned to panchayats on the condition that they should meet one-half of the cost of work by way of cash out of their own funds or by contributions from the villagers in cash or labour. It will be seen from the above figures that there has been an increase in the amount of grant given to panchayats from year to year for this purpose.

One hundred and eighty-eight presidents of panchayat boards have been removed from office during the last five years against 255 presidents removed from office during the five years ending 1945. During the same period, there has been a reduction in the number of vice-presidents of panchayats removed from office and in the number of panchayats superseded from 23 and 117 to 11 and 114 respectively. On account of the intensive drive on the supervisory staff of panchayat boards, all the irregularities or defects noticed in the administration of panchayats are brought to light in time and they are therefore being effectively checked and averted by prompt action. Only in extreme cases of persistent defaults or wanton negligence one of the extreme remedies, viz., supersession, is resorted to and that too after giving ample opportunities and scope to the panchayats concerned to improve or rectify the defects, if possible.

Training of Executive Officers

The Government have approved the scheme to train Executive Officers of panchayats in registration work under District Registrars before they are appointed as Registration Officers. The duration of the training will be for a period of three weeks.

It may be recalled that under the Madras Village Panchayats Act, 1950, the executive authority of any panchayat within whose jurisdiction the office of a Sub-Registrar is not situated, may be authorized to exercise the powers and discharge duties of a Sub-Registrar in respect of documents which are exempted from stamp duty and registration fees, and also in case of such documents which are classified by rules under the Panchayat Act, as documents of ephemeral nature, such as acknowledgment or receipt of money or movable, affidavits, agreement to pawn or pledge movables, leases and muchilikas for agricultural purposes for any period, bonds, mortgages and other like documents executed by or in favour of Co-operative Societies or Land Mortgage Banks, mortgage of a crop, promissory notes, security mortgages executed by officers of Government to secure due execution of office or for due accounting of money, surrender or transfer of leases.

I Expenditure incurred by District Boards in the maintenance of various services during the years

1945-46 to 1949-50.

	1945-46.	1946-47.	1947-48.	1948-49.	1949-50.
(IN LAKHS OF RUPEES.)					
1 Roads	161.73	* 88.51	93.19	118.43	135.06
2 Secondary schools	47.82	54.68	69.59	89.19	102.61
3 Elementary schools	223.93	257.04	299.92	399.58	346.82
4 Medical institutions	29.69	31.47	36.30	40.49	42.87
5 Preventive medicine	15.54	15.58	16.84	20.74	23.49
6 Water-supply and drainage	1.00	1.34	1.55	1.65	1.63

* Decrease due to transfer of roads to Highways Department.

II

Expenditure incurred by Municipal Councils on the maintenance of various services during the years

1945-46 to 1949-50.

	1945-46.	1946-47.	1947-48.	1948-49.	1949-50.
(IN LAKHS OF RUPEES.)					
1 Roads	34.12	* 31.58	34.23	40.98	45.42
2 Secondary schools	17.10	18.58	22.89	27.19	30.74
3 Elementary schools	40.17	42.36	48.20	54.27	58.06
4 Medical institutions	6.69	7.30	8.66	9.79	11.24
5 Preventive medicine	87.22	96.23	101.87	118.26	130.23
6 Water-supply and drainage	31.06	40.59	33.98	39.14	42.37

* Decrease due to transfer of certain roads to Highways Department.

III

Government grant given to District Boards during five years, 1945-46 to 1949-50, for maintenance of various services.

	1945-46.	1946-47.	1947-48.	1948-49.	1949-50.
(IN LAKHS OF RUPEES.)					
1 Elementary schools	127.11	140.17	134.61	171.86	170.02
2 Secondary schools	6.07	6.80	8.56	12.12	22.74
3 Medical relief	1.43	2.07	1.41	2.38	2.68
4 Preventive medicines	0.30	0.12	0.33	0.56	0.45
5 Water-supply and drainage	..	..	..	..	..
6 Roads	* 52.12	* 23.72	* 20.77	* 31.78	70.76

* Includes grants for capital works.

IV

Government grants given to Municipal Councils during five years, 1945-46 to 1949-50, for maintenance of various services.

	1945-46.	1946-47.	1947-48.	1948-49.	1949-50.
(IN LAKHS OF RUPEES.)					
1 Elementary schools	14.92	15.67	18.89	18.37	19.38
2 Secondary schools	1.85	1.85	2.30	3.39	6.68
3 Medical relief	0.23	0.15	0.32	0.24	0.47
4 Preventive medicine	1.20	1.13	1.30	1.20	1.41
5 Water-supply and drainage	1.74	1.00	1.27	2.95	2.14
6 Roads	* 3.21	* 3.72	* 1.28	* 3.56	* 5.07

* Includes grants for capital works.

Salient Features of Welfare Work

A brief note on the salient features of the activities of the Rural Welfare Department in the areas selected for rural welfare work during June 1951, is given below :—

South Arcot District.—An adult education school was started at Kamatchipettai during the month. A spinning course for women was conducted for 15 days. Training was given in ginning, carding and slivering. Several lectures on primary knowledge on the economy of Khadi were given to the pupils. At Paithandurai village, a week-end camp was conducted and it was largely attended. Prizes in Khadi cloth were awarded to the teachers of the four best adult education centres.

Bellary District.—During the month, 23 sanitary drives were conducted; 50 Grama Sanghams were formed; 16 compost pits were constructed and 20 charka demonstrations were held. Tools costing about Rs. 2,012 were distributed free of cost to 58 artisans.

Cuddapah District.—Forty-five sanitation drives were conducted; 33 cess pools were got constructed; 150 manure heaps were properly preserved; 65 compost pits were dug and 38 charkas were introduced. Spinning and carding demonstrations were held. A quantity of 4,173 hanks of yarn was woven. Night schools were started at Madur and Lingapuram. Slates and charts were supplied to these schools. Propaganda on Grow More Food and on bunding to prevent soil erosion was carried on.

Nine road works and nine well works were under execution and an expenditure of Rs. 5,210 was incurred during June 1951. Harijan Day was observed. Aims and objects of the Rural Welfare Department were fully explained to the villagers.

Tiruchirappalli District.—Sixty-nine hamlets and 25 cherries were visited during the month; 25 soak pits were constructed and 15 pits were cleaned; 30 common compost pits were opened and 22 pits were rectified; 50 Harijans were given baths in the newly constructed Harijan bath room at Paramathi; 35 hamlets and 15 cherries were cleaned. Seven mass sanitation drives were conducted; 36 dirty pits were filled up and 36 rubbish heaps were removed to the common compost pits. Spinning was taught to the pupils of the Harijan Schools at Perur and Tholayanatham.

At Arumbaroor one middle school was opened during the month. Village libraries were opened in eight villages. Twenty-five charkas and 27 thaklis were distributed to the spinners. Harijan Day was celebrated in a fitting manner.

Tanjore District.—Fifty-eight manure pits were rectified; 25 compost pits were formed; 30 cherries were cleaned; 28 insanitary pits were filled up and 29 heaps of manure were removed outside the dwelling houses during the month.

Anantapur District.—A rural workers' training camp was conducted at Gollapalli from 7th to 18th June 1951 for 24 people coming from 18 different villages in the three selected firkas, and proper training in all items of constructing work such as compost making, village sanitation, Khadi, tree planting, etc., was imparted. The villagers have contributed about Rs. 600 in the form of cash and kind for this camp. Competitions in various sports,

games, spinning and written tests were conducted and prizes awarded for the trainees. General certificates were awarded for all the 24 trainees. These 24 Grama Sevaks have formed themselves into an association called 'Grama Sevak Sangham' and resolved to meet in some place or the other at least once in two months and carry on the rural reconstruction work. On the whole, they have promised to plant and protect about 500 trees, dig 100 compost pits and introduce 40 charkas before the end of December 1951.

Mass sanitation drives and compost making demonstrations were conducted by the trainees themselves at Gollapalli, Kondampalli and Herasamudram. Twelve new compost pits were dug and some were partially filled up. Seeds of various varieties have been procured and nurseries raised for the successful celebration of the 'Vanamahotsavam' campaign during the month of July 1951. Nurseries have been raised in six villages.

Chittoor District.—During June two mass and 42 individual sanitation drives were conducted. Two spinning demonstrations were held; 28 insanitary pits were filled up. Three Co-operative Societies were formed.

Nellore District.—The Grama Sevaks handled 41 adult education classes, conducted 120 sanitation drives and 136 spinning demonstrations. They covered with earth 59 manure heaps and 46 sullage pits and treated 31 first aid cases. The Grama Sevaks were able to raise about 6,000 seedlings in connection with 'Vanamahotsavam' festival. Much propaganda on self-sufficiency and self-reliance was made to the villagers.

North Arcot District.—A short camp under Gandhian constructive programme was inaugurated by the Hon'ble Minister of Rural Welfare on 17th June 1951 at Periakalambadi in Tirunjavuram firka. The camp was conducted for one week from 17th June to 24th June 1951 when 32 villagers from different villages of the Rural Welfare area underwent training. Soap making, chalk making, construction of compost manure pits and trench latrines, spinning, etc., were taught to the trainees in the camp.

The foundation stone for the construction of a park at Kalasapakkam was laid by the Hon'ble Minister for Rural Welfare, Madras, on 16th June 1951. The Hon'ble Minister opened the school building at Selapandal on the same day. The reading room and the radio room constructed by the villagers of Veeralur were opened by the Hon'ble Minister on 17th June 1951.

A Grama Sevak Sangham was started at Boothamangalam village. A *thondi* manufacturing society has been started to Kappalur village in Kalasapakkam firka.

Tirunelveli District.—During the month, 68 manure pits were dug; 152 charkas were sold and a quantity of 42,332 hanks of yarn was spun.

South Kanara District.—In Kumbla firka, a cottage industries co-operative federation was organized. In Mulki firka, 22 water closets were distributed. Two model farms were started. Two acres of waste lands were brought under cultivation.

Krishna District.—Two middle schools in Chenubanda and Kambhampadu village, were started during June 1951.

A Place of Honour

The thirtieth of every month in the year is a red letter day in the history of Harijan uplift, a pioneering work inaugurated by the Father of the Nation. This day is observed as Harijan Day throughout the State. It is obvious that the age-long disabilities and the time-honoured prejudices cannot be removed, as though by a magic wand, all on a sudden by Governmental action alone. All the same, no stone has been left unturned by the Government, to place the Harijans on an equal and honourable footing with other communities, living as free citizens in the State.

Educational Concessions.—It has been generally said that Harijans as a whole have not progressed much in the field of education. Alive to the fact that education is the *sine qua non* for the social and economic advancement of any community, the Government have granted various concessions in the matter of the education of Harijan youths. One such concession that Government have made is the provision of rupees one lakh in the current year's budget for increasing the rates of non-residential scholarships, awarded by the Department of Harijan Welfare, in order to meet the increased cost of books, special fees, etc. It is hoped that this gesture would give a fillip to the Harijan youths to take advantage of the scholarships.

The Government have gone another step forward in this direction. They are considering a proposal to exempt the Harijan pupils from the payment of special fees to educational institutions, as it has been found by experience that Harijan pupils find it extremely difficult, if not impossible, to pay the special fees in advance. Since it has been found that the present accommodation in the Government Nandanar School at Chidambaram is inadequate, the Government have sanctioned during the current year rupees one lakh for constructing a building for the school.

Building grants, involving a sum of Rs. 81,775, have also been sanctioned to certain subsidised hostels. The Government are considering a proposal to supplement the teachers' stipends, granted by the Education Department to Harijan pupils, as it has been found that Harijan pupils find it difficult to maintain themselves in the hostels with the present stipends from the Education Department. A flat rate of Rs. 5 per mensem has been recommended as supplementary grant by the Harijan Welfare Department. (The Education Department grants Rs. 12 and Rs. 18 per mensem for Higher Elementary Grade and Secondary Grade teachers respectively.)

Hostel Facilities.—It was found that difficulty is felt in accommodating the Harijan students in the present insufficient number of buildings in the City; Government have therefore approved a proposal for starting a Government hostel at Madras, to accommodate 100 Harijan students, studying in the various colleges in the City. The question of opening the hostel will be decided shortly. Meanwhile, till such a hostel is opened, the Harijan Welfare Department have subsidised 430 hostels in 1950-51, for maintaining 11,200 boarders. These subsidies have cost the Government a sum of Rs. 16,57,830. The Government have provided during the current year a sum of Rs. 21,06,330 for this purpose. Besides subsidising hostels

where Harijan pupils stay, the Harijan Welfare Department are at present running 20 hostels directly in the various districts.

Audio-Visual Education.—With a view to imparting education through entertainment, the Government have sanctioned the introduction of audio-visual education in all the five Harijan schools in the City of Madras. Suitable educational films and other films of general interest to pupils are exhibited.

Housing.—In the present race for housing accommodation among all communities in the State, the Harijans have found themselves completely helpless. The result is that most of these poor Harijan families have been forced to settle on any vacant land found in and around the City. It has been a problem to ask these poor and helpless Harijans to vacate their random settlements, for the simple reason that alternative sites cannot be easily suggested. An attempt has, however, been made to make a beginning to end this vexed problem.

To start with, the Harijan Welfare Department of the Government of Madras have agreed to the transfer of land, measuring 9 cawnies, 9 grounds, 1,949 square feet in R.S. No. 3838-1 of Tondiarpet, for housing the Harijan families who have now pitched their shacks on the fine fore-shore of the Marina known as "Kanniappa Nagar."

Boarding Concessions to Harijans

The Government have directed that persons belonging to Scheduled Castes and other communities, eligible for boarding grants from the Harijan Welfare Department, while studying in the secondary school, should have the benefit of the grant for the second year in the same class, subject to the condition that this concession is given only twice during the course, i.e., once between Forms I to III, and once in Forms IV and VI.

It has also been ordered that students belonging to the communities referred to above studying in engineering colleges, should be allowed the concession for one failure and those studying in medical colleges for two failures during the period of the entire course. These concessions will also be given to students belonging to the Toda community. The Government have recently extended the concession to students belonging to Yenadi, Korava and Sugali communities for a period of three years from 1951-52.

It may be recalled that the Government had ordered in 1948 that the pupils belonging to the Scheduled Castes and other backward communities should have the benefit of the boarding grants for two years in the same class, and that the concession will be valid for a period of ten years from 1948-49.

Ministers Visit Chinnachettulotti Village

On their way to Rajapalayam from Madurai, Sri Jagjiwan Ram, Minister for Labour, Government of India, and Sri B. Parameswaran, Minister for Rural Development, Government of Madras, paid a visit to Chinnachettulotti village included in the Rural Development Area near the Ramanathapuram border. Sri V. Achuthan Nair, Rural Welfare Officer, took the Hon'ble Ministers round and explained in detail the programmes launched in the Firka area.

The distinguished visitors were delighted to see the various works as school premises, wells, baths, approach roads, compost pits, tree plantation and other items accomplished by the Harijans, who are trying to meet their own requirements without depending much on Government aid. The building of the school cost them about Rs. 4,500, while Government had contributed only Rs. 500 towards construction costs.

The Hon'ble Ministers expressed their pleasure at the clean and sanitary surrounding and the neat appearance of the people. They spoke a few words in appreciation of the good work done by the villagers and stressed the need for unity and united effort.

Scheduled Castes and Tribes

The Government of India have recently published the Constitution Scheduled Tribes Order, 1950, and the Constitution Scheduled Castes Order, 1950, issued by the President of the Indian Union, in which certain communities eligible for educational concessions and financial assistance from the Harijan Welfare Department of the Government of Madras are not mentioned. These communities, viz., Badagas, Irula, Kani or Kannians, Malayalee or Malaiyalee, Marati, Padanna, Yenadi and Harijan converts, who have been hitherto enjoying the educational concessions and financial assistance granted by the Government of Madras, will continue to enjoy the same.

Backward Community Hostels

The Government have issued orders for the early formation of the Managing Committees for the Backward Classes hostels, subsidized by the Government. The strength of the Managing Committee has been fixed at six. The term of office of the members will be two years. The Managing Committees will also function as selection committees for admission of boarders into the hostels.

Welfare Work by Non-official Agencies

The Government have selected Gandhi Gram, Ambathurai, Madurai District, Gandhi Ashram, Keelamoongiladi, South Arcot District, Komaravolu Ashramam, Komaravolu, Krishna District, Grama Seva Mandiram, Timmapuram, Anantapur District, under the scheme of entrusting non-official agencies with Rural Development work, in selected areas.

Non-residential Scholarships

The Government have empowered the Collectors of the districts concerned except in the case of Madras City, to sanction and renew non-residential scholarships to pupils belonging to the eligible communities reading in Class IV to Form VI of secondary schools. The Director of Harijan Welfare will continue to award scholarships to the pupils from the Madras City.

Exemption to Harijan Co-operators

The period of exemption from the payment of fees payable for the registration of documents and obtaining of encumbrance certificates by the Harijan members of the co-operative societies has been extended for a period of two years with effect from 1st April 1951.

Government have also extended the continuance of exemption granted to co-operative societies, with a majority of Harijan members, from the payment of the registration fees and encumbrance certificates up to 31st March 1953.

Advance Compensation Deposited with Estates Abolition Tribunal

On behalf of the Government, the Director of Settlements has deposited with the Estates Abolition Tribunal, Vizianagaram, the following further amounts in March 1951 towards advance compensation under Section 54-A for certain zamin and under-tenure estates, in the district noted below, after deducting one-half of the amounts owing to the Government towards peshkash, land-cess, etc., as noted against each:—

District.	Date of deposit.	Half of total compensation.	One-half of Government dues deducted.	Advance compensation deposited.
Nellore	28th March 1951	10,986	..	10,986
Krishna	29th March 1951	37,297	5,060	32,237
West Godavari	30th March 1951	15,000	1,797	13,203

A list of zamin and under-tenure estates in respect of which these amounts have been deposited and also lists of under-tenure estates for which the advance compensation under Section 54-A has worked out to a nil figure either for the reason that the landholders have claimed all the cultivable lands in them as their "private" or "Home Farm" lands, or the statutory deductions to be made in the case of under-tenure estates in calculating the basic annual sum have exceeded the amount from which the deductions have to be made, are published on page 670 of Part II of the *Fort St. George Gazette*, dated 8th May 1951.

Settlement of Strikes and Lockouts

The Commissioner of Labour is the head of the Factories and Labour Departments. He is the ex-officio Chief Inspector of Factories, Commissioner for Workmen's Compensation, Registrar of Trade Unions and Certifying Authority under the Industrial Employment (Standing Orders) Act. On the Factories side, he is assisted by two Deputy Chief Inspectors of Factories, eight Regional Inspectors, fourteen Inspectors and one Inspectress of Factories. In addition, there is a non-technical Inspectrate consisting of 199 Assistant Inspectors of Labour. On the Labour side, he is assisted by two Assistant Commissioners of Labour, one Special Assistant, 14 Labour Officers and one Woman Labour Welfare Officer.

Factories.—With the coming into force of the Factories Act, 1948, on 1st April 1949, the work of factory inspectorate has increased considerably. The Factories Act, 1948, introduced several new provisions, the most significant being the licensing of factories. Licensing has secured centralised control over the location, construction and functioning of factories. The Act applies to all premises where a manufacturing process is carried on with the aid of power employing ten or more persons, and to premises where a manufacturing process is carried on without the aid of power employing 20 or more persons. With a view to regulate the conditions of work in smaller units, the Government have extended the provisions of the Factories Act, 1948, to premises where a manufacturing process is carried on without the aid of power, employing less than 20 but more than ten persons.

At the end of June this year, there were 11,714 factories employing on an average about four lakhs of workers daily. For the effective administration of the Act, the Factories Department was reorganized in April this year and the State was divided into nine factory regions, eight regions in charge of Regional Inspectors and one region under the direct charge of the Deputy Chief Inspectors of Factories. Besides administration of the Factories Act, the Factory Inspectorate is also concerned with the administration of the Payment of Wages Act and the Madras Shops and Establishments Act.

By a special notification, the Government have extended the provisions of the Payment of Wages Act, 1936, to the non-power factories employing ten to nineteen persons.

Labour.—The declared policy of Government is that "internal settlement is preferable to external settlement of trade disputes." The Labour Officers and Assistant Commissioners of Labour help the Commissioner in settling industrial disputes by conciliation. Detailed instructions have been issued to Labour Officers in dealing with trade disputes. They have been asked to remain in closest touch with employers and labour and to know and forestall occasions for disputes. To the extent they know men and matter fully, they will have the confidence of both parties on one hand and the ability to find acceptable solutions on the other. If one or both of the parties are unreasonable, the Labour Officers should precisely examine their claims and record what in his view is correct. It is

not enough to record that one side is unreasonable but to specify how and to what extent, so that the Government may be able to decide if the case should be referred to adjudication or left to find its own solution. If settlement by mediation is not possible, then the dispute is referred for adjudication.

Conciliation.—The number of strikes and lockouts settled by conciliation in the first half of the year 1951 was 49 and the number referred to adjudication was 54. The corresponding figures for the first half of 1950 is not readily available. The total figures for the year 1950 are 94 and 71 respectively.

Strikes and lockouts.—The number of strikes and lockouts that occurred in the first half of 1951 was 92. The number of mandays lost was 146,817. The figures for the corresponding period in 1950 is not readily available. The total number of strikes and lockouts for 1950 was 123 and the number of mandays lost was 339,296.

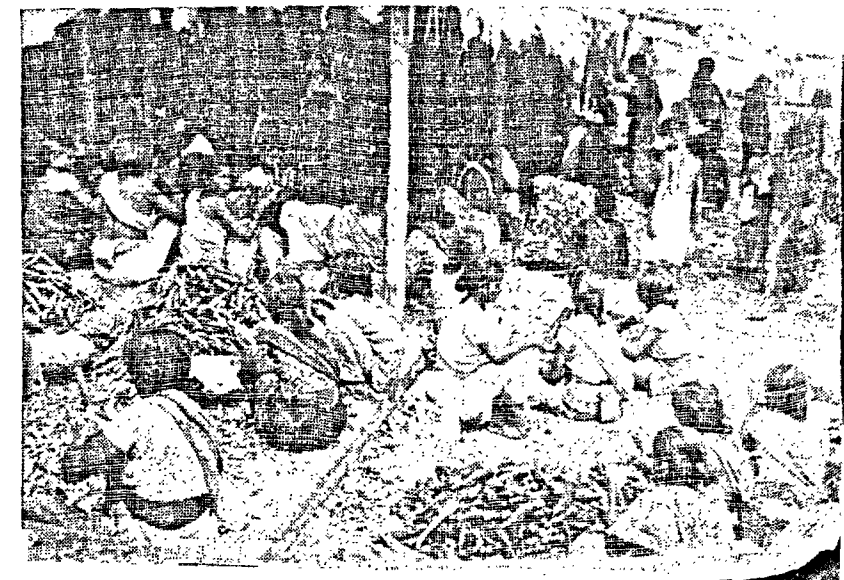
Admission to Polytechnics

The Government have issued instructions in regard to selection of candidates for admission to the Polytechnics in this State.

Fifteen per cent of the seats available in the Polytechnics will be reserved for candidates belonging to the Scheduled Castes and Scheduled Tribes.

Not less than 25 per cent of the seats will be reserved for socially and educationally backward classes. Converts to Christianity from the Scheduled Castes and Scheduled Tribes will also be included in the category of socially and educationally backward classes. If qualified candidates from the classes specified above are not forthcoming up to the limits fixed for them, the consequential vacancies will be filled by candidates belonging to other classes. The remaining seats will be available for candidates belonging to all classes.

SUBSIDIARY FOOD: Women peel tapioca, an important subsidiary food, at a sago manufacturing concern in Salem



Cotton, Yarn and Cloth

Uptodate 989 licences to deal in cotton have been issued for the cotton year 1950-51 (ending 31st August 1951) against 972 licences issued for 1949-50. With the object of ensuring that the maximum quantity of the current crop of Indian cotton is brought to the market and made available for mill consumption, the Textile Commissioner, Bombay, has, by his notification dated 21st June 1951, directed that all kapas of Western variety of cotton should be ginned before 31st July 1951 and that all kapas of Cambodia and Karunganni varieties in Madras State should be ginned before 31st August 1951. To enforce this notification effectively the Director of Controlled Commodities has called for a declaration of stocks of these kapas before 12th July 1951 and the Collectors have been instructed to watch closely the ginning of these kapas within the prescribed dates.

The next cotton year (1951-52) begins from 1st September 1951. The ceiling prices for the different varieties of cotton for the new year have not yet been notified by the Textile Commissioner, Bombay. There has been an agitation from the growers for higher prices. There have also been representations from cotton growers and dealers that the nominee system is adversely affecting their interests.

The Cotton Advisory Board is meeting at Bombay on 31st July 1951 and the Director of Controlled Commodities has been invited to attend the meeting. It is likely that the question of prices for the next cotton year and the representations regarding the nominee scheme will be considered by the Cotton Advisory Board on 31st July 1951 along with the other questions relating to cotton in general.

Cotton Yarn

The following is briefly the present yarn supply position. For June 1951 the mills offered 18,210½ bales of yarn as against 18,336½ bales offered in May 1951. This includes 2,725½ bales of 60s yarn as against 1,538 bales offered by mills in this count for May 1951. As the mills have offered more quantities of 60s, the demand for this count has fallen and the Textile Commissioner, Bombay, has been requested to release yarn of lower counts upto 40s in place of 60s.

With effect from 1st July 1951, the Textile Commissioner, Bombay, has issued revised instructions for distribution of yarn based on their actual packed production, instead of anticipated production. According to this, the mills are expected to make their offers against the Textile Commissioner's running release orders in two instalments, i.e., the first offer on the 16th of the month, in respect of their actual production during 1st to 15th of the month and the second offer in respect of their actual productions packed from the 16th to the end of the month, on the 1st of the following month.

With a view to ensure the lifting of the bales within the prescribed time and regular flow of supplies to consumers, the mills have been linked with State nominees, on a semi-permanent basis for a period of three months. The Textile Commissioner, Bombay, has promised to release 2,500 bales as a special allotment to Madras, over and above its share, viz., 15,302 in the available supplies for July 1951 also.

Cloth Supply Position

From September 1950 onwards up to April 1951 there was acute scarcity of mill cloth. This was mainly due to the vigorous export drive launched by the Government of India, and also to short production due to the strike by the mills and the commission agents in Bombay surplus area. From May 1951 onwards this State is getting an increased allotment, the allotment for July 1951 being the heaviest. Our State buyers have procured 95 per cent of the total allocations to this State for June 1951. The July 1951 purchases would have commenced only on 11th July 1951. The Assistant Textile Commissioner, Madras, at Bombay, who represents this State at Bombay in regard to textile matters, is arranging to lift as much of the quota due to the State as possible, to relieve the acute scarcity of mill cloth now prevailing in the State. The buyers of this State are men experienced in the trade for a long time and they know the varieties and qualities of cloth to be purchased to suit the needs of the State in general and the districts served by them in particular.

The cloth supply position is bound to be quite satisfactory by the end of August 1951. If this State continues to get heavy allotments in the next few months also, as in May to July 1951, then steps may have to be taken to enlarge the procuring agency and also to distribute the cloth on a broader basis, i.e., among a larger number of licensees. Such proposals are already under consideration.

Want of Transport Facilities

The main difficulty till recently was want of quick transport facilities from the procuring centre to the several destinations in this State. Due to large-scale movement of foodgrains which has been given the topmost priority in movement, there has been considerable delay in movement of cloth from Bombay surplus area to this State, but the movement position has improved considerably.

For the half-year ending 31st December 1951, this State has indented for a total quantity of 157,646 bales. This includes the production of the composite mills in this State. In indenting for the quantity, the Textile Commissioner, Bombay has been specifically asked to allot only coloured sarees of 6 to 9 yards in length and dhoties of 7 and 8 yards in length and above 45" and 48" in width respectively.

Issue of Khadi Licences

The Government have sanctioned the issue of a limited number of licences under the Madras Khadi Development Order, 1949, to individuals or institutions for the production and weaving of Khadi in the areas where neither the All India Spinners' Association nor the Government are carrying on the Khadi work.

Representations have recently been made by Khadi producers and private organisations to the Government that a large number of spinners and weavers have been thrown out of employment since 1947 by the introduction of the Khadi Development Order and the Government were requested to allow private individuals to produce Khadi. As spurious Khadi is still produced notwithstanding the Madras Khadi Development Order, 1949, the Government could not accede to the request.

Improvement of Cattle

By Sri A. B. SHETTY, Minister for Agriculture

The improvement of our draught and milch cattle is vitally necessary to raise the efficiency of our agricultural operations and add to our food resources. The three main measures required for this purpose are the use of approved types of bulls, the provision of adequate quantities of fodder and concentrated feeds and the extension of veterinary facilities for the control and eradication of cattle diseases. We have in this State about 1,700 stud bulls distributed in different centres under the Premium Scheme, the Free Livestock Distribution Scheme and other provisions. The improvement effected through the present system of bull supply and distribution is limited to small areas and the upgrading work is to a great extent nullified by scrub bulls which do promiscuous breeding in the same areas.

The Key Village Scheme is now recommended as the best scheme for cattle improvement. A Village Livestock Improvement Scheme based on the Key Village System has been taken up in four of our Rural Development Centres in Guntur, Bellary, Tanjore and Coimbatore Districts. The adoption of the artificial insemination method can, to some extent, solve the difficulty caused by the shortage of good breeding stock. Artificial insemination work is now being done in the Veterinary Hospitals in Madras, Coimbatore and Guntur and it is being extended to Ootacamund and Anamalais.

Gosamvardhan Scheme

It is gratifying to find that the Ministry for Food and Agriculture at the Centre has, after all, recognised the need for including the improvement of livestock as an essential item in the Grow More Food campaign and they are setting apart this year a sum of Rs. 20 lakhs for this purpose. They have formulated a ten-year plan of cattle improvement work, the chief features of which are—

- (1) Segregation of unfit stock and preventing them from reproducing their kind.
- (2) Adequate and balanced feeding.
- (3) Provision of stud bulls.
- (4) Effective prevention as well as control of diseases which periodically decimate and debilitate our cattle.

Key Village Scheme

This plan for cattle development envisages the establishment of 600 Key Villages with 540 bull-rearing farms and 150 artificial insemination centres. The Key Village is a compact area of one village or a group of contiguous villages containing a total population of 500 cows. An annual production of about 60,000 bulls of high quality is expected under this scheme. Three units of Key Villages have just been started by the I.C.A.R. in Dolhi, U.P. and Travancore-Cochin as pilot projects. Key Farm Schemes have been formulated to supplement the Key Village Scheme especially in the earlier areas. Centres will be set up around existing cattle-breeding stations with a programme of work essentially the same as that of Key Village Schemes. The use of the staff and facilities available at the farms will economise expenditure.

These centres have to contain 1,000 to 2,000 cows and buffaloes above three years of age and they will be served by bulls produced from the farm either naturally or by artificial insemination. The establishment of an artificial insemination centre in each farm will be an essential part of the scheme. The eradication of rinderpest disease which takes a heavy toll in our country is proposed to be started in the third year of the plan after conducting preliminary investigation and training the field staff for mass vaccination work.

The Madras Government are proposing to start Key Farm Schemes in seven of our cattle-breeding stations this year and the Central Government have agreed to give two-thirds of the cost of this scheme for this year as a special case. The Director of Animal Husbandry in Madras, who has been responsible to a great extent in evolving lapinised (rabbit) vaccine for immunising cattle against rinderpest when he was at the Mukteswar Research Institute, will be very helpful to us in undertaking this scheme of eradicating rinderpest from this State. A total of 122 minor dispensaries have been started since last year in several centres in every one of the districts in our State with a view to extend the veterinary facilities for disease control.

Deep Sea Fishing Operations

Deep sea fishing operations conducted during the fortnight ending 30th June 1951 yielded 7,634 lb. of fish. The total quantity of 25 lakhs of fingerlings, chanoz, mullets and etroplus was collected and stocked both in the departmental and private waters.

Pudukkottai Municipality tanks have taken up 18,070 labco variety of fish for stocking purposes. In respect of the Mettur Scheme, a total quantity of 131,551 lb. of fish was caught, realising a sum of Rs. 46,284 by way of sale-proceeds.

By way of revenue the Fisheries Department has collected Rs. 3,393 from the fishing operations conducted in the departmental waters. The transport van of the Fisheries Department has transported 40,000 lb. of fish and realised Rs. 1,075 as hire charges. The other van at Ellore transported 17,350 lb. of fish, realising a sum of Rs. 214-4-0.

Cotton Scheme in Kurnool District

The Government have sanctioned a scheme for multiplying 881 F. Cotton seeds in an area of 600 acres during 1951-52, in order to enable the Department of Agriculture to run large seed farms of this strain in future years.

The area under 'inner' seed farm during 1951-52 will be 200 acres, while the 'outer' seed farm will be 400 acres. The estimated production of seeds from both 'inner and outer' seed farms is 600 bags of 130 lb. each, which would serve to raise a seed farm of nearly 6,000 acres in 1952-53. The seed farms will be located in Panyam area in Kurnool District.

Care of Cattle and Poultry

Following are features of interest in the working of the Animal Husbandry Department:

Veterinary Education.—Revised instructions governing admissions to the Madras Veterinary College and the Veterinary and Livestock Inspectors' Course have been issued. The selection of candidates for admission to the two courses which has been hitherto on communal basis has been given up. Provision has, however, been made in the revised instructions for reservation of seats for Scheduled Classes and tribes, and to communities which are economically and educationally backward.

Veterinary Hospitals.—A new Veterinary Dispensary sanctioned for Guntur District was opened at Nidubrolu on 1st July 1951. This has brought the number of Veterinary Institutions in the State to 145.

Minor Veterinary Dispensaries.—Two touring billets have been converted into minor dispensaries during June 1951, one at Mangalagiri in Guntur District and the other at Usilampatti in Madurai District. The total number of minor Veterinary Dispensaries now functioning in the State is 122.

Cattle Disease.—It has been reported that rinderpest is prevalent in the Madras City and parts of Chingleput and South Arcot districts, and orders have been issued to enforce the provisions of the Madras Rinderpest Act in the affected areas to counteract the disease.

Veterinary Investigations.—During the months of May and June 1951, Brucellosis was investigated in nine villages of Madurai and Coimbatore districts and also at the District Livestock Farm, Malabar. In those villages where vaccinations had been conducted previously, the results were very good and people appreciated its usefulness. During the period 541 calves were vaccinated against the disease.

Veterinary Research.—The Veterinary Biological and Research Institute at Ranipet continued to supply sera and vaccine required for the State. Particulars of the various biological products and their quantities produced at the Institute and distributed during the months of May and June 1951 are as under:—

Name of the products.	Quantity manufactured.	Quantity despatched.
Anti-Rinderpest Serum.	379,160 doses.	337,330 doses.
Haemorrhagic Septicæmia Vaccine.	100,090 doses.	108,965 doses.
Black-quarter Vaccine.	94,980 doses.	144,920 doses.
Rinderpest Goat Virus.	204,400 C.C.	171,634 C.C.
Rinderpest Bull Virus.	4,825 C.C.	2,450 C.C.
Bovine Lymphangitis vaccine.	..	82 courses.
Fowl-pox vaccine ..	836 doses.	836 doses.
Sheep-pox vaccine ...	1,500 doses.	1,500 doses.

Besides the above, 48,280 doses of Ranikhet disease vaccine were manufactured and distributed within the State, and 500 doses outside the State.

Cattle Farm.—The Central Agricultural Farm at Pudukkottai, ordered to be transferred to the Animal Husbandry Department, was taken over in June 1951. The total number of livestock farms in the State is now eight.

Breeding Bulls.—The policy of the Government is to provide as many breeding bulls as possible for improving the cattle in the State and several schemes are being worked for this purpose. The number of breeding bulls under the various schemes in different parts of the State is 1,710. The number of services performed by them during May and June 1951 is 8,145.

Artificial Insemination.—There is a great paucity of good pedigree bulls in this State. As a means of overcoming this paucity, a scheme for artificial insemination of cattle is in force. The main centre of the scheme is in the Madras City. There are two sub-centres, one in Guntur and the other in Coimbatore. The scheme is in charge of a Special Officer stationed at Madras. The scheme has been in progress since 1948 and is gaining popularity day by day. It is found possible to fertilize ten times the number of cows by artificial insemination than by natural services, utilizing the same number of bulls. A motor van has been placed at the disposal of the Special Officer since November 1950 so as to carry the semen collected at the main centre to different parts of the City where cows are congregated for insemination purposes.

From April to November 1950 when no transport was provided the number of cows and buffaloes inseminated was only 509, and the figure rose up to 1,322 during the seven months subsequent to November 1950 when transport of semen was provided for. During the months of May and June 1951, about 750 animals have been inseminated by utilizing about 15 bulls which works out to a rate of 25 inseminations per month by each bull.

Cattle Fairs and Shows.—One of the important functions of the Department is to educate the masses regarding the proper breeding and upkeep of livestock. As a means of achieving this object, cattle fairs and cattle shows are held periodically in different places. During the months of May and June 1951, 31 cattle fairs and shows were held.

Poultry.—There is a Poultry Research Station at Teynampet, Madras, under the Poultry Development Officer, and three District Poultry Farms at Cannanore, Chittoor and Cuddapah in charge of Veterinary Assistant Surgeons.

The transfer of the central administration of District Poultry Farms, from the Poultry Development Officer to the District Veterinary Officers from 1st July 1951 has been ordered. Under the new arrangement, the District Veterinary Officers will be able to bestow constant attention and exercise close supervision over the day to day administration of the farms and keep a vigilant watch over their progress, while the Poultry Development Officer as an expert and specialist, will give necessary directions and instructions on the technical side, for the efficient functioning and development of the farms.

The electrification of the Poultry Research Station, Teynampet, and the construction of a pump house at the Station, at a cost of Rs. 12,700, have been sanctioned.

Community Radio Receivers

Twenty-three community radio receivers were installed recently by the State Broadcasting Department, bringing the total to 1,651. Out of these 23, eight sets were installed in rural welfare centres for which half the cost is borne by the Rural Welfare Department. Twenty-one sets installed in panchayat boards were manufactured by the State Broadcasting Department laboratories.

The work of assembling another batch of 500 special low cost community radio receivers for the villages in the State has been taken up and is in good progress. These sets are to be installed in about 500 villages and schools, from which applications and remittance of advance money have already been received. The sets are expected to be ready within the next few months.

Grants to Oriental Schools

Orders have been issued by the Government for the reorganization of the Oriental Schools, which are solely devoted to the study of Sanskrit, Tamil, Telugu or Arabic. Under the reorganized scheme, which will be given effect to from 1951-52, grants on the basis of two-thirds of the net cost of maintenance of the schools will be given to the managements. The status of the reorganized schools has been raised to that of Secondary Schools and the pupils studying in them will appear for the S.S.L.C. Public Examination, answering the same papers in English, Social Studies, and if the candidate chooses, Hindi, in addition to the papers in the Special Oriental Language.

Candidates, qualifying themselves by passing the examination, will be eligible for admission to the College course in the Oriental Languages and in the general colleges.

The present advanced Sanskrit schools, which provide for a four-year course after the elementary stage, are given three years' time to convert themselves into schools of either high school level or the middle school level.

E.S.L.C. Examination and Training Course

The Government had passed orders that the candidates who take up English as optional subject for E.S.L.C. Examination and happen to fail in that subject only, will be admitted to Elementary Grade Training course. This concession was made as a temporary measure during 1945-46. The Government have ordered that the concession may be retained on a permanent measure with effect from 1951-52.

Basic Training Schools

In accordance with the sanction accorded by the Government for the opening of new Government Basic Training Schools and conversion of Government Training Schools into Basic Training Schools during 1951-52, the Education Department has ordered a new school to be opened at Adivipalem, Krishna District. The aided Basic Training School at Ugre, South Kanara District, has been ordered to be taken over under Government management and three Government Training Schools have been converted into Basic Training Schools. Co-education has been introduced in the Government Training School for Men in Cuddalore and in Pentapadu.

Pandits and Munshis in Colleges designated Assistant Lecturers

The Government have directed that Pandits and Munshis, Grades I to III, working in Government Colleges, be designated as Assistant Lecturers in Languages, Grades I, II and III. They have also ordered that the Assistant Lecturers in Languages, Grade I, be allowed to draw the scale of pay of Rs. 150-5-200-10-250 plus Rs. 5 for L.Ts., similar to the scale of pay for Assistant Lecturers in Government colleges in other subjects.

The scale of pay of Assistant Lecturers in Languages, Grades II and III, will continue to be Rs. 80-5-120-10-170 and Rs. 70-5-130, respectively. These orders will take effect from August 4, 1951. This action has been taken by the Government, pending the issue of necessary amendments to the Special Rules for the Madras Educational Subordinate Service.

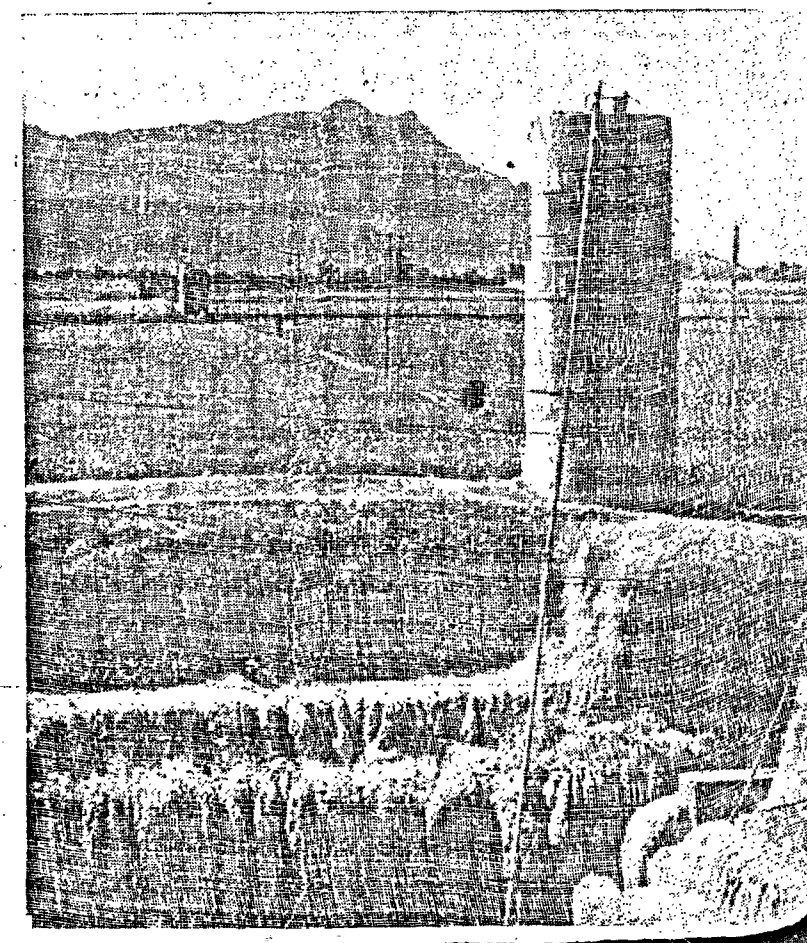
Gift of Hospital Furniture

The Government have thanked the Hospital Electrification Committee of Srivilliputhur for having made a gift of a septic furniture valued at Rs. 4,125 to the Government Hospital, Srivilliputhur.

Sales Tax on X-Ray Photos

The Government have passed orders that diagnostic X-ray photo will be assessed to Sales Tax, and that X-ray therapy and electric treatment where X-ray photo is taken in the course of treatment will be exempted from Sales Tax.

TOWER IRRIGATION: From deep wells, water is pumped into these huge towers, where it is readily available for irrigating the fields.



Corruption among Government Servants

During the month of January 1951, corruption among Government servants was brought to notice against 327 persons, including those against whom proceedings were pending at the end of the previous month. Of these, 23 persons were let off as charges against them were not proved. Corruption was successfully detected in the case of 23 persons and they were suitably punished. Of these, eight persons were awarded minor punishments. The names and designations of the 15 persons who were awarded severe punishments are as follows:—

(1) S. Karwar, Assistant Port Conservator-cum-Wharf Supervisor, Madras, (2) I. Bhatteswara Rao, Officiating Head Constable, (3) N. Gajapathi Rao, (4) Veeraraju and (5) Buda Beig, Police Constables, Krishna District, (6) Ghouse Hussain, Head Constable, Tirunelveli District, (7) Subbiah Pillai, Head Constable, Railway Police, Tiruchirappalli District (dismissed from service), (8) A. R. Subramania Aiyar, Sub-Registrar, Elavanasur, South Arcot District, (9) Kuppusamy Ayyar, Motor Vehicles Inspector, Ramanathapuram (compulsorily retired from service), (10) Muhammed Khasim, (11) Thangavelu, (12) Markandan, Police Constables, Tiruchirappalli District (removed from service), (13) T. Chelamiah, Acting Forest Guard, (14) M. Obulesu, Forest Watcher, (15) Shoik Mahaboob Ali, Temporary Prohibition Guard, Anantapur District (discharged from service).

Proceedings against 281 were pending at the end of the month.

Selecting Municipal Commissioners

The Government have constituted a Three-Man Committee, consisting of the Secretary to Government in the Local Administration Department, Secretary to Government in the Health Department, and Inspector of Municipal Councils and Local Boards, to select candidates for appointment as Third Grade Municipal Commissioners.

A notification calling for applications from persons possessing the prescribed qualifications, will be published in the *Fort St. George Gazette* shortly.

The agents for the sale of *Madras Information* and its language counterparts are not authorized to collect subscription and issue receipts. The Director of Information and Publicity will not take any responsibility for money which is not remitted directly to him and acknowledged.

Books:

APARTHEID

STRATEGY OF RACE DISCRIMINATION

The Publications Division, Ministry of Information and Broadcasting, Government of India, New Delhi.

Pages 40]

[Price, Annas Eight.

It is a commonplace that the South African problem is a dangerous issue which threatens world peace; to the average man, however, the evil implications of the *impasse* are not so apparent. This slim pamphlet gives an excellent account of the problem in restrained, readable style, which should cause even the most rabid Malanite to squirm uneasily.

The booklet details the chain of legislation from 1880 which seeks to curtail the rights of Indian residents in South Africa, restrict trade and labour, discriminate in education and social welfare benefits, deprive coloured people of franchise. The passing of time has only brought about fresh indignities like the Pegging Act of 1943 and the Ghetto Act of 1946.

India's complaints in the U.N. forum has spotlighted the problem; but South Africa, still recalcitrant, sneers at the "exaggerated emphasis" on the Declaration of Human Rights and "abstract and often impracticable principles and ideals." In a "sound realistic approach" the South Africans continue to enforce in stricter manner *apartheid*, the policy of racial discrimination in the social, economic, political and cultural fields. The fetish of colour is carried to ridiculous extents, reminiscent of the anti-Judaism of the Nazis. The white man's arrogance is reflected in a remark of Dr. Jansen, Minister of Native Affairs: "The Asiatics can live on the smell of a rag."

The eight-page photographic inset enhances the value of the pamphlet, which is an indispensable text for democrat and fascist.

— P.V.S.

SLOKA-BADDHA RAMAYANA

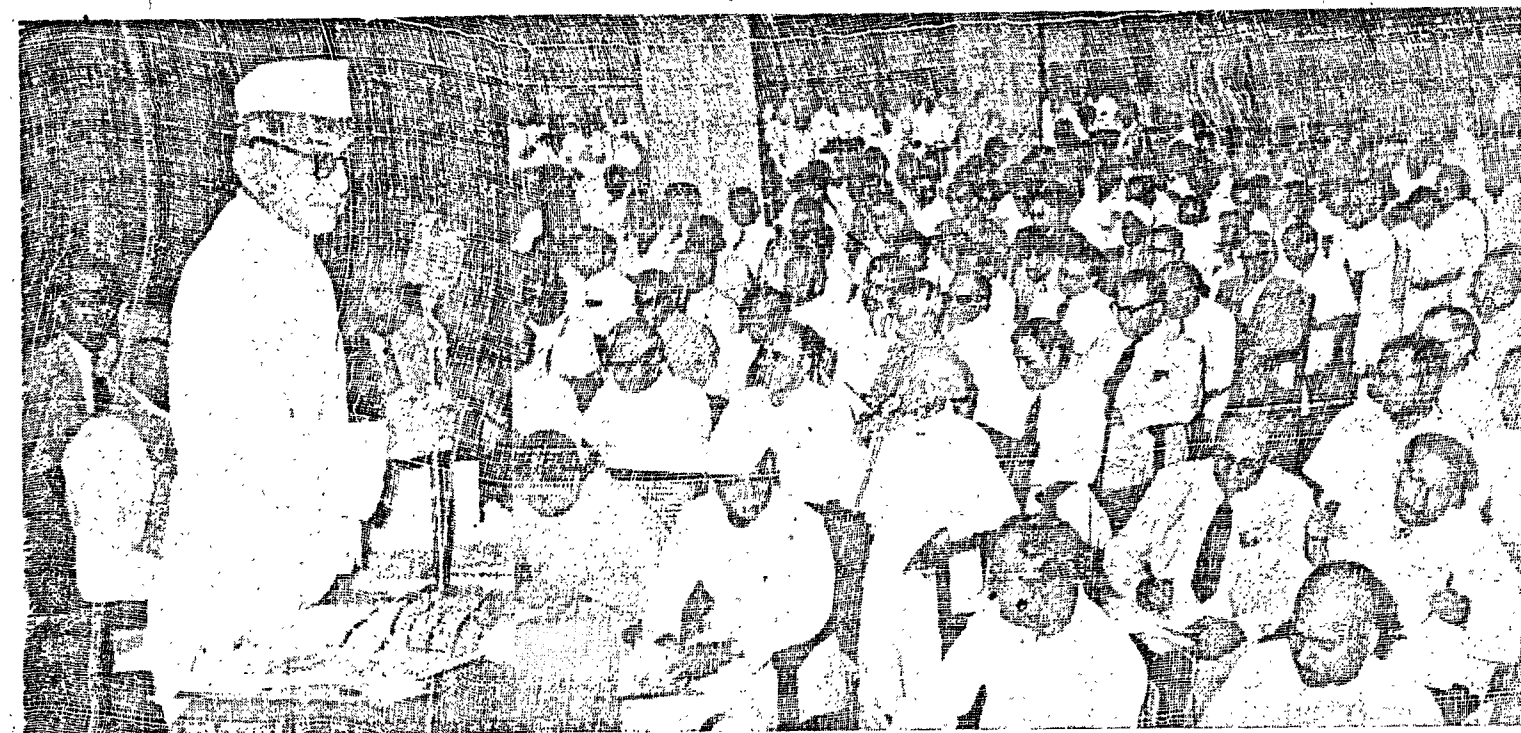
of Sri Madhava Swami (in MARATHI).

Edited by Sri P. D. JOSHI.

Tanjore Saraswati Mahal Series No. 30, Madras Government Oriental Series, Pages 178, Price Rs. 1-8-0.

PALM GUR

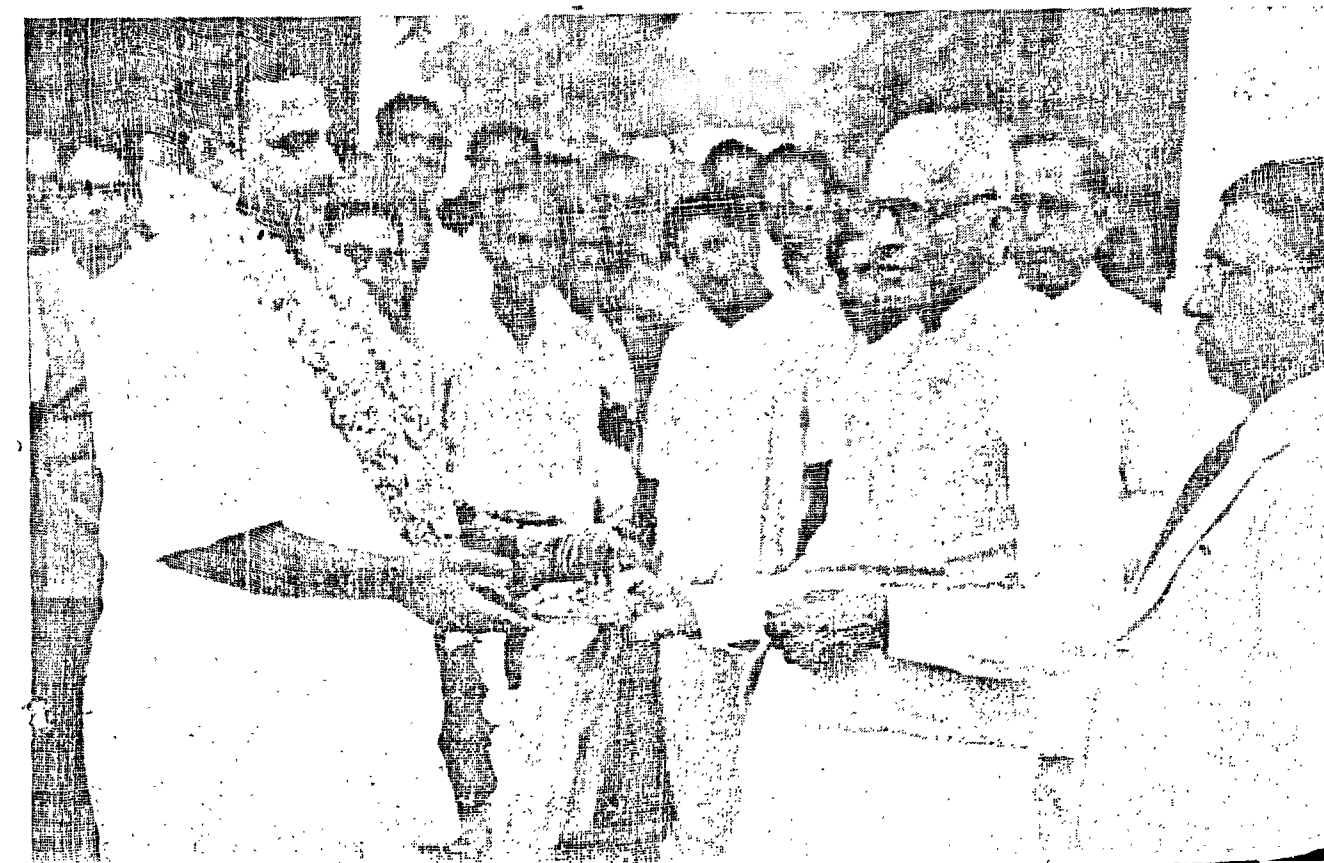
A booklet on Palm Gur can be had from the Secretary, All-India Village Industries Association, Maganvadi, Wardha, (M.P.), on payment of Re. 1 (Postage extra).

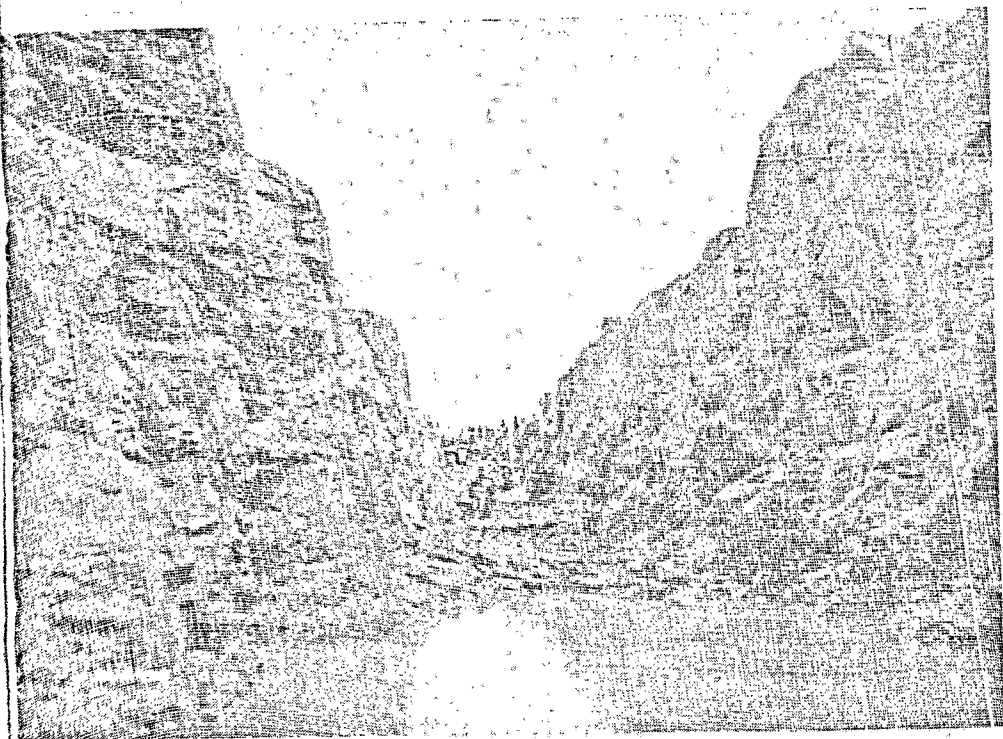
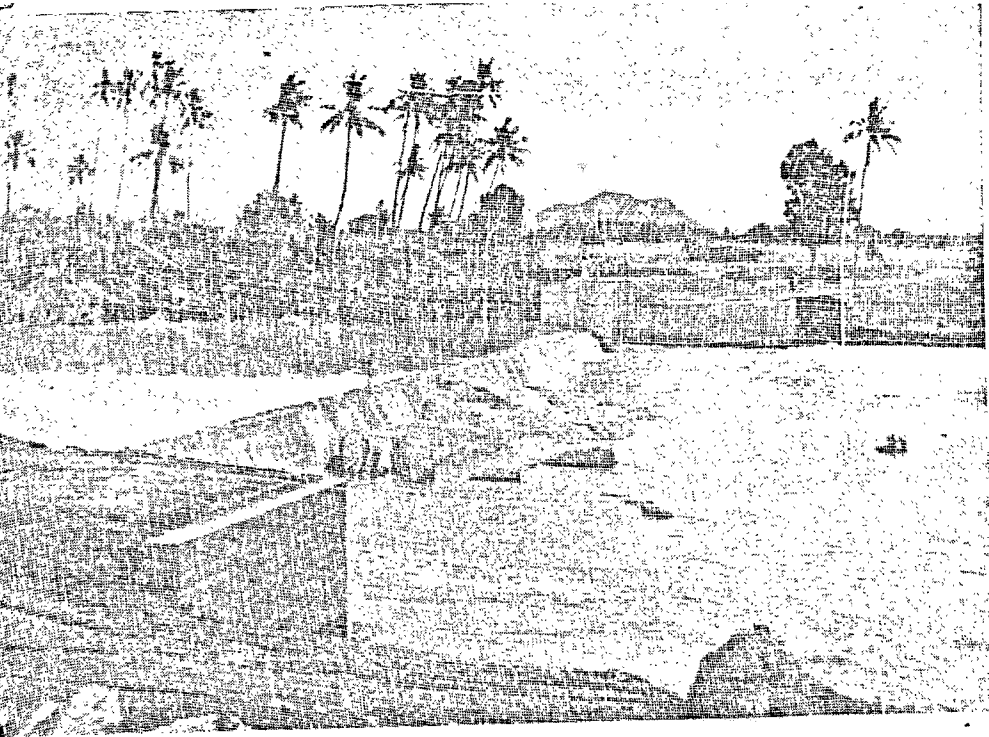


OF FOOD AND FARMERS

Above: Sri K. M. Munshi, Minister for Food, Government of India, addressing the gathering at the Agricultural College Day Celebrations in Coimbatore. The Union Food Minister expounded the secret of good agriculture in terms of the life cycle. He said: "The earth gives us food, we should return it in the form of dung, manure and similar soil food."

Below: Sri R. Govindarajulu Naidu, of Orakkadu Village, Ponneri Taluk (Chingleput District), who produced a crop of 8,071½ lb. of paddy per acre, receives the District and Taluk prizes from Sri A. B. Shetty, Minister for Agriculture. The seed used was Chingleput Sirunani (Co 19) Departmental strain; for one acre of crop 2 tons of compost, 100 lb. of ammonium sulphate, half a ton of cattle manure, 1,000 lb. of green-leaf manure and 2 bags of groundnut cake were used. Prizes were also distributed to the other winners in the recent crop yield competition at the special function held at the District Agricultural Office, Guindy.





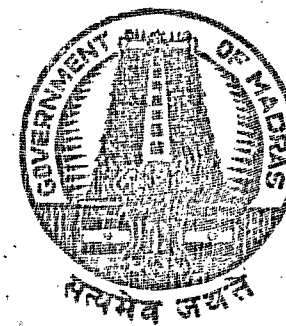
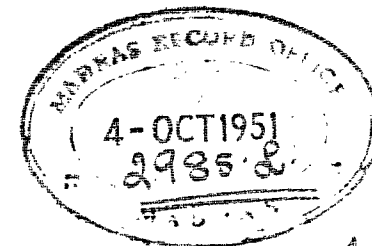
Registered No. M-4767.

IRRIGATION IN KRISHNAGIRI

One of the Irrigation Schemes in the Krishnagiri Taluk in Salem District is the construction of an anicut on the Markandanathi, and the excavation of a channel therefrom to feed the Badathalaw and two other tanks. The total expenditure approved on this project is Rs. 10,40,000.

Pictures show (top) the anicut, (centre) blasting of the rocks for the channel and (bottom) excavation work in progress.

MADRAS *Information*

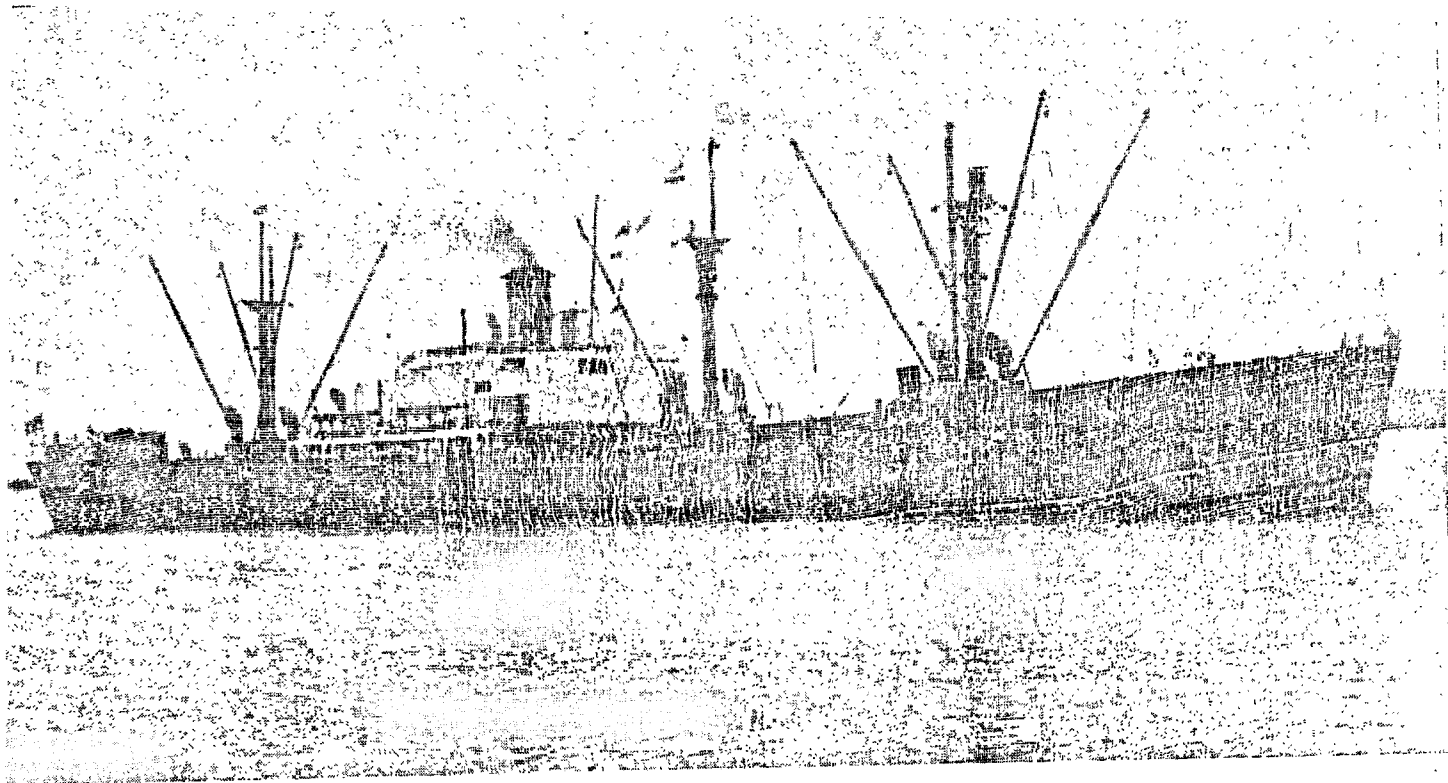


Gandhi Jayanti Number

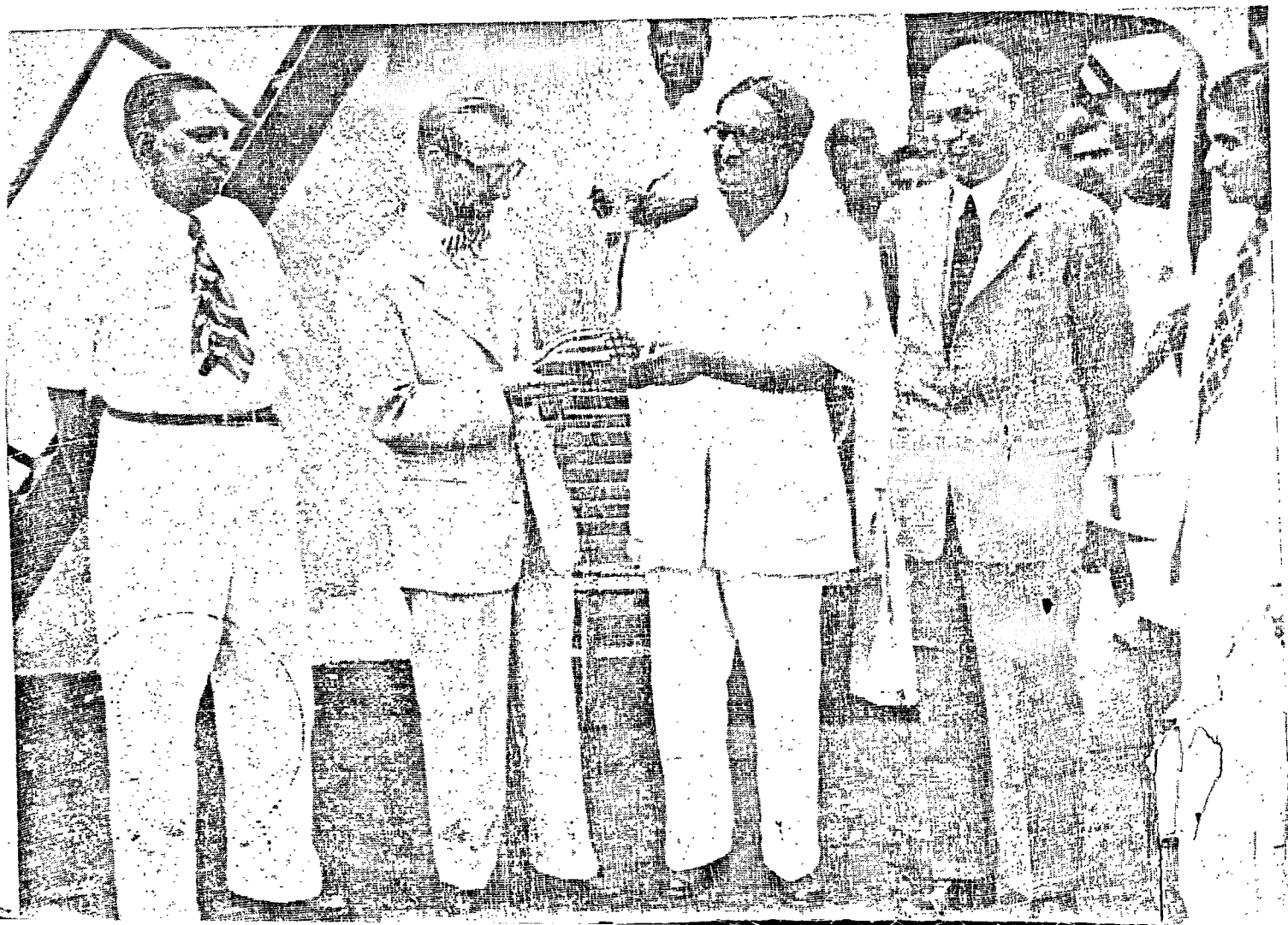
Vol. V, No. 10]

October 1951

[Price As. 3



ARRIVAL OF U.S. LOAN GRAIN. The s.s. "Jacob A. Westerwelt" carrying the grain from America supplied under the U.S. Emergency Food Aid Bill reached Madras recently and unloaded 2,000 tons of wheat. (Below) Sri J. L. P. Roche Victoria, Minister for Food receiving the token food bag from the American Representative.



Madras Information

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Vol. V, No. 10

"WE SEEK TO SERVE AND NOT TO COMPETE"

October 1951

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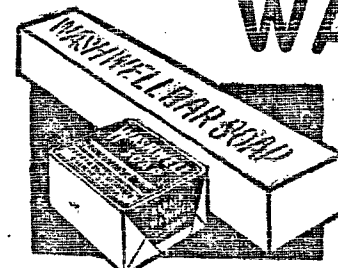
CAN YOU WASH WITH POTATOES?

Of course, if you rub hard enough, a potato, or even a lump of chalk will get clothes clean — unless you rub them to shreds first! It costs less in the long run, though, to eat potatoes, use chalk on the black-board and to wash with pure soap.

The common soap substitutes, loaded with chalk or potato-flour "fillers" only waste labour and destroy clothes.



KERALA
WASHWELL



**PURE
BAR
SOAP**

KERALA SOAP INSTITUTE
CALICUT
Department of Industries & Commerce
GOVERNMENT OF MADRAS

SISTA'S-KS-6

OUR
HOMAGE
TO



THE
MAHATMA

The light that has illumined this country for this many many years will illumine this country for many more years and a thousand years later that light will still be seen all over the country and the world will see it and it will give solace to innumerable hearts. For that light represents something more than the immediate present. It represents the living, the eternal truth, reminding us of a right path. How we ran to Bapu when we had any affliction? Though he is no more, let us always think of what he could have wished us to do and act in a way which will bring about concord and amity in this afflicted land of ours. He has also given us strength to show the world that his teachings have influenced us as to make us an example to the rest of the world, as how to keep peace and create goodwill among nations.

SRI JAWAHARLAL NEHRU, Prime Minister of India.

Gandhiji's Vision of Village Swaraj

SRI J. SIVANANDAM, Secretary, Local Administration Department.

Mahatma's idea of village swaraj was that it should be a complete republic, independent of its neighbours for its own vital wants, and yet inter-dependent for many others in which independence is a necessity. The first concern of every village should be to grow its own food crops and cotton for its cloth. It should have a reserve for its cattle, recreation and playground for adults and children. Then if there be more land available, it should grow useful money crops, thus excluding ganja, tobacco, opium and the like. The village should maintain a village theatre, school and public hall. It should have its own water works ensuring clean water-supply. Education should be compulsory upto the final basic course. As far as possible every activity should be conducted on the co-operative basis. There should be no castes as we have today with their graded untouchability.

Let us examine how far the measures taken by this State Government to introduce a substantial amount of autonomy to rural units, particularly through the enactment of the Madras Village Panchayats Act, 1950, have brought up nearer the idea set up by the Father of the Nation.

The new Act

Under the new Act every village will be included in a panchayat so that each citizen will have some part to play in its governance. The panchayat consists purely of elected representatives, the president being elected by the entire electorate directly. The idea of direct election of president is to foster a spirit of unity in the village and to train the people to elect a leader of their own.

The Panchayat has been endowed with powers to manage all the local institutions and deal all local matters civic and administrative. Certain functions have been made obligatory to ensure clean and healthy surroundings, e.g., construction, repair and maintenance of public roads in the village, lighting of streets, construction of drains and disposal of drainage water and sewage, cleaning of streets, removal of rubbish, provision of public latrines and provision of protected water-supply. It is given discretion to

spend within its financial capacity, on measures of public utility calculated to promote the safety, comfort, or convenience of the inhabitants, e.g., opening and maintenance of dispensaries, maternity and child welfare centres, playgrounds, parks, cart-stands, markets, installation of radio, etc.

At present the opening and maintenance of elementary schools in rural parts are mainly the concern of district boards, as most of the panchayats with slender resources cannot afford to maintain elementary schools. It is hoped that with the augmenting of finances of panchayats, by the compulsory levy of house tax, schools will be opened by panchayats themselves. It is also noteworthy to mention that the panchayat may incur expenditure on improvement of agriculture and agricultural stock, the holding of agricultural shows and the promotion of cottage industries.

All unreserved forests in the village vest in the panchayat which has also been empowered to regulate the use of porambokes in its area. This will enable the panchayat to set apart a sufficient reserve for use as grazing ground for cattle and for playgrounds.

Village Theatres

It is open to panchayats, if they can afford to incur the necessary initial expenditure, to open and maintain village theatres. This will also prove remunerative to the panchayat if the theatre is run on sound lines. Similarly it is open to the panchayat to maintain public halls, where public lectures and entertainments could be arranged for the benefit of the villagers.

Under the Madras Village Panchayat Act, all public water courses, springs, reservoirs, tanks, fountains, wells, etc., other than those connected with irrigation, shall vest in the panchayat and be subject to its control. Hence the panchayat may now pay particular attention to the improvement of these water sources and take sufficient precautions to see that the people of the village are supplied with clean water. It has also to be mentioned that the sinking and repairing of wells, the excavation, repair and maintenance of ponds or tanks and the construction and maintenance of water works for the supply of water for washing and bathing purposes and of protected water for drinking purposes is an obligatory item of expenditure from the panchayat fund.

Panchayats and Co-operative Societies

At present the village panchayats, are kept separate from co-operative institutions. It is thought that the time is not yet ripe for the institution of multipurpose societies in villages which could take over the functions of panchayats in village administration, as well as those of the co-operative societies for catering to the wants of the villagers. The scheme of panchayats is intended mainly to pick up and encourage the local talent for leadership. A village panchayat and a good co-operative society could certainly work side by side in the same village for the common benefit of all the villagers.



A village reading room in Chingleput District. Photo shows villagers reading newspapers and journals.

Gandhi Jayanti—Message of the Charka

By R. KUNCHITHAPADAM AYYAR, Khadi Special Officer.

During the Gandhi Jayanti, it is natural that our thoughts should turn on the manifold activities of Mahatma Gandhi, the valuable lessons that he taught us and how best we can cherish his memory. Gandhi's own wish was that the week be celebrated as Charka Jayanti. When we think of it, nothing can be more appropriate; for, the charka is the unique and perhaps the greatest of the gifts which we owe to him.

At a time when the machine and technological improvements had come to be universally regarded as the means for the prosperity of a country, only the unique genius of Gandhiji could visualize in the humble and restricted charka, the more sure means for the country's prosperity. The clarity of his vision is becoming more and more clear to us as the years pass.

Since Gandhiji first started the Khadi movement, we have had a large number of spinning and weaving mills added to our textile industry. The indigenous mill cloth production has greatly increased and we can claim to have successfully stopped the drain that was going on previously when we were importing cloth from Britain and Japan. But can we claim that it has brought increased prosperity to our villages, where more than 70 per cent of our population live? Can we claim at least that the increased mill production has made it easier for the villager to obtain the cloth he requires, assuming, that he has the means to pay for it? It must be admitted that the industry, neither on the production side nor on the distribution side, has been designed to serve the interests of the villagers.

The fact is that from time immemorial cloth production in our country was a village industry closely allied to agriculture. Agriculture alone could not support the large population dependent on land. In the off-season the peasantry must have a supplementary occupation. Hand-spinning supplied this want. There were handlooms in every village. Every family made its own yarn and had it woven by the village weaver. Thus the villages were generally self-sufficient in regard to clothing. The weaving and spinning industry was gradually killed by the British

The Act specifically provides that the amenities in the village shall be open to the use and enjoyment of all persons, irrespective of their caste or creed.

The other noteworthy features of the new enactment are that the panchayats have come to administer civil and criminal justice in the village which was formerly done by the village courts constituted under the Madras Village Courts Act, 1888, and that the executive officers of the panchayats are empowered to register documents which are exempted from stamp duty and registration fees and also documents of an ephemeral nature.

Thus a substantial advance has been made to develop panchayats into self-contained and self-governing units of local administration invested with large and practically independent powers in all matters relating to village life and village economy and in the proper working of the Act lies the realisation of the goal set forth by Mahatma.

Textile Mill Industry. The fact that the textile mill industry has now become mostly Indian-owned does not improve the position of the peasantry. Gandhiji with his unerring instinct discovered that the regeneration of the villages can be brought about only by restoring to the peasantry their traditional occupation of hand spinning. The revival of the charka is the means to this end.

The recent travails of the handloom weavers have once again shown us that the handloom industry is insecure so long as it is dependent on mill-yarn. The security and the prosperity of the industry is bound up with the revival of the Charka.

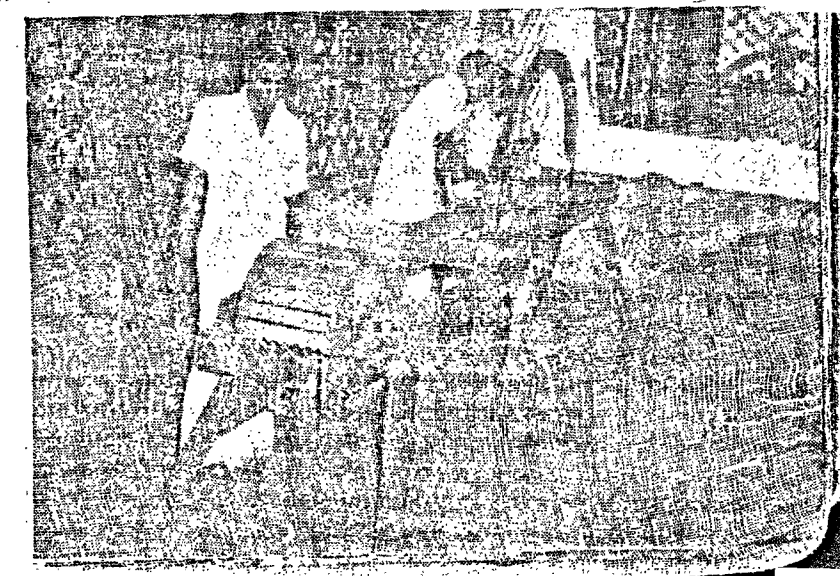
Government's Khadi Scheme

It is to the credit of the Madras Government that they were the earliest to formulate a comprehensive scheme for developing khadi. The Government's Intensive Khadi Scheme provides for intensifying khadi production in selected centres so as to make the centres self-sufficient in respect of cloth in terms of khadi. The scheme was introduced in seven centres in 1946-47. Here the spinners are given all the facilities necessary like supply of charkas and other implements, and cotton, at cost price. Trained workers are employed to enlist new spinners and teach them spinning. The spinners are encouraged to use the yarn to make their own khadi and the surplus yarn is purchased from them by the Government and the khadi produced therefrom is available for sale to the public.

The scheme provides also for the payment of a small subsidy to spinners varying from two to four annas per yard, to induce them to use the khadi produced for themselves instead of seeking to sell their yarn.

The results so far achieved have been encouraging. Though the goal of "one charka in every home" is still far off, the progress within the last one year is satisfactory. Taking all the centres, the total number of families resident in them, comes to about 85,000. The number of spinners under the scheme rose from 26,426 on 31st March 1950 to 33,578 on 31st March 1951.

Beypore Coir Factory. A machine for removing impurities from the coconut fibre.



The production of khadi in these centres has averaged 6.3 lakhs of yards per annum. During 1950-51, it rose to 6.7 lakhs of yards. The production is being stepped up to cope with the increasing demand. The quantity produced during the first quarter of 1951-52 amounted to about 1.85 lakhs of yards. The target for this year is 8 lakhs of yards. The quantity mentioned above does not include the quantity produced by self-spinners for their own use under the scheme. The quantity of khadi so produced has averaged 2.5 lakhs of yards per annum.

The Government intend to extend the Intensive Khadi Scheme to more centres gradually. With a view to prepare the ground, a modified scheme called the Extensive Khadi Scheme has been introduced in 54 firkas. More than 5,000 charkas have been introduced under this scheme so far.

In Koilkuntla area of the Rayalaseema it has been found that the spinning tradition still exists in many villages. Most of the working class families own charkas, but they are not spinning because there is no organization to supply them cotton and take their yarn. This area contains also a large number of hand weavers who are suffering without employment. The Government have sanctioned the opening of an Intensive Khadi Centre in the area. It is likely to be opened within a month. It will provide facilities for about 5,000 families to engage themselves in spinning during their spare time, and will provide full-time employment for about 300 weavers' families.

The total expenditure incurred on the scheme from its inception up to the end of 1950-51 amounted to 61.15 lakhs. The receipts up to that date by way of sale proceeds of khadi, charkas, etc., amounted to Rs. 43.80 lakhs.

Benefits to all

The Government of India gave grants for the scheme during the years 1947-48 to 1949-50 amounting to 11.85 lakhs. Leaving out the amounts paid by way of subsidy and the expenditure on training workers, the bulk of the expenditure on the scheme is likely to be recovered by the sale of the khadi produced. It should be remembered that the money spent on the scheme is spent in the villages and is paid directly to the primary producers, namely, the ryot who cultivates the cotton, to the ginner,

The Fisheries Industries School at Kozhikode run by the Industries Department. The pupils learn a trade



the carder, the spinner, the weaver, the village washerman, etc. There is no other single industry run under Government auspices where such a large amount is distributed among such a large number of wage-earners in the villages with the minimum of overhead. In the centres where the scheme is being worked, it has contributed appreciably to the bettering of the village economy. Anyone who visits these centres can see for himself that the local population is better clothed here, than the rural population anywhere else.

The Constitution of India guarantees to every citizen the "right to work" and the right to an adequate means of livelihood. From the point of view of the unemployed and under-employed millions of rural India no other industry can better serve to implement this guarantee than khadi.

It is hoped that the message of the charka will be taken to more homes during the present Gandhi Jayanti Celebrations, thus leading to the progressive betterment and prosperity of Rural India.

Corruption Among Government Servants

During the month of February 1951, corruption among Government servants was brought to notice against 311 persons including those against whom proceedings were pending at the end of the previous month. Of these, 12 persons were let off as charges against them were not proved. Corruption was successfully detected in the case of 24 persons and they were suitably punished. Of these, five persons were awarded minor punishments. The names and designations of the 19 persons who were awarded severe punishments are as follows:—

Ch. Subbarao and G. Venkatarao, constables, East Godavari District; Annamalai, Constable, South Arcot District; Vasudevan Nayar, Head Constable, Ramakrishnan Nayar, Kuttappan Nambiar and Kanda, Constables, Malabar District; M. Muthiah, Peon (Excise Department), Godavari Agency Circle, T. V. R. Chari, Assistant Engineer (Highways), Puttur, South Kanara District; S. Elizar Sargunan, Special Revenue Inspector, V. Vaithilingam, Peon, South Arcot District; M. Amjid Ibrahim, Deputy Tahsildar, Madurai District; R. S. Subramanian, Deputy Tahsildar, South Kanara District (dismissed from service); P. J. Mammen, Permanent Deputy Tahsildar and Officiating Tahsildar, North Arcot District; Syed Amir Sahib, Tahsildar, K. S. Raghavaachari, Head Clerk, Ongole; Venkatasubbiah, Peon, Revenue Department, Rapur, Nellore District (compulsorily retired from service); D. S. Prakasarao and N. K. Gandhi, Constables, Krishna District (probation terminated and discharged from service).

Proceedings against 275 persons were pending at the end of the month.

Salient Features of Rural Welfare Work

Following note gives the salient features of the activities of the Rural Welfare Department during July 1951 in the areas selected for Rural Welfare Work.

South Kanara District.—Vanamahotsava was celebrated in all the three firkas and 173,670 seedlings were planted. The Harijan day was celebrated in two centres. In Mangalpady, dress worth about Rs. 250 was distributed to the Harijan children attending schools, the Manjeshwar temple authorities contributing Rs. 100. Three pounds of cotton seeds were distributed. Free tools were distributed to three artisans.

Bellary District.—During the month, 17 sanitary drives were conducted; 684 books were distributed; 50 Grama Sangams were formed; 33 compost pits were constructed and 28 charka demonstrations were held. An expenditure of Rs. 2,814-1-0 was incurred on Rural Welfare Scheme; 2,489 plants were planted by the Rural Welfare staff in the month.

Tiruchirappalli District.—In Vellakoil centre three Young Men's (Valibar) Sangams were formed; 89 hamlets and 16 cherries were visited, 23 soak pits were constructed and 15 soak pits were cleaned. Six common compost pits were opened and 10 common compost pits were rectified. Sixteen cherries were cleaned. Five mass sanitation drives were conducted. Forty dirty pits were filled up. Thirty rubbish heaps were removed to the compost pits. Forty farms were visited. The attack of pests was controlled on an area of four acres. Bunds were formed in an area of three acres; 5,351 trees were planted during the vanamahotsava.

In Vengalam firka, a conference of khadi workers was held during July 1951. The need for extensive khadi development was stressed. Twenty-four charkas were distributed and 100 hanks were collected from the spinners during the month. Mass public meetings were conducted at Agaram, Peranjir and Mavalalingai. A new school building was opened at Agaram village. A khadi sub-centre was opened for the benefit of the villagers.

In Musiri firka, an adult school was opened. Fifty-two compost pits were dug. Tree-planting week was celebrated in a fitting manner.

North Arcot District.—One Labour School was opened at Arunagirimangalam cheri in Kadalady firka. Board Elementary Schools were opened at Seelapandal and Sannandal in Thuringapuram firka. The villagers constructed and offered buildings for the location of the above schools free of rent.

Two stud bulls have been purchased from the Hosur Cattle Farm for the Kalasapakkam Co-operative Cattle Breeding Society and they are stationed at Padagam and Kidampalayam villages.

The National Tree Planting week (Vanamahotsava) was celebrated in all the villages in the selected firkas from 1st July 1951; 5,678 seedlings were planted and 22 nursery beds have been raised so far.

The Firka Cottage Industries Co-operative Federation has been started at Kalasapakkam village for the development of cottage industries like Oil-crushing, Paddy-crushing, manufacturing of agricultural implements, etc.

Cuddapah District.—Forty-four charkas were introduced during the month. Carding and spinning demonstrations were held at Korrapad, Kallur, and Aliadapalli. Two hundred and fifty seers of slivers and 300 seers of cotton lint were supplied to the self-spinners. Sixty compost pits were dug, 72 tons of compost was manufactured during the month. Forty-one sanitation drives were conducted during the month in all the eight groups. Fifty cesspools were got constructed and 106 manure heaps were properly preserved during the month.

Chittoor District.—During the month, two sanitation drives were conducted, seven insanitary pits were filled up and 37,960 trees planted.

Tirunelveli District.—One hundred and two compost pits were dug during the month. Eighteen charkas were sold during the month, 579 charkas have been sold so far; 988 hanks of yarn were spun during the month; 119,884 hanks of yarn have been spun so far.

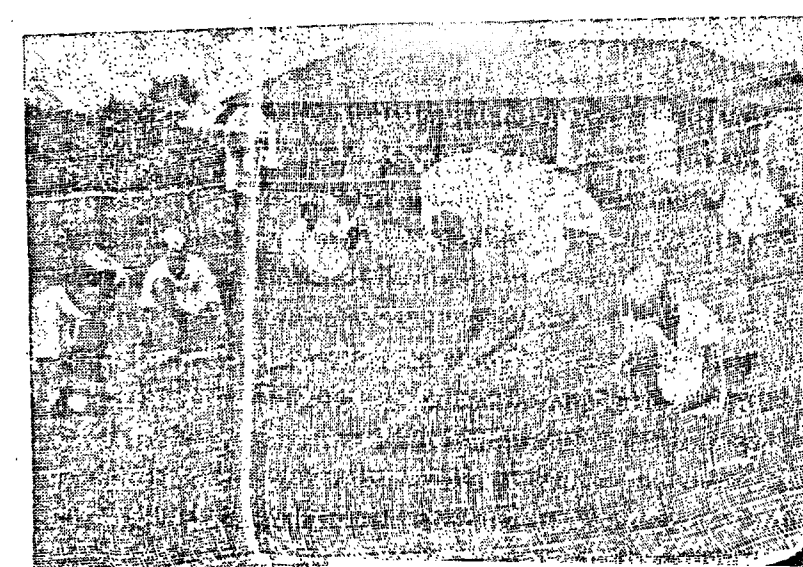
Coimbatore District.—Twenty-six soak pits were constructed. Thirty-one soak pits were rectified. Seventeen wardha type trench latrines were put up. Fifty-two dirty pits were filled up. Thirty-four manure heaps stacked near the dwelling quarters were removed to the outskirts of the village. Sixteen cherries were cleaned. Six mass sanitation drives were conducted; 11,942 trees were planted during the Vanamahotsavam.

Tanjore District.—During the month, ten septic tank latrines were constructed. Twenty-eight charkas were introduced in Vedaranyam firka, 40 compost pits were dug and 73 manure heaps were removed outside the dwelling houses.

Anantapur District.—One adult night school was started in Hindupur firka. Fifty poor children were freely supplied with books and slates in Madakasira firka. Three Mass sanitation drives were conducted. Competitions in sports and games for adults and children were conducted and prizes awarded in Utakur. The Panchayat Board also contributed Rs. 15 towards the prizes.

South Arcot District.—During July, the District Veterinary Officer, Cuddalore, distributed exotic breeds of cockerels to several ryots at subsidised cost.

The Basic Training School at Mayipadi in South Kanara. The trainees at work for growing vegetables.



Three courses for training women in spinning were conducted at Kamatchipetti, Irundai and Veeraperumanallur during July 1951. A sum of Rs. 232 was paid to the ryots in the Chinna Salem centre as subsidy for compost manufacture. A milk supply co-operative society was organised at Chinna Salem.

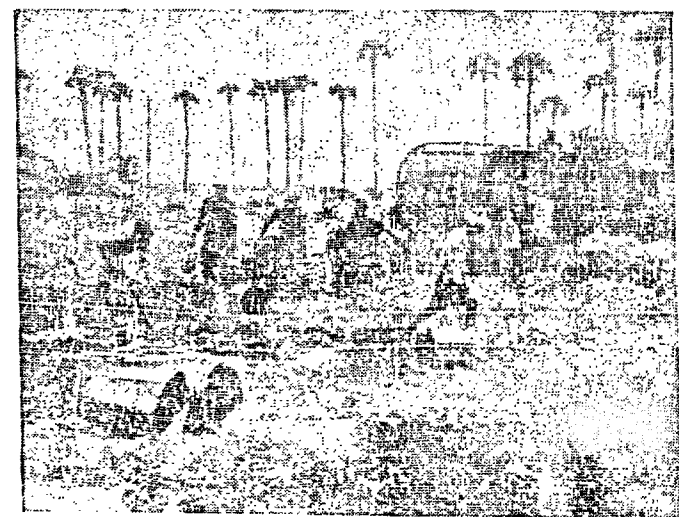
The Nilgiris District.—Vanamahotsava was celebrated; 21,300 seedlings were planted. Fifty-one compost pits and eight manure pits were opened. Contour planting, compost making, Grow More Food and prevention of soil erosion were propagated. About 5,000 bluegum and wattle seedlings were issued to ryots. Eleven ounces of vegetable seeds were supplied to the ryots from the Agricultural Depot at Ootacamund; 28 lb. of special variety of paddy, 432 lb. 6 oz. of insecticides and fungicides were sold in the selected areas.

Malabar District.—Vanamahotsava was celebrated in all the villages. Over 18,000 plants were distributed to the villagers for planting.

Guntur District.—Three works under the discretionary grant and one work under Rural Water Supply Scheme were completed during the month. Thirteen mass and 37 individual sanitation drives were conducted. Six charkas were introduced.

Ramanathapuram District.—The Khadi Scheme introduced in this area is working efficiently; 644 charkas have so far been introduced in the entire Rural Welfare area and the spinners have been subsidised by distribution of charkas at concessional rates. Supply of cotton (slivers) is also made at the cost price at the non-seasonal time; 6,690 hanks of yarn were spun by the villagers during this month. Forty-one sweeping campaigns were conducted during this month. A poultry farm was opened at Managarsari.

Chingleput District.—One well was completed in Melanur cheri and a sum of Rs. 496 was paid for. Road to a length of two miles and seven furlongs was formed during the month. Improved paddy seeds, green manure seeds and cotton seeds were supplied to the ryots. An advance of Rs. 1,590 was made to the ryots for purchasing seeds and manures. Four thousand two hundred trees were planted



The Madurai Municipal Compost Manure Depot. Night soil being dumped into pits

and about five acres were brought under green manure cultivation. Vanamahotsavam was celebrated in all the villages. A magic lantern lecture and 24 gramophone performances were held. A drama on the "Tree planting" was also enacted.

Kurnool District.—In Kurnool lirk, twenty-five spinning demonstrations were conducted. Four manure pits were set right and 31 compost pits were dug. Two soak pits were dug and nine pits were cleaned. One milk supply society and one cottage industries co-operative federation society were organised.

In Yerragondapalem centre 32 spinning demonstrations were conducted; 59 manure pits were set right and 25 compost pits were dug.

West Godavari District.—Nineteen mass drives and 72 individual sanitary drives were conducted during July 1951. Thirty-eight new charkas were introduced. Three hundred and ninety-nine yards of cloth was woven by self-spinners. Twenty-five thousand five hundred and ninety-five trees were planted; 240 looms were distributed; 1,268 cattle were attended to; 14 spinning demonstrations were conducted.

Rayalaseema Development Board Exhibition in Cuddapah

An exhibition under the auspices of the Rayalaseema Development Board was conducted in Cuddapah from 12th to 19th August 1951. Hon'ble Sri H. Seetharama Reddi, Minister for Revenue and the Chairman of the Rayalaseema Development Board, opened the exhibition which was very largely attended.

The Food Production department co-ordinated with the Agricultural Department in putting up an attractive exhibition stall wherein improved seeds of paddy, millets, cotton and green manure and seedlings of choice varieties of fruits and vegetables were displayed. Charts and posters on various improved methods of agriculture and the concession given to ryots for growing more food were exhibited very prominently and they attracted huge crowds. Agricultural implements, machinery, oil engines, tractor, bull-dozer, power and hand sprayers, etc., were displayed. The exhibition was of great educative value. Advantage was taken of this exhibition to give wide publicity on the various food production schemes launched by the Government of Madras. The three-year plan for increasing food production and the Governmental set up thereon were displayed with the help of poster boards. Over 2,000 ryots visited the exhibition every day. In the evenings, films on (i) water, (ii) soil erosion, (iii) top soil, (iv) soil and water conservation and (v) preparation of compost kindly lent by the United States Information Services were screened. Every day over a thousand people witnessed the cinema shows exhibiting agricultural films which were greatly appreciated. The film on 'Cotton' which was in Telugu proved quite interesting as well as instructive.

Besides Agriculture and Food Production departments various other departments like Animal Husbandry, Co-operative, Forest, Industries, etc., also participated in the show. The stall run by the Guild of Service attracted a large number of women. They were particularly interested in Synthetic rice and various other preparations from Tapioca flour which were exhibited there.

Three Years of Total Prohibition

By A. PALANIAPPA MUDALIAR, M.A., Deputy Commissioner, Prohibition (Amelioration) and Joint Registrar of Co-operative Societies, Madras.

On the 2nd October 1951, the day of Mahatmaji's eighty-third birthday, Madras, will be completing three years of Total Prohibition. To Madras belongs the honour of being the pioneer of this silent and glorious revolution and of having implemented a reform most dear to Gandhiji. More than any other evil, it is the drink evil that eats into the vitals of a nation; and Mahatma Gandhi gave top priority to its abolition in his constructive programme. In one of his writings he observed, "If I were appointed dictator for one hour for all India, the first thing I would do is to close without compensation all the liquor shops, destroy all the toddy palms such as I know in Gujarat and compel factory-owners to produce humane conditions for their workers and open refreshment and recreational rooms where these workers get innocent drinks and equally innocent amusements".

Mahatma Gandhi hailed the introduction of Prohibition in the Madras State as one of vital and fundamental importance to the well-being of the people and in a message to Madras on the eve of the extension of Prohibition to eight more districts in October 1947, he observed, "It is good news that you are making eight more districts dry. There can be no rest until the whole province is dry". Thanks to the determination of the Madras Government, the three years of Total Prohibition in the State have belied the doubts expressed in certain quarters regarding its efficacy and success. Though the introduction of this reform involved loss of nearly 17 crores of rupees to the Madras Government, they were nevertheless prepared to forego the revenue, which in the opinion of Gandhiji was "tainted money"—for the reason that the reform will save millions of people from starvation, misery and debt and help them to live in peace and prosperity.

The money, which the people, particularly the poorer classes, were spending on drink, is now available to them for being spent for more useful purposes. The indirect gain to the people is to the tune of Rs. 70 to 80 crores on account of Prohibition. In this way the loss of revenue to Government is more than compensated by the immense good that it has done to the large majority of the poor people in every corner of the State.

Employment of Ex-tappers

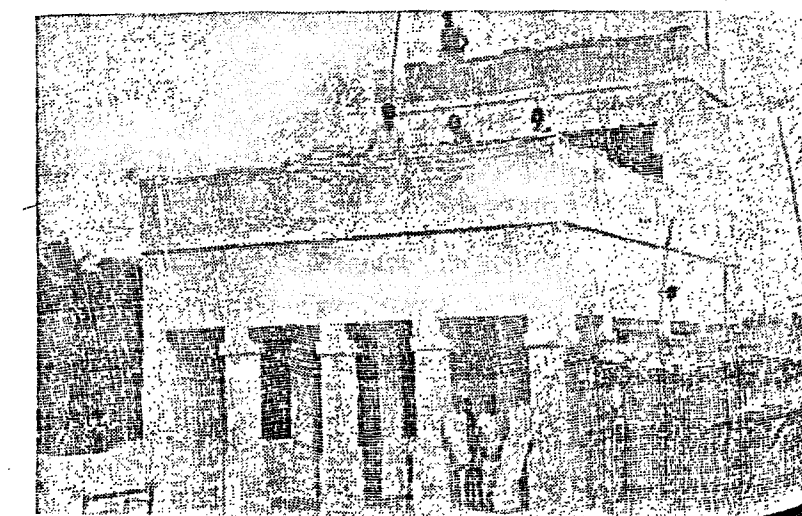
One of the immediate problems that Government had to face on the introduction of Prohibition was to provide employment for the toddy tappers thrown out of work, who numbered about 1.63 lakhs. One of the major measures adopted to provide them with alternative work was the formation of palm jaggery manufacturing co-operative societies. Other types of co-operative societies such as milk-supply societies, land colonization societies, cottage industries societies were also formed for their benefit in suitable places but the palm jaggery societies were the most popular because they handled an industry with which the ex-toddy tappers were already familiar. To provide employment to them, Government permitted the tapping of sweet juice from palmyrah trees in most of the districts in the State for manufacture of jaggery on a

co-operative basis. They have also permitted the tapping of sweet juice from coconut trees in Malabar, South Kanara and Coimbatore districts, from date trees in the districts of Chittoor, Anantapur, Guntur and North Arcot and from sago trees in Malabar for jaggery manufacture.

At the end of June 1951, there were 2,000 jaggery societies with 1.60 lakhs members of whom 1.16 were given licences for tapping of sweet toddy for jaggery manufacture. In this way, 72.5 per cent of the tappers have been provided with employment by the formation of jaggery societies. These societies produced 25.56 lakhs of maunds of jaggery valued at Rs. 131.81 lakhs during the year 1950-51. Government have permitted the sale of sweet toddy as neera for personal consumption through co-operative societies in the districts of Tirunelveli and



A community centre at Pulimangalam in North Arcot District was opened recently by Sri K. Chandra Mouli, Minister for Local Administration. Photo shows the Minister addressing the gathering on the occasion. (Below) The building constructed by the Gramasangham for use as the Centre.



PROHIBITION

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MADRAS INFORMATION

Ramanathapuram. It is proposed to open a neera parlour in the City of Madras soon. The formation of jaggery societies has not only provided work to the ex-tappers but has given a fillip to the palm gur industry in the Madras State.

Palm Gur Development

In order to improve the industry and introduce it in areas where the tappers are not quite familiar with it, Government sanctioned a scheme of Palm Gur Development, which is being worked with the assistance of the State Palm Gur Organizer and Palm Gur Instructors trained in the Central Palm Gur Training School, Cuddalore. Under the scheme, 1,000 sets of equipment have been given free to the tappers in the several districts and they are taught the improved methods of production of jaggery. As a result, the tappers are able to produce better type of jaggery at less cost. At the instance of the Government of India, two intensive palm gur production centres—one for palmyrah and another for date jaggery—are being conducted in Tirunelveli and Anantapur districts respectively, the object of the scheme being to find out the commercial potentialities of the palm gur industry and to collect data about its economics.

Besides jaggery societies, other types of societies are organized to provide work to the tappers. Co-operative Milk Supply Societies and Unions, Land Colonization Societies, Cottage Industries Societies and Labour Contract Societies have been formed for the benefit of the ex-tappers and ex-addicts. Government have provided the societies with subsidy and staff wherever necessary. Steps are also being taken to settle the ex-toddy tappers in other walks of life such as gang coolies, unskilled labourers, peons and chowkidars, etc. As a result of the formation of co-operative societies and other measures taken, the problem of resettling the ex-tappers in the districts has been well-nigh solved.

Ameliorative Activities

Prohibition involves the changing of the habits of a large section of the people. For the success of this reform, propaganda and ameliorative work among the ex-addicts are as important as the detection of crimes and prevention of offences and the punishment of offenders under the

Prohibition Law. Gandhiji attached great importance to ameliorative work among the ex-addicts. He laid emphasis on educating public opinion and opening of refreshment rooms for selling harmless drinks and providing newspapers, games, etc., at the same places as grog shops. Following this lead, Government sanctioned, on the introduction of Prohibition, the opening of refreshment stalls for the first few weeks to help the addicts in the change-over from drink to abstinence and subsidised them.

Again, sports and games and entertainments of various kinds were organized in the villages in order to divert the minds of the ex-addicts from the drink habit and make the rural life happy. Government have provided propaganda van equipped with cinema-outfit, public address system, gramophone to carry on propaganda and also to entertain the villagers. Local Boards, public bodies and co-operative organizations are encouraged to install radio-receiving sets. Rural recreation on a district-wide basis was carried on in the early years of Prohibition. Later on, greater emphasis was laid on harnessing the spirit ushered in by the introduction of Prohibition for social and rural uplift work, as otherwise the gains of Prohibition will not be realized by the community at large. Ameliorative work was, therefore, directed more and more towards constructive work by way of making the villagers more happy and economically better.

Organization of Grama Sanghams

The spear-head of work on the social front was the improvement of the environment of the poorer classes in the villages. The ameliorative activities in the villages have to be planned in such a manner as to evoke a spirit of self-reliance and mutual confidence among the villagers. To achieve this object, grama sanghams were formed under the ameliorative scheme to promote rural uplift activities on a voluntary basis. These grama sanghams organized rural sanitation, street cleaning, road laying, sinking of wells for drinking water, opening of schools and libraries, reading rooms, etc. At the end of June 1951, there were about 13,800 grama sanghams in the State of which nearly 4,970 were active. Some of them were sanctioned library grants by Government.

To enable them to undertake rural uplift work as corporate bodies, they are registered under the Societies' Registration Act at a concessional fee of Rs. 5. Government give subsidy up to a limit of Rs. 3,000 in each case to the grama sanghams which put up buildings, which will serve as a common place for the villagers to meet and conduct social and recreational activities. Co-operative Societies are also pressed into service for rural uplift work. Government have sanctioned a State-wide Scheme for the reorganization of rural credit societies and several of them have undertaken, besides business activities, social and recreational activities. These societies also undertake construction of village halls-cum-godowns to serve the double purpose of godown and community centre. Several rural societies have shown lively interest in the promotion of social and rural uplift work. As a result of the vigorous drive for savings instituted in the district among the people through homesafes and hundi-boxes, the ex-addicts have been able to save money and utilize them for useful purposes.

A well constructed for Harijans by the Harijan Welfare Department.
A Harijan Girl at the well.



PROHIBITION

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MADRAS INFORMATION

Better and Happier Living

The ameliorative work that is carried on chiefly through the agency of co-operative organizations and grama sanghams represents the constructive side of the prohibition programme and it has helped the people to realize the beneficial effects of the reform. Government have caused an enquiry to be made into the condition of the people who were formerly addicted to drink and necessary data are being collected regarding the effects of the reform. There is no denying the fact that, with the removal of the drink evil, the people particularly the poorer classes lead a better and a happier life, and this is borne out by the enquiries made by the ameliorative staff. Verily, it can be said that Prohibition has brought about a general rise

in the standard of living of the people and has rescued them from the grips of poverty, destitution, dirt and disease.

Social workers have now a splendid opportunity to serve their fellowmen in various ways. Their assistance in the enforcement of Prohibition and the promotion of the ameliorative activities will be very valuable. They can direct their efforts to the formation of voluntary organizations to provide social and recreational amenities to the ex-addicts and utilize the opportunity for general rural progress. There can be no greater monument raised to the memory of Gandhiji than the successful working of this great moral and social reform and it behoves one and all of us to do our best to make it a success.

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Fundamentals Through Basic Education

By DR. M. D. PAUL, M.A., M.Sc., ED.D. (Columbia), Deputy Director of Public Instruction, Madras.

Introduction

During the last decade or so there has been a tremendous interest in India in matters relating to education. Probably no other topic is so widely discussed as this. There is much discussion in the Press, over the Radio, on the lecture platform, among professional groups and in individual homes. This indeed is a healthy social condition.

In discussing education, lay citizens often raise questions concerning teaching "the fundamentals". The public needs reassurance that "That Three R's" are well taught in the schools. Many people seem to believe that if boys and girls are taught "reading" and "ritin" and "rithmetic," they will consequently become good citizens, fitted to survive in this most difficult world in which we live to-day. What are some of the fundamentals that have to be arrived at in our educational system?

A realization of the real needs of education for to-day made Gandhiji declare, "Literacy in itself is no education. Literacy is not the end of education nor even the beginning. It is only one of the means whereby man and woman can be educated."

In the Basic system of education sponsored by Gandhiji education will be through activities in the form of crafts centred round the physical and social environments of the child. He emphasised that education should not only train the intellect but also the hand and other senses. "True Education," according to him, "is that which draws out and stimulates the spiritual, intellectual and physical faculties of the children."

Social Need

The child is primarily a social being. A constant process of interaction goes on between him and his environment—the world of beings, the world of ideas and ideals and the physical world. This goes on continuously—whether we like it or not—from the time of birth (to be more accurate, from the time of conception) to the time of death. It is necessary, therefore, that in

The students of the Basic Education School at Kallupatti in Madurai district. The tiny tots happy at a game.



Basic Education the activities and experiences of a child should be so organized as to draw forth the best in him, and make him a harmonious and well-integrated person.

Learning to Live Together

Probably the most important plank in the platform of democracy is good human relations. Our failures in caste relationships, our religious animosities and the like are well known. The children of every caste and creed are in our school class-rooms now. Here in schools, then, are provided opportunities for them to live together. Actually in Basic training schools students from all communities and sects live and eat together. Such a training is fundamental to the future of our country.

In India to-day there is a vital need for people to realize that along with certain rights and privileges which they enjoy, there are also some obligations and responsibilities.

"Democracy is perhaps to be understood as associated living conducted on the basis of respect for personality. This involves on the one hand, the active aspect of individual freedom, purpose and effort; and on the other, the moral attitude and wish not only that others enjoy analogous freedom and self-direction, but that the common good is served."

What better place than a school is there for impressing this on the child?

Personal Cleanliness

Personal cleanliness is given great importance in Basic schools. Not only are hygienic principles and rules of health taught but they are practised. Every morning when the children assemble in the school, one among them—the elected 'Minister' in charge of Health—personally inspects all the children to see whether they have combed their hair, cleaned their teeth, kept their nails clean and tidy; and questions them whether they have answered the calls of nature and the like. When children come to school without their hair being dressed properly, the hair is oiled and combed. There is usually provision of water and soap where the children can wash their hands and faces and if necessary their clothes too.

Environmental cleanliness forms also an integral part of the programme of work. They sweep the floor of the school and dust the furniture. They clean the surrounding compound and keep it tidy. By actual practice they learn how to dispose of garbage. Not as is usually done by throwing it into the street or into the neighbour's compound, but by storing it in proper places and by using it as manure for the garden. Some schools organize, now and then, cleaning campaigns in the villages or in the neighbourhood of the school. This activity of children has stimulated in many an adult as useful civic sense of keeping the surroundings clean.

Productive Activity

The acid test in Basic Education is its productiveness. Though the productive activities are provided extensive

Encouragement to Producers of Cambodia Cotton

The Textile Commissioner of Bombay has excluded certain superior varieties of cotton, such as Cambodia Co-4, from the operation of the price control, with the object of encouraging the production of such varieties. The Government have introduced a certification scheme, under which a certificate will be issued by the Agriculture Department through the Certification Officer (Assistant Cotton Specialist, Rajapalayam) to ryots, who cultivate Cambodia Co-4. The certificate will certify the genuineness or otherwise of Cambodia cotton grown by the ryots, and it will guarantee the exemption of the cotton from the operation of the price control, thereby allowing the ryots to sell the cotton at a higher price.

The conditions attached to the issue of such certificates in respect of Cambodia Co-4 varieties, which are also known as Rajapalayam Uganda, and Madras Uganda-1, are that the cotton should have a minimum staple of 15/16", and the kapas should be ginned only in the gins specially licensed for the purpose under departmental supervision and the lint certified by the Agriculture Department. The bales containing certified lint should be marked with special distinctive marks.

The Cambodia variety is grown as an irrigated crop in Madras State in the summer season in Ramanathapuram, Tirunelveli, Madurai and South Arcot districts and as a rainfed and irrigated crop in winter season in Coimbatore, Salem, Tiruchirappalli, Madurai and Ramanathapuram districts.

Kapas Co-4 obtained from the 1951 summer crop in the districts of Madurai, Ramanathapuram, Tirunelveli and South Arcot is eligible for certificate, if the purity is tested to be 95 per cent and over and having a minimum staple of 15/16". The certificate, issued after inspection and test, should be surrendered to the first purchaser and will be valid till the certified cotton is consumed by the mills.

Cotton grown in 1951-52 winter season (15th August 1951 to 15th April 1952) in Coimbatore district and 1st September 1951 to 15th May 1952 in Salem, Tiruchirappalli, Madurai and Ramanathapuram districts and grown in 1952 summer season (15th February 1952 to 30th September 1952) in the districts of Madurai, Ramanathapuram, Tirunelveli and 15th December 1951 to 30th September 1952 in the districts of South Arcot, is also eligible for certification.

opportunities to develop child's talents and innate abilities. Also training is given to enable him to bring into co-ordinated exercise as many members of the body as possible and to train the different senses. Through intelligently and steadily pursuing an activity till he produces something tangible and useful from cotton to cloth for instance—he is trained to persevere in his undertaking and to feel the joy of having produced something worthwhile.

Does the training thus given to produce things make the child a self-reliant and independent person who can by putting forth his own efforts be confident of his own sustenance? This I think is essential if the education we impart is going to be useful to him in life now and hereafter. For in spite of our political independence this trait is vitally necessary, because for over 150 years due to political bondage, we have been trained to be 'dependent' on others. We have to get our children out of this mentality.

Learning by Doing

No task is too difficult or mean for Basic students. Cleaning the latrines and urinals, sweeping the school buildings and compound, watering the gardens, preparing the food, etc., so essential for normal living, are all done by the pupils. But these are done not as compulsory items which they have to do as part of their education (to pass the examination) but as processes which help them to be educated. That is they are done scientifically—as Gandhiji puts it, "the why and wherefore of every process" is explained to them in such a way that they learn them. So these duties serve as the medium through which they are educated, means whereby their personalities are developed.

Conclusion

Many readers may wonder what has happened to reading, 'riting and 'rithmetic and other traditional essentials. Are they eliminated? Of course not! Children will learn to read, to write and to add. They will learn many things about the History and Geography of the village, the country and the world, in which they live. They will still be curious about the physical universe, where the stars come from and what is the centre of the earth. They will continue to enjoy fairy stories and also participate happily in social events and religious festivals. But this learning is to help to illuminate the child's environment in all its aspects to the child. The writer does not disparage the value of some of the subject-essentials which have concerned education in the past. He is only offering a way of achieving them by concentrating attention on the new fundamentals. Let us help the children achieve it both for themselves now and for the better India which they will build.

Maida for Biscuit Factories

The Government have directed that the composition of the quota of maida and wheat to biscuit factories, other confectionaries, and vermicelli factories shall be as follows: Biscuit factories and other confectionaries—25 per cent of basic quota in maida, 75 per cent of basic quota in wheat. Vermicelli factories—50 per cent of basic quota in maida, 50 per cent of basic quota in wheat. The revised scale of supply represents a temporary enhancement of quota in the shape of wheat.

The National Five-Year Plan and the Madras State

By SRI P. S. KUMARASWAMI RAJA, Chief Minister, MADRAS.

From the note placed on the tables of the Houses of the Madras Legislature.

The National Five-year Plan which has been recently published, is a modest document based on a realistic appraisal of the country's available resources. It envisages an outlay of Rs. 1,793 crores on Development Schemes in the public sector, during the next five years and is divided into two parts. The details of the first part have been worked out to a cost of Rs. 1,493 crores. This part of the plan can be implemented with the resources now in sight, including the promised external assistance such as the American Food loan, the anticipated releases from sterling balances and, if unavoidable, some little deficit financing. The details of the second part costing Rs. 300 crores, are now being worked out by the Commission and its implementation depends on further external assistance being forthcoming. The distribution of the outlay on the first part under broad heads is given below :—

	Outlay during 1951-56.	Percentage of total outlay.
	RS.	(IN CRORES).
Agriculture and Rural Development.	191.70	12.8
Irrigation and Power	450.26	30.2
Transport and Communication ..	338.20	26.1
Industry	100.99	6.7
Social Services	254.08	17.0
Rehabilitation	79.00	5.3
Miscellaneous	28.54	1.9
Total	1,492.77	100.0

The Commission has laid greater stress on Food Production by improved methods of agriculture and extension of irrigation, Power Development and Improvements to communications including Railways, come next in the order of priority. The sums earmarked for Social Services are not spectacular. On the side of industries the plan envisages primarily assistance by the State, leaving it to private enterprise to shoulder the main burden of development in a well regulated manner.

The expenditure of Rs. 1,493 crores covered by the first part is divided almost equally between the Central and State Governments—

	RS.
	(IN CRORES).
Central Government	734
Part A States	560
Part B States	171
Part C States	28
Total	1,493

The distribution amongst Part A States is shown below :—

	RS.
	(IN CRORES).
Madras	137
Bombay	120
Uttar Pradesh	91
West Bengal	69
Bihar	56
Madhya Pradesh	44
Punjab	15
Orissa	15
Assam	13
Total	560

The plan for this State may appear to be the largest when compared with those of other States. But, these figures do not take into consideration the enormous expenditure undertaken by the Centre on large multi-purpose projects like the Bhakra-Nangal, the Hirakud and the Damodar Valley, costing Rs. 176 crores during the next five years. These projects will benefit the Punjab, Bihar, West Bengal and Orissa and therefore, the proportionate share of costs of these projects should be added to the figures for those States, in order to arrive at a true comparison. The Central assistance being severely rationed, the implementation of a larger plan would naturally entail greater strain on the resources of the State undertaking it.

General

The plan for this State follows the National plan in its general pattern, but greater emphasis has been laid on the development of irrigation, power and agriculture :—

	RS.	Total.
	LAKHS.	RS.
I. Agriculture and Rural Development—		
1 Agriculture	1,600.00	
2 Veterinary and Animal Husbandry	150.00	
3 Dairying and Milk Supply	40.00	
4 Forests	100.00	
5 Co-operation	100.00	
6 Fisheries	200.00	
7 Rural Development	2,190.00	
II. Major Irrigation and Power Projects—		
1 Irrigation	3,016.00	
2 Electricity	5,024.00	
III. Industry—		
1 Cottage Industries	126.86	
2 Other Industries	85.14	
IV. Transport Roads	500.00	
Total	500.00	

	RS.	Total.
	LAKHS.	RS.
V. Social Services—		
1 Education	8,00.00	
2 Medical	1,200.00	
3 Public Health	300.00	
4 Housing	459.00	
5 Amelioration of Backward Classes	2,759.00	
Grand total	13,701.00	

Irrigation and Power

All the irrigation and power schemes included in the plan are already under execution as part of our Post-war Reconstruction Programme and nothing new has been added to the list—

Name of the scheme.	Total cost.	Expenditure covered by the Five-year Plan, 1951-52 to 1955-56.
	RS. LAKHS.	RS. LAKHS.
Irrigation Schemes.		
Lower Bhavani	9.07	4.90
Malampuzha Reservoir	3.80	3.03
Mettur Canal Scheme	2.45	2.31
Rallapad Second Stage	53	55
Romperu Drain	96	37
Quavery Delta Drainage Improvements	30	1
Manimuthar Project	3.98	3.95
Upper Pennar Project	84	84
Bhiravanitippa Project	93	93
Aranian Scheme	95	95
Walyar Scheme	1.00	1.00
Mangalam Reservoir	45	45
New Grow More Food Schemes in charge of P.W.D.	73	73
Tungabhadra	18.20	10.14
Total	44.24	30.16
Electricity Schemes.		
Moyar Hydro-Electric Scheme	4.64	1.41
Pykara III Stage Extensions	4.89	2.08
Papanasam Second Stage Extensions	3.36	1.99
Machkund Hydro-Electric Scheme	6.82	4.32
Machkund Transmission Lines	8.03	4.55
Madras Plant Extensions	10.43	7.71
Nellore Thermal Scheme	1.01	41
Madras-Mettur Inter-connection	2.18	95
Transmission Line and Distribution	23.93	17.39
Tungabhadra Hydro-Electric Scheme	7.94	6.43
Acquisition of Electrical Undertakings	4.50	3.00
Total	77.73	50.24
Grand total—Irrigation and Electricity.	1,21.97	80.40

Many of the schemes under this programme are expected to be completed in the next two years and would bring under irrigation about one million of acres of land and more than double the power generation of the State. The bulk of the new power is intended to be used up on rural electrification, for which purpose an amount of Rs. 17.39 lakhs has been earmarked on transmission and distribution lines. Out of the total estimated cost of Rs. 122 crores for this programme, we have already invested about Rs. 40 crores and about Rs. 80 crores are proposed to be invested during the five-year period.

Agriculture and Health

Many of the agricultural schemes included in the plan, such as the distribution of chemical fertilizers and improved strains of seed, are fully or partially self-supporting. The sum of Rs. 16 crores provided for under this head represents the net cost to the Government, after setting off the receipts against the gross expenditure. This sum also includes the large amounts we are now spending on the renovation of existing irrigation tanks and the construction of new ones as a part of the Grow More Food drive.

Out of the sum of Rs. 12 crores under Medical and Public Health, about Rs. 7 crores will be spent on Water-supply and Drainage Schemes and about Rs. 1½ crores on anti-malarial measures.

Provision has been made for essential improvements to existing hospitals and for the construction of two medical colleges, one at Madurai and the other at Guntur. The large bulk of the allotment of Rs. 8 crores under Education has been earmarked for the development of primary education. The various individual schemes to be covered by the allotments under different heads are now being worked out in detail in consultation with the heads of departments.

Financing the Plan

The Planning Commission has indicated in a general way how the plan has to be financed for the country as a whole. As far as this State is concerned, the money is expected to come from the following sources :—

	RS.
	(IN CRORES).
(i) State revenues available for development expenditure on the present scale	30
(ii) Possible economies in expenditure	5
(iii) Surplus from deposit transactions	8
(iv) Loans from the open market	17
(v) Withdrawals from reserves	27
(vi) Assistance from the Centre	30
(vii) Additional taxation	20
Total	137

A good few of the items included in the plan are mere continuation of schemes already in operation in this State, as for example the expenditure on rural development, construction of new roads, improvements to hospitals, amelioration of backward classes, etc. Even without the plan, provision would have been made, to the extent possible, in the Revenue budget of the State for these services and normally a sum of Rs. 30 crores would have been spent on them during the five years and that is the sum indicated under item (i) above. The sum of Rs. 5 crores under item (ii) above will have to come out of drastic economies in departments like Civil Supplies, Police,

Prohibition and other spheres of general administration. Item (iii) represents the normal capital accumulation with the Government from transactions, such as deposits on account of provident funds and State trading schemes. Under item (iv) credit has been taken for Rs. 17 crores to be raised from the open market during the five years, which works out to an average of Rs. 3½ crores per year.

The Government has still in reserve securities worth Rs. 32 crores and it is proposed to raise Rs. 27 crores by their sale, as indicated under (v). The quantum of Central assistance has not yet been finally fixed. The Commission has indicated an assistance of Rs. 20 crores only, but this Government has pressed for its enhancement to Rs. 30 crores and that request is still under consideration. It is therefore hoped that the sum of Rs. 30 crores under item (vi) will materialize, in which case, the extent of additional taxation can be limited to about Rs. 20 crores, at an average of Rs. 4 crores per year, as shown under item (vii).

Land Revenue Reforms

The scope for additional taxation in this State, which has already shouldered the severe strain of complete prohibition, is very limited. The proposal, now under consideration by the Union Government, to levy death duties, may meet a small portion of our needs. For further augmentation of our revenues, to the extent expected by the Commission, we shall have to turn to the land. Our Land Revenue, which used to be the mainstay of our pre-war budgets, is still being maintained more or less on the old level. No doubt, we have controlled the price of foodgrains and therefore agriculturists growing food crops have not been able to earn their full share of the increased prices. But, on lands growing commercial crops such as groundnut, cotton, coconut, pepper, etc., the present assessment sits comparatively light. It is therefore proposed to bring in legislation before the House enhancing to some extent the assessment on lands growing commercial crops.

The execution of various irrigation schemes at enormous public expenditure has increased the value of lands newly brought under the plough. It is but fair and proper that a portion of this unearned increment is appropriated by the State to provide funds for development in other areas. A Bill for the compulsory levy of betterment fees is now coming up for the consideration of the House. The Land Revenue Reforms Committee has recommended the levy of a surcharge on agricultural holdings paying assessment of over Rs. 150. The Government propose to accept this recommendation and the necessary legislative measure is also coming up before the House. The Planning Commission has also recommended the levy of agricultural income-tax and the enhancement of irrigation rates. In view of the additional taxes now proposed, these questions will have to be considered in detail before they are accepted by the Government.

Personnel for Projects

Ours is the most deficit of all States in food and all that deficit is in rice. Wheat growing projects of the North, however attractive they might be from the All-India point of view, cannot bring in lasting succour to the under-nourished people of this State. We will indeed endeavour to implement the plan prepared by the Commission, but our food deficit can be met only if the vast waters, now running to waste into the sea from our river systems, can be diverted to the fertile plains on either side to grow more rice. For this purpose, we have drawn up a 15-year plan.

This programme includes the Krishna and the Godavari river valley projects which have been investigated in detail in consultation with international experts. A few hydro-electric projects have also been included in this programme.

Through our sustained efforts during the past few years we have managed to build up a first-rate engineering organization in this State. The key-personnel of this organization have been trained overseas and some of them are men capable of holding their own in international circles. Machinery and transport worth several lakhs of rupees with workshops for their maintenance have been set up and are giving excellent turn-over. To meet the acute shortage in technical personnel, four new Engineering Colleges and several polytechnics were opened and trained men are now coming out of them in adequate numbers. Aided by cheap power from our hydro-electric grid, the cement production of the State has more than doubled and is now adequate for the growing needs of these projects. A ring of competent contracting firms has also grown around these works and is giving excellent support to our engineers.

It is in the interests of the nation, and this State in particular, that this valuable organization capable of investing about Rs. 20 crores per year, with an economy in overheads, comparable to the best in the country, should be continuously used and improved on. As already indicated, the Planning Commission has in mind a Supplementary Programme costing about Rs. 300 crores to be initiated subject to external assistance being forthcoming. Let us hope and press that in the apportionment of priorities for schemes to be included in this Supplementary Programme, the special facilities obtaining in this State for the development of natural resources, will receive proper consideration and we will soon be in a position to sanction the execution of the more important items of our 15-year programme.

Special Planning Number

"Plan to raise the Nation's standard of living." This is the essence of terms of reference on which the Planning Commission, set up in 1950 with Jawaharlal Nehru as Chairman, went to work. The Planning Commission has since made its recommendations and these affect decisively the future welfare of the people in every sphere of national life.

How does the Five-Year Plan, formulated by the Commission, affect Madras State? What steps are being taken by the Madras Government to adopt and implement these proposals, with due regard to assessment and investigation of our resources, effective and balanced utilisation and determination of priorities?

Our Special Planning Number attempts to answer these and similar questions. The Special Number, containing articles by Ministers and heads of Government departments, will form an authoritative appreciation of the policies and programmes of Madras State in regard to the proposals of the National Commission.

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Copies can be had from the Director of Information and Publicity, Fort St. George, Madras.

Preparation and Publication of Electoral Rolls

The printing of the final lists of amendments to the preliminary electoral rolls for the Madras Legislative Assembly and the House of the People of this State has been completed in all the districts except Bellary, Srikanthapuram and Nellore. The printing of the lists in respect of the expected districts will have been completed by now.

The rolls have to be finally published by constituencies and not by taluks and sub-taluks as was done at the stage of preliminary publication. Lists of officers proposed to be appointed as Electoral Registration Officers for the Assembly and Parliamentary constituencies have been forwarded to the Election Commission for approval. It has been suggested therein that the Taluk Officer (Tahsildar or Deputy Tahsildar) may be the Electoral Registration Officer for an Assembly Constituency and that a Revenue Divisional Officer may be the Electoral Registration Officer for a Parliamentary Constituency. The final rolls will, as directed by the Election Commission, be published at the offices of the Electoral Registration Officers. It has been suggested to the Election Commission for its approval that the final rolls may be published non-statutorily at the same places in which the preliminary rolls were published. After the Election Commission has appointed the Electoral Registration Officers for the constituencies and directed the final publication of the rolls the electoral rolls by constituencies will be published in the form in which they will be used at the elections.

2. The number of voters in this State is a little over 27 millions.

Council Rolls

The draft electoral rolls for the Local Authorities, Graduates' and Teachers' Constituencies of the Madras Legislative Council were first prepared in 1950 with reference to 1st April 1950 as the qualifying date. Consequent on an amendment of the Representation of the People Act, 1950, the preparation of the above rolls with reference to 1st April 1951 as the qualifying date became necessary. These rolls are under preparation accordingly. The Central Government have now introduced a new rule 5-A, in the Representation of the People (Preparation of Electoral Rolls) Rules, 1950, according to which the Chief Electoral Officer has to issue a notice in Form IV-A prescribed therein inviting applications in the prescribed form for registration in the electoral rolls for the graduates' and teachers' constituencies. The time within which, such applications are to be submitted should be not less than 14 days from the publication of the notice. This notice can be issued only after the Council Constituencies have been delimited and the Electoral Registration Officers for those constituencies are appointed. It is only after these applications have been dealt with that the preliminary publication of the rolls can take place.

* (1) Public building in a local unit specified by the Electoral Registration Officer.

(2) Registration Office (of the Registration Department).

(3) Police Station.

(4) Office of the local body, if any, having jurisdiction over the local unit.

The Council Constituencies have not yet been finalized and the Presidents' Order relating to this delimitation is expected to be issued during the present session of Parliament. The Electoral Registration Officers for these constituencies have not yet therefore been appointed. After the receipt of claims and objections to the preliminary rolls and the decisions of the Revising Authority thereon, the rolls will be finalized and then finally published. As the Council Constituencies have not yet been delimited, the final publication of the Council rolls will be later than the publication of the rolls relating to the Madras Legislative Assembly and the House of the People.

Judging from the draft rolls prepared in 1950 the total number of voters in the State in the Local Authorities', Graduates' and Teachers' Constituencies will be about 8,218, 24,904 and 16,557, respectively or about 49,500 voters in all.

Delimitation of Constituencies

The Delimitation of Parliamentary and Assembly Constituencies (Madras) Order, 1951, as modified by Parliament has been published in the *Gazette of India*. For giving wide publicity to this Order, the republication of the Order in the *Fort St. George Gazette* has been arranged. Steps are also being taken to make copies of the Order available to the public for sale.

The number of constituencies is as follows :—

	Single Member Constituencies.	Plural Member Constituencies with one general seat and one seat reserved for the Scheduled Castes.	Plural Member Constituencies with one general seat and one seat reserved for the Scheduled Tribes.
Madras Legislative Assembly	243	62	4
House of the People	49	12	1

As stated earlier, the President's Order relating to the Council Constituencies in this State is expected to be issued during the present session of Parliament.

Electoral Law

The representation of the People Act, 1951, which contains the law relating to the conduct of Elections has been enacted by Parliament and it has been republished in the *Fort St. George Gazette*. The rules under that Act have yet to be issued by the Government of India. These will also be republished in the *Fort St. George Gazette*, and copies of the Act and Rules will also be made available for sale to the public, both in English and in the principal languages in this State.

Symbol System

The Election Commission has so far allotted symbols for thirteen All-India Political Parties. The Election

LAW AND ORDER

Relation with the public have been established on a firmer basis as a result of the constant reminder to men that they should secure the co-operation of the public by courteous behaviour. The Courtesy week was inaugurated on 16th August 1951.

In order to meet a possible contingency, the City Police have drawn up a scheme for throwing a cordon round the City with a view to search passing vehicles and apprehend offenders who might be escaping from the City after a dacoity or bank raid. A rehearsal of the scheme which was held recently was a success and it is proposed to perfect the system by further rehearsal.

Jeep patrols continue to be sent out to areas where grave crimes are usually reported and this system, has produced marked results on the preventive side.

Crime.—An efficient informant system has been organized throughout the City and liberal grants from special rewards are made to encourage informants. This and the Station Vigilance Committee are supplying valuable information and several cases are detected. To cite one of two examples, a gang of criminals who had their hideout in Ayyanavaram and who were operating in the City were arrested as a result of information furnished by an informant and the information furnished by a member of Vigilance Committee resulted by the detection of four house breaking cases and the arrest of two notorious K.Ds.

Traffic.—Special attention has been paid to relieve the traffic congestion in the City. As a result of the Conference held with railway authorities it has been decided to close the present exit gate on General Hospital Road and open a new one in Wall Tax Road. This new arrangement which will be introduced shortly is expected to relieve, to a very great extent, the congestion in front of the Central Station. Other measures to ease heavy traffic congestion in the City include the closure for lorry traffic certain streets in the City and the making into "one way" street every alternate of street, east of Mint Street and north of China Bazaar Road up to the Broadway.

At a meeting of the lorry owners convened recently the duties and responsibilities of the owners were explained to them. It was also impressed upon them that they should exercise better control over their drivers. While they were assured of the best consideration for their genuine grievances and difficulties it was also made clear to them that any infringement on the part of owners or their drivers of the conditions of the permit and the rules of the road would not be tolerated.

As pedestrians are generally not keeping to the pavements and jay walking is prevalent in highly congested areas such as General Hospital Bridge, Mount Road, Chintadripet Bazaar, etc., intensified action is being taken under rule 44 of the Madras Traffic Rules.

Fire Service.—During the period from May to August 1951, 35 serious fires occurred in this State. Property to the extent of Rs. 32,33,640 was saved by the Madras Fire Service and the property destroyed in them is estimated Rs. 9,01,760.

An analysis of the reports of the fire accidents received from districts shows that fires occur mostly in rural areas and that such occurrences are not immediately reported to the nearest fire stations. Government are considering what steps could be taken to educate the villages in this direction.

The Madras Fire Service is not only fighting fires and saving property from destruction but is also assisting agriculturists and lending a hand in the Grow More Food campaign. Owing to the failure of the monsoon there is a great demand for pump sets to irrigate short term crops. As pump sets are in short supply the Government, as a special case, permitted the use of Fire Service pumps by agriculturists on payment of small hire charges.

The static water tanks now under the custody of the Fire Service Department have been allowed to be used as Fish nurseries in certain districts.

Subversive Activities

Since the last press conference held on the 7th June, the activities of the subversive elements have been further brought under control. In the Circars and in the rest of the State, the situation continued to be quiet; in Kurnool district, which has been marked for some activity since December last, there was one serious incident at the beginning of June, in which a gang of about 20 persons raided Gadivelamula Police Station in Nandyal Circle. The raiders suddenly opened fire on the police staff and took away some muskets and ammunition in the Station. Adequate action is being taken against the Police staff concerned. As mentioned earlier, apart from this serious incident, their activity has been progressively coming down, and though there were about 5 incidents in June, there was only one in July and one early in August, and the latter half of August has been free from any incidents.

During the period, a number of active communists in the area have also been apprehended, six important communists, some of whom were Dalam leaders, were arrested on 11th August in Homkaram Forest; a week later, a Dalam leader was arrested by the special duty staff in Guntur district; another week later yet another member of a Dalam surrendered before the Police in Venukonda. Government are confident that the improvement in the situation will be kept up.

Communal.—A minor clash between Hindus and Muslims of Guntur occurred on 12th August over the question of playing music before a mosque. The clash resulted in the death of a young child and in injuries to three persons of both the communities. Feelings ran high and preparations were made by Hindus to take a procession with music in front of the mosque on the occasion of the Independence Day. The local authorities have however kept a careful watch over the situation and it is at present reported that the situation is quiet.

Miscellaneous.—On 30th August, Customs officials with a posse of Special Armed Police raided Meenambur village in South Arcot district for smuggled goods. A crowd of about 200 villagers offered resistance to the party and tried to prevent them from searching a house in spite of the search being authorized and personally directed by a Magistrate. As the Police party was in danger of being overpowered, the Magistrate ordered the Police to open fire. Thirty rounds were fired and nine villagers died and 16 others were injured. The Collector was satisfied after an enquiry that the firing ordered by the Magistrate was fully justified. The injured are being properly attended to in the Headquarters Hospital.

Detentions.—The number of detenus released since the last press conference is 50. Out of a total of 161 persons still in detention, 48 persons are now on parole. Of the

PROGRESS OF AMELIORATIVE MEASURES



Improved methods being adopted in the manufacture of Palm Jaggery under the Palm Gur Development Scheme

A neera stall run by the Vannarpet Jaggery Co-operative Society in the Tirunelveli District



Members of the Variapuram milk supply society in the Cuddapah District are assembled at the milking yard

Commission has stated that the question of allotment of symbols to parties functioning only on a State basis should be taken up by the Chief Electoral Officer of this State after the All-India list has been finalised by it. The further communication from the Election Commission in this regard is awaited.

Programme of Elections

It is expected that the notification calling upon the Assembly and Parliamentary Constituencies of this State to elect members will be published on the 7th November 1951 and the polling will commence on 2nd January 1952 and will be completed by the 25th of that month. The last date for nominations is expected to be 21st November 1951. It is hoped to complete the declaration of the results in respect of all the above elections in the State by the 11th of February 1952. Elections by the New Madras Legislative Assembly of members to the Madras Legislative Council will commence in the middle of February 1952 and will be completed by the 18th March 1952. Regarding elections to the Local Authorities, Graduates' and Teachers' Constituencies of the Madras Legislative Council, this Government have expressed themselves in favour of postal ballot.

All the elaborate arrangements which have to be made in connection with the conduct of these unprecedented elections on the basis of adult franchise are receiving careful attention and will be completed well in time. The Collectors have been instructed to give publicity to the lists of polling stations which are proposed to be set up for the conduct of these elections, and copies of the lists will be furnished to all political parties in the State; and any representation received within the time specified will be duly considered before the lists are finalised. Normally there will be 750 voters allotted to a booth and a voter will not have to travel more than 3 miles to record his vote. Except in remote hilly tracts, as in the Agencies, where the population is very small and scattered, there will be separate booths for men and women voters at each polling station. The polling booths for gosha women will be manned entirely by women staff.

The polling for the Madras Legislative Assembly and House of the people will take place simultaneously at each polling station. The actual polling is expected to take place on 9 days as specified below :—

Date.	Names of the Parliamentary Constituencies in which the polling will take place on the date in column (1).
(1)	(2)
2— 1—1952	Rajahmundry, Ongole, Bellary, Vellore, Cuddalore, Madurai, South Kanara (North) and Ponnani.
5— 1—1952	Narasaraopet, Nellore, Kurnool, Wandiwash, Tindivanam and Srivilliputtur.
8— 1—1952	Visakhapatnam, Guntur, Chingleput, Kancheepuram, Krishnagiri, Coimbatore, Aruppukottai, Ramanathapuram, South Kanara (South) and Malappuram.
9— 1—1952	Anantapur and Mayuram.
11— 1—1952	Tenali, Trivellore and Dharmapuri.
12— 1—1952	Vizianagaram, Kakinada, Penukonda, Pollachi, Tanjore, Srivaikuntam, Dindigul and Kozhkode.

Names of the Parliamentary Constituencies in which the polling will take place on the date in column (1):

(1)	(2)
16— 1—1952	Srikakulam, Gudivada, Vijayavada, Nandyal, Madras, Salem, Tiruppur, Pudukkottai, Kumbakonam, Tirunelveli, Periyakulam and Telliacherry.
21— 1—1952	Parvatipuram, Eluru, Cuddapah, Tirupati, Tiruchengode, Tiruchirappalli, Sankaranayinarcoil and Cannanore.
25— 1—1952	Pathapatnam, Masulipatnam, Chittoor, Erode and Perambalur.

The polling will take place simultaneously in each Parliamentary constituency and in the State Assembly Constituencies comprising the same area.

A new feature at the forthcoming elections will be the use of indelible ink with which every voter coming into a polling booth will be marked on his left fore-finger before he is given his ballot papers.

Supply of Steel Ballot Boxes

In view of the fact that polling stations for the elections under the New Constitution have to be located also in many out-of-the-way villages with poor means of communication and the ballot boxes have to be transported often under the most unfavourable conditions, the Government of India have decided that only steel ballot boxes should be used in the elections in future so as to withstand the risks of the roughest of journeys. On the assumption that there will be, on an average, 4 candidates contesting a single-member constituency and 8 candidates contesting a plural-member constituency, the total requirements of this State for the ensuing elections are about 390,000 steel ballot boxes. This Government have accordingly placed orders with Messrs. Bungo Steel Furniture, Limited, Calcutta, and Messrs. Hyderabad Alwyn Metal Works, Limited, Hyderabad, for the supply of two lakhs ten thousand and one lakh eighty thousand ballot boxes, respectively. The dimensions of the boxes to be supplied by the respective firms are 9" x 9" x 3" and 9" x 9" x 7". The boxes to be used for the constituencies of the House of the People will be painted in green and those to be used for the constituencies of the State Assembly will be painted in "mahogany" (Chocolate).

The boxes will be made of 20" gauge steel and their slots will be painted bright white half-an-inch wide so that they may be easily discernible to the voters.

Stepping up Cotton Production

With a view to stepping up cotton production, the Government have sanctioned a scheme for seed-multiplication of cotton in 600 acres of Panyan area in Kurnool district.

Grant for Harijan School Building

The Government have sanctioned a grant of Rs. 13,780 towards the construction of a building, to house the Olcott Memorial School for Harijans, located at Adyar, Madras.

Maintenance of Peace

The acute economic conditions in the State are adversely affecting crime which during the month of June showed a slight increase but detection is steadily improving. A notable feature of detection during August was the unearthing of a gang of eight Yenadis reported to be responsible for a series of house-breakings in the Narasapet taluk, the temple dacoity of Sangamjagarlamudi and the attacks on the Railway Station of Savalyapuram and Pedukurapad, all in Guntur district. Six members of the gang have been arrested and a major portion of the properties concerned in all the cases was recovered. A surprise raid by the Sub-Inspector of Police, Kuthemannahkoil resulted in the arrest of four hirelings of a factionist of Lalpet and the recovery of two unlicensed revolvers, 24 cartridges and a few knives.

Action against Police officials for misconduct and corruption.—One officiating Deputy Superintendent of Police was compulsorily retired from service for corruption. One Subedar of the S.A.P. was removed from service for grave misconduct and embezzlement. A Sub-Inspector of Police of South Kanara was removed from service under the orders of Government for gross misconduct towards some members of the public. An Inspector of Police in South Arcot district who threatened a merchant with victimization with a view to extort money from him was successfully trapped on 4th September 1951 by the District Superintendent of Police. The Inspector has been placed under suspension pending further action. Six constables found in the company of gamblers were arrested while in the act of gambling in Sivaganga Subdivision, Ramanathapuram district and are now under suspension. Departmental action is being taken against them. Two others of the same subdivision are being dealt with for accepting illegal gratification.

Anti-Blackmarketing.—The Anti-Blackmarketing staff in the districts have been working with vigour and zeal to counter blackmarketing. The following statement shows in one view the number of cases registered and the amount of property involved from January to July this year.

Month.	Number of cases registered.	Property involved.
January ..	298	1,00,809
February ..	460	2,02,922
March ..	237	1,29,986
April ..	162	60,689
May ..	240	44,994
June ..		
July ..		

The more outstanding of these blackmarketing cases include the seizure of cotton yarn worth Rs. 13,000 and six bags of cotton waste together with a lorry at Walayar in Madras district, the seizure of iron materials worth Rs. 10,000 in Visakhapatnam South and the seizure of 600 bags of cereals at Virudunagar. In the first case at Walayar, the police also seized a sum of Rs. 3,500 which was offered as a bribe.

The Government have revised the scale of pay of Deputy Superintendent of Police with effect from 29th June 1951. The old and revised scales are as follows :—

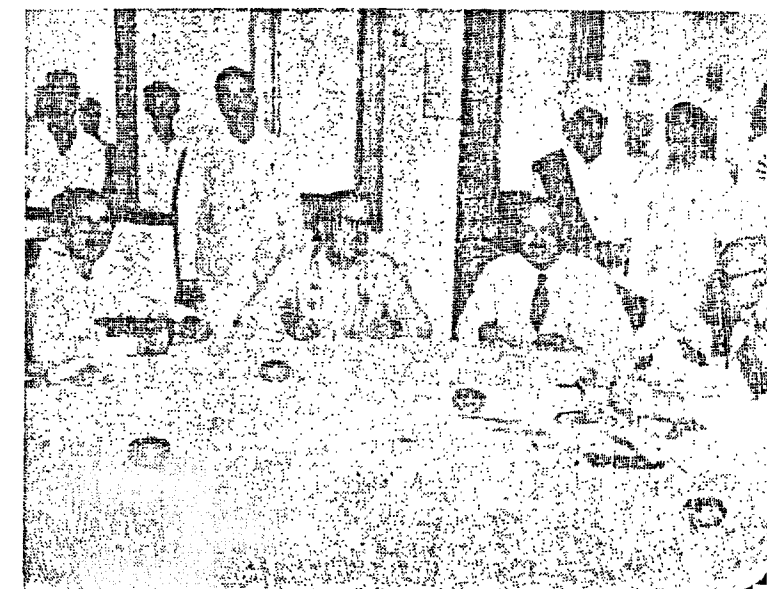
Old—Rs. 250—30/2—310—40/2—350—50/2—600.
Revised—Rs. 280—30/2—310—40/2—350—50/2—650.

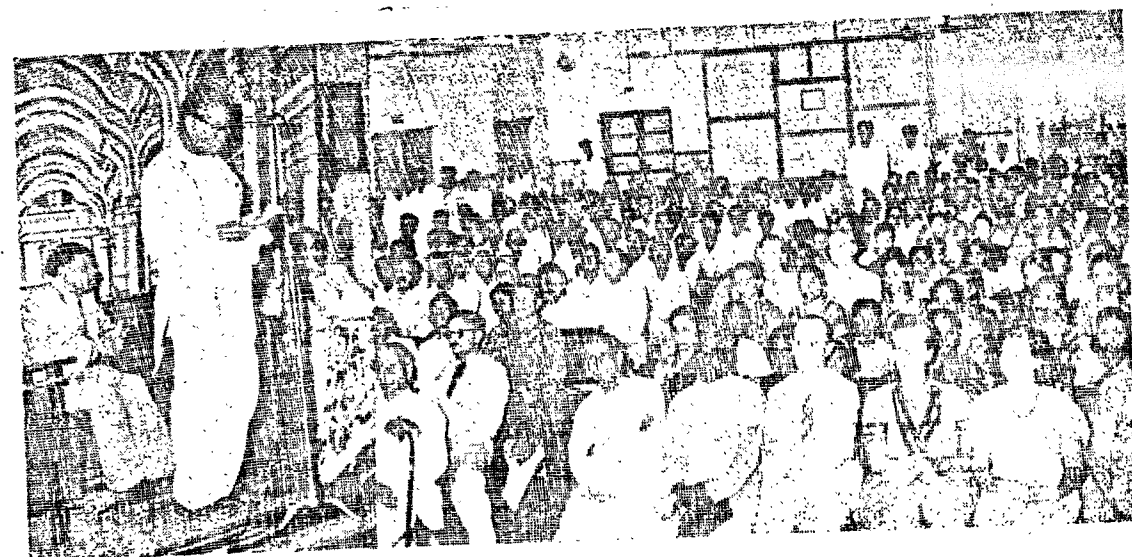
The Government of Madras have agreed to give practical training in districts to seven I.Ps. Probationers allotted to Part B States on completion of their training at the Central Police Training College, Mount Abu. Six of them are allotted to Hyderabad and one to Travancore-Cochin.

Courtesy Week.—In order to improve the relations between the Police and the public and to enlist in greater measure public co-operation in the discharge of the duties of the Police, it was decided that a "Courtesy Week" should be conducted in the Madras City and all the District Headquarters for a week commencing from 16th August 1951. The main feature of the scheme are (i) every morning in the week, a courtesy pledge should be taken by all ranks, (ii) Inspectors should explain to the men the importance of courtesy and exhort them to do at least one courteous act during the day, (iii) placards containing slogans regarding the beneficial effects of courtesy to the public should be displayed in all police stations, offices and line huts, (iv) a reward should be given for the best instance of courtesy in each station during the Courtesy week, (v) Press correspondents should be taken round the police stations and offices on the inauguration day so that they may know at first hand of the courteous manner in which the public are received and treated.

Madras City—Law and Order.—In order to rush Police assistance to quell disturbance of any kind causing breach of peace within the City, the public are being educated to ring up telephone No. 93 "Control Room" by exhibiting slides in all the theatres in the City. During August, the Commissioner of Police issued special instructions to round up disorderly elements.

The final meeting of the Minimum Wages Committee recently held in the Secretariat. Photo shows Sri H. Sitarama Reddi, Minister for Labour and other members of the Committee.





Sri P. S. Kumaraswami Raja, Chief Minister addressing the gathering on the occasion

Chief Minister inspecting the guard of honour provided by the inmates



Another photo taken on the occasion showing besides the Chief Minister, Dr. T. S. S. Rajan, Former Minister for Public Health, Sri R. Ramanathan Chettiar, Mayor and others

LAW AND ORDER

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MADRAS INFORMATION

persons released, six were released on the recommendations of the Advisory Board, eight under orders of the High Court and thirty by the Government after a review of their cases. The Government have been periodically reviewing the cases of all persons in detention or parole, to see if any of them can be safely released without prejudicially affecting the interests of law and order on the security of the State.

Detentions for Blackmarketing.—Since the last conference, four more persons have been detained for indulging in blackmarketing operations.

Free and Fair Elections.—The Government have recently made it clear that the criticisms often levelled against the Government, accusing them of imposing unnecessary restrictions on the holding of public meetings, etc., as intended to stifle the activities of rival organizations, are unfounded. It has also been made clear that instructions

have been issued to the district authorities to provide the maximum facilities for all political organizations for the purposes of electioneering propaganda without any distinction, imposing only such minimum or unavoidable restrictions as may be necessary in the interests of law and order. In order to avoid any clash between contesting parties, the Government are, at the same time, anxious that every political organization should comply strictly with the requirements of law in carrying on their electioneering propaganda. Where licences are required for holding of meetings or of taking out of processions or the use of loud speakers, the Government expect that the necessary licences will be obtained. Only such co-operation with local authorities, by being kept duly and sufficiently informed of the intentions of contesting parties in regard to these matters, can enable them to provide the necessary bandobast and thus ensure a peaceful atmosphere for the conduct of electioneering propaganda and the holding of free elections.

Revival of Collective Consciousness

It should be the first aim of the co-operative movement to revive and re-establish collective consciousness as a vital force in the country's economy. The spirit of mutual help and collective action have got to be inculcated persistently by every one connected with the movement. No doubt, something is being done in this direction at Co-operative Conferences and at general body meetings of societies, etc. But this is not enough. What is required is, that the idea of co-operative consciousness must be based on the daily work and achievements of co-operative societies which have to be exhorted to show leadership in agricultural and industrial practices. Some leeway can be made if co-operative seminars are conducted. But before they are held, interested co-operators will have to be invited to submit papers and schemes, on receipt of which, the question of when and of whom the seminar is to be held can be considered.

It is gratifying that the Madras Provincial Co-operative Union has offered to address co-operators and co-operative institutions interested in the seminar to submit papers and schemes for consideration and also to prepare a tentative scheme of work itself. The Provincial Co-operative Union has also contacted the T.U.C.S. with a view to introducing some button-like symbol embossed with a design and a motto among its members, in order to create a proper consciousness of being a co-operator. If the experiment succeeds, it may be extended to other branches of the co-operative movement, and ultimately to the entire movement itself.

The target fixed by the All-India Co-operative Planning Committee for bringing not less than 50 per cent of villages within the ambit of rural credit societies, has already been reached. In order to facilitate the attainment of the target suggested by the same Committee for membership of rural credit societies to the extent of 30 per cent of the rural population, it is proposed to give regards to societies which have enrolled the highest percentage of population within the jurisdiction of each Central Bank.

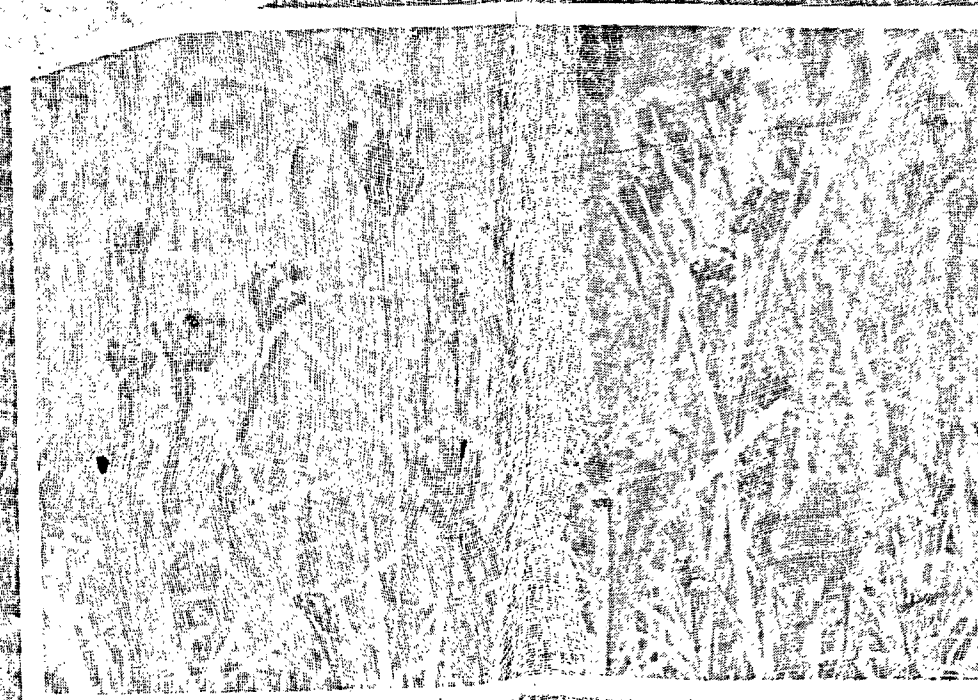
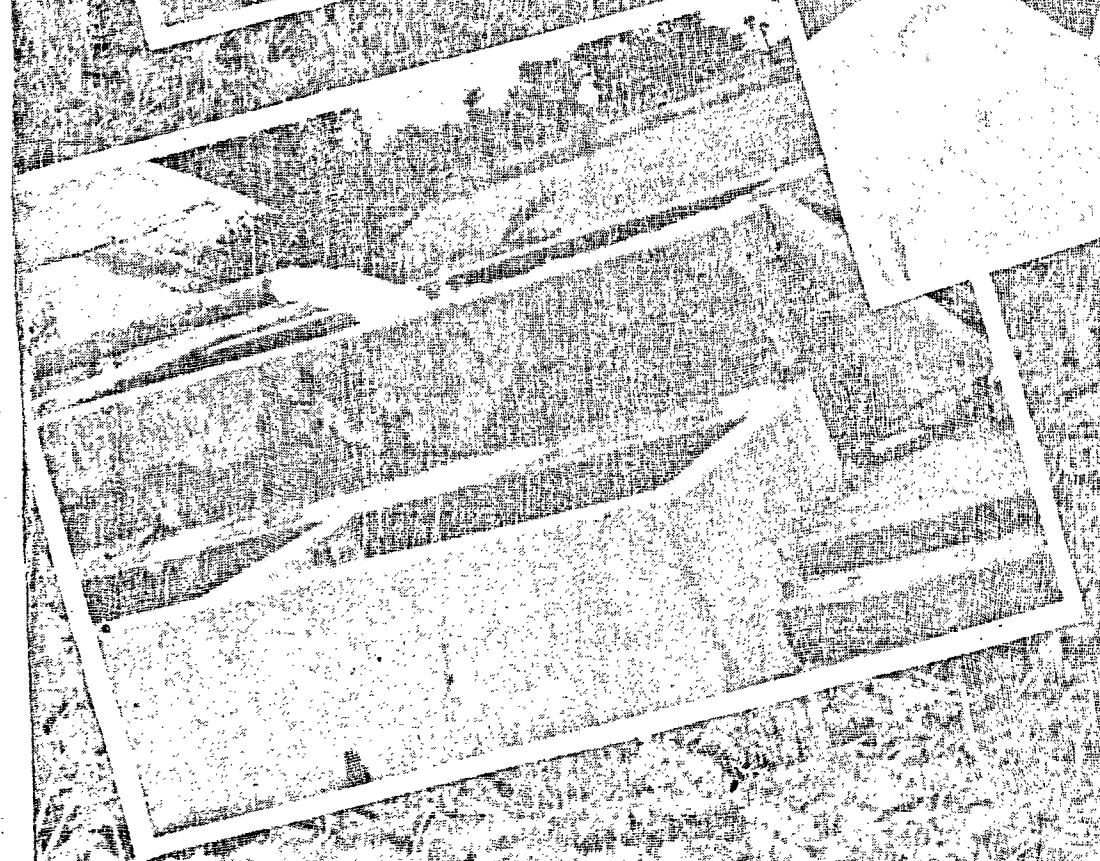
Census of Surplus Labour

It has been suggested that all co-operative societies may take a census of surplus labour, land and materials and then fix a rent payable for their services required by the members. If any member fails to accept the plan for such services, the society may withdraw its unlimited liability for his future loans, and if all members accept the plan, the society, as a whole may receive loans at preferential rates of interest. As the census is intended to more fully capitalise the land, labour and resources of co-operative societies, even the census of one society of the existing unemployment of such resources would be illuminating. This question is under consideration.

Co-operatives have been encouraging the use of agricultural machinery by their members. Four marketing societies, one marketing federation, 2 agricultural credit societies, one central stores and 2 primary stores have purchased machinery such as tractors, pump-sets and power drills for hiring out to their members. The Coimbatore Co-operative Central Bank has purchased one power drill and one jumper and has let them out on hire. Rural Credit Societies have been giving special loans to their members not exceeding Rs. 3,500 for the purchase and installation of pump-sets, repayable within a period of 5 years, with a view to stepping up agricultural production. Urban Banks are also giving such loans to their agriculturist members.



Sri R. Govindarajulu Naidu of Orakadu village in Chingleput district won the district prize in the recent crop yield competition by producing 8,071½ lb. of paddy per acre. Photo shows Sri R. Govindarajulu Naidu (inset, left centre) and his farm. The ploughing, the Oil Engine pump at work, Compost heap, the standing crop (Summer Kuruvai Crop ADT 3) and the ragi field can be seen in the picture.



Food and People In India and Pakistan

By SRIPATHI CHANDRASEKHAR.

(The author, writing in 'Food and People' an UNESCO publication, discusses the population and food problems of India and Pakistan. The following are extracts from the article on two topics, Agriculture and Family Planning.)

Agriculture

The problem of population has to be considered in relation to the food supply. Nearly, seventy per cent of the population is dependent on agriculture for a livelihood. As the mouths to be fed are on the increase, the area of productive land diminishes. That there is pressure on the land in India to-day cannot be denied.

Indian agriculture is characterised by primitive methods of farming, dependence on the vagaries of the monsoon and subdivision and fragmentation of land, consequent on the Hindu and Muslim Laws of inheritance (which enjoin succession to immovable property by all male heirs, usually in equal proportion). Holdings are uneconomic and there is excessive dependence by the majority of the people on land for livelihood. Moreover, a quasi-medieval land-tax system has created a large number of parasitic middlemen who have come to possess undue rights on land, claiming a considerable share of the income arising from it without deserving it. The primitive technique of Indian farming is responsible not only for low yield per head, even when compared with countries like Japan and China, but also for the gradual deterioration of land with soil erosion and deforestation.

This does not mean, however, that there is no immediate scope for improving Indian farms and their yields. According to 1939 official statistics, one-third of the cultivable land in both the Dominion lies idle—not fallow. Statistics for the undivided India (which exclude the Indian States) are as follows:—

Agricultural area of the provinces.	Millions of acres.
Net area of survey	669.0
Area under forest	89.5
Area not available for cultivation	145.0
Cultivable waste other than fallow	153.6
Fallow land	51.0
Net area sown with crops	229.9

Thus, of a cultivable area of 432 acres, only 53 per cent of land is cultivable but left waste. Then, there is land 'not available for cultivation'. About this land, the Royal Agricultural Commission (India, 1928) said, 'It is difficult to believe that the whole of the vast area now classed as not available for cultivation, amounting as it does to 150 million acres or 22.5 per cent of the total area of British India (Provinces) is either not available for cultivation or not suitable for cultivation.'

India has, therefore, not exhausted the supply of her cultivable land, and what is cultivated appears to be eroded and exhausted because of the primitive technique of farming. With modern methods of agricultural science

of erosion prevention and soil reclamation, the cultivated land can be made brought under profitable cultivation. Such an improvement would be welcome, but it will touch only a fringe of the problem.

While increased yield and more acreage of cultivation are possible with the aid of science, they cannot by themselves afford a better standard of living to the Indian population, or completely solve the population problem unless and until a substantial number of people, now dependent on land are transferred to some other productive employment such as industry.

Family Planning

The last and the most important solution is that of family planning. It is too late in the day for India to discuss the pros and cons of this question. The arguments for and against have been energetically propounded and the scientific verdict has been in favour of it. Family planning certainly has a vital role to play in India's population policy, along with the modernization of agriculture and the industrialization of the Indian economy.

Apart from the general rural conservatism of the masses who offer resistance to every reform, there is no organized resistance either by the Government or the Church, as in some countries. Nor are the Indian religions opposed to planning parenthood. It will not be a hard task, therefore, to enlighten the public mind in India as to the benefits of family planning. Once the public health officials begin promoting it, it will spread even to the traditionally forgotten villages. Once Indian mothers are educated in the knowledge that there is a scientific device to meet their desperate, albeit latent, demands, family planning can easily make headway. There are, of course, certain special difficulties which should be taken into consideration before planning a network of birth control clinics. It should be recognized that a majority of Indian people live under backward conditions. Matters like bathrooms, running water, privacy, the cheapness, reliability, and availability of contraceptives, and the illiteracy of women, need attention. But no matter what the obstacle, this reform must be pioneered.

Fortunately, the question has not been completely ignored in India. The authoritative Health Survey and Development Committee appointed by the Government of India observe in their Report (1946), 'All of us are agreed that when childbearing is likely to result in injury to mother or infant, there is every justification for the practice of contraception. In such cases it should be the responsibility of Governments to provide instruction regarding contraception in maternity and child-welfare centres, dispensaries, hospitals, and any other public institutions which administer medical aid to women. We also consider that the supply of contraceptive requisites should be made free of cost by the State to necessitous women when the practice is advocated for reasons of health. There is also unanimity among us in respect of State action in two other directions, namely, (1) control over

the manufacture and sale of contraceptives, as in the case of food and drugs, and (2) assistance from public funds towards research for the production and sale of effective contraceptives.

But the most important need in India is to provide contraceptive advice on ECONOMIC grounds. Even this authoritative committee did not include poverty and the low standard of living as a pressing reason for adopting contraception and limiting the size of the family.

The Indian National Congress, however, set up during the war a National Planning Commission under the Chairmanship of the present Prime Minister, Pandit Jawaharlal Nehru. One of the committee's resolutions recommends, 'In the interest of social economy, family happiness and national planning, family planning and a limitation of children are essential, and the State should adopt a policy to encourage these. It is desirable to lay stress as well as to spread knowledge on cheap and safe methods of birth control. Birth control clinics should be established and other necessary measures taken in this regard and to prevent the use or advertisement of harmful methods.' The resolution is significant enough but goes on to add, 'An eugenic programme should include the sterilization of persons suffering from transmissible diseases of a serious nature, such as insanity or epilepsy'. This resolution was adopted by the National Planning Commission when India was not free and when it had no governmental authority. Now that the Chairman of the Committee is the Prime Minister of India, it is to be hoped that the resolution will not remain a pious sentiment on paper, but will be translated into action. India's population problem is distressing enough as it is to-day, and delay will only accentuate the difficulty.

Subsidiary Foods

To tide over the food shortage in the State, the Madras Government have been encouraging the cultivation of subsidiary food crops like sweet potato, tapioca, kurkan, etc. Up to 1950-51 the Government had supplied seed materials free to poor ryots in order to encourage them to grow these subsidiary food crops. This gave a good fillip to the cultivators to extend the area under these crops.

For 1951-52 the Government have sanctioned the distribution of seed materials of tapioca, sweet potato, kurkan, etc., at half the cost price and have permitted the Director of Agriculture, Madras to incur an expenditure of Rs. 12,000 for the purchase of seed materials. This amount will be utilized for purchasing seed materials at market rates and supplying the same at half the cost price to deserving agriculturists. The loss thus sustained (Rs. 6,000) will be borne by the Government of Madras, and the Government of India in equal proportions. This concession is expected to encourage poor ryots to take up to the cultivation of this subsidiary crop and thus to bridge the gulf between production and consumption. The scheme will be in force in all the districts where there is scope for the cultivation of tapioca, sweet potato, etc. Ryots will also be given loans by the Agricultural Department for the purchase of chemical fertilizers. There will thus be a great scope for increasing the cultivation of these root crops.

An illustrated booklet is being published by the Commissioner of Food Production on the cultivation of tapioca, preparation of tapioca flour, sago, etc., and also on the various preparations that could be made from tapioca. Ryots are therefore requested to take advantage of the concessions given by the Government to extend the cultivation of these subsidiary food crops.

Information about Water-supply through Radio

Government have sanctioned a scheme for the broadcasting of news about water-supply position in irrigation reservoirs and dams and its regulations, etc., for the benefit of the ryots in East Godavari, West Godavari, Krishna, South Arcot and Madurai districts. Information about such water position for Tamil districts will be broadcast from All-India Radio, Tiruchirappalli, while similar information for Telugu districts will be broadcast from All-India Radio, Madras, and relayed by All-India Radio, Vijayavada, once a week.

Ambulance Van for Kozhikode Hospital

The Government have sanctioned the purchase of an ambulance van at a cost not exceeding Rs. 15,000 for use in the Government Headquarters Hospital, Kozhikode.

Food Offences and Punishments Awarded

During the fortnight ending July 15, 1951, 559 cases of prosecutions for food offences were disposed of in the Madras State. Fines, ranging from Re. 1 to Rs. 1,000 and sentences of imprisonment up to three months, were imposed. The accused persons were of several grades of social standing.

Raju Muthiriyar of Tanjore district was fined Rs. 200 and Dubba Golliah, cultivator of Srikakulam, was fined Rs. 1,000 and sentenced to undergo rigorous imprisonment for 15 days for illicit transport of foodgrains. A fine of Rs. 300 was imposed on V. Subba Rao, West Godavari district, for hulling paddy without permit. For purchase of rice from an unauthorized dealer, Meka Adinarayana and P. Janardhana Rao of East Godavari district were each fined Rs. 200. In Tiruchirappalli district M. K. R. Palanimuthu, who transported foodgrains during night without permit, was fined Rs. 200.

During the same fortnight, departmental punishments, such as warnings, fines, forfeiture and enhancement of security deposits, cancellation of retail and wholesale licences, etc., were also awarded in 183 cases.

The Pulichintala Project

There has been some agitation in the columns of the Press and elsewhere, urging the immediate execution of the Krishna Reservoir (Pulichintala Project) in preference to any other scheme of the Krishna river. A comparison has been sought to be made between the Pulichintala Project and the Krishna Pennar Project, and claims have been put forward to suggest that the former is a better project. As the agitation is based on a misconception of facts and figures, the Government consider that the correct position should be placed before the public.

The Pulichintala Project was investigated and prepared between 1908 and 1911, and contemplated the irrigation of only 9 lakhs of acres of land, comprising 6 lakhs acres of new land in the Guntur district, a new area of 1.25 lakhs in the Krishna Delta, and a crop in the second-crop season over an extent of 1.70 lakhs acres on existing wet and submersible lands in the same delta. Although the Pulichintala Project was not proceeded with, the extent of 1.25 lakhs acres of new land in the Krishna Delta has been brought under wet cultivation by the installation, round about 1925, of 6 feet shutters over the Vijayavada Anicut. If, therefore, the old project were to be taken up now, it could irrigate only about 6 lakhs acres of new area and a crop in the second-crop season over 1.70 lakhs acres of existing single-crop wet and submersible lands. In the course of the agitation, the claim has, however, been made that the project could irrigate 1.3 lakhs of acres in the Krishna Valley on both sides of the river. But no where has an indication been given whether 16 lakhs acres could really be commanded by the old project.

It has been suggested that the 16 lakhs acres of land, claimed to be capable of being irrigated, could be fed from a reservoir with an effective capacity of 100,000 cubic feet and with a dam comprising masonry to the extent of 18 c.ft. and earth work to the extent of 100 m.c.ft. No details in respect of these figures have been given, but presumably the effective capacity suggested refers to the net capacity proposed in the old Project Report, prepared nearly 40 years ago, for irrigating an extent of only 9 lakhs acres. If 16 lakhs acres were to be irrigated, including a very large area of second crop and power, a reservoir of considerably greater capacity (nearly double the capacity) and a much larger dam would be needed. The masonry work of even the old dam as suggested to be revised would be much more than 18 m.c.ft. (the old dam was for 59 m.c.ft.) and besides, account has to be taken of the number of shutters and sluices that would have to be provided in the dam for passing the enormous flood discharges of the Krishna, the catchment of the river at the dam-site being as much as 90,000 square miles. This would involve a large additional outlay on shutters. A bigger dam and reservoir would cost a great deal more, if it were at all feasible at the site. The protagonists of the project have put its cost at Rs. 18 crores. The cost of the project as estimated in 1910 was Rs. 6.4 crores for works or Rs. 8.33 crores inclusive of direct and indirect charges. The prices now prevailing are at least five times as great as those at the time the project was prepared. Comparison of originally figured and actual costs of Mettur Dam and works like the Lower Bhavani Project and Tungabhadra now under construction fully support this view. In the circumstances, the dam at Pulichintala would cost very

much more than has been claimed by the protagonists of the scheme. The addition of the cost of new canals and bigger reservoir to this old project might, when the project is fully investigated, will take the total cost of the project to something in the order of Rs. 50 crores to 60 crores. In this connexion, it may be mentioned that it is believed that the Government of Hyderabad have made a provision of Rs. 40 crores for their proposed reservoir on the Krishna and Nandikonda for irrigating 9 lakhs acres.

It has been further suggested by the protagonists of the Pulichintala Scheme that the scheme has been examined thoroughly and found to be capable of being executed immediately. On the contrary, the scheme was investigated over 40 years ago, and would require very detailed investigation, as several changes might be called for in the features of the project. As regards the contention that the scheme is easily feasible and has been highly recommended by experts, it may be stated that Col. Ellis who prepared the scheme 40 years ago recorded the following observations on two different occasions in 1915 and in 1917:—

"The project as prepared involves some great engineering difficulties which will not be removed by adopting the suggested deviations of the Inspector-General of Irrigation and I regard the prospects of a successful Krishna Project as poor, while the cost of such a project would be very great.

"Although I prepared the project myself and therefore would be naturally inclined to look on it with favour, I could not recommend its prosecution even if money were plentiful. Under the circumstances it is considered desirable to describe the project as unpromising and to say there is no immediate prospect of its being proceeded with.

"The Someswaram Diversion Dam Scheme should be investigated further before the Krishna can be again recommended for sanction, as it is possible it might prove the better scheme."

Referring to the Someswaram Dam at another place, Col. Ellis observed—

"It appears quite feasible to construct a diversion dam across Krishna at Someswaram, a place a short distance below the confluence of the Tungabhadra with the main Krishna and to divert flow of Krishna by a cut through the water shed ridge into the valley of the Pennar and drop it into that river for irrigation in the more arid tracts of Nellore district. The proposal would divert the water to a tract which has more need of it than Guntur district and should I think be further investigated."

(This is the very scheme of the Krishna Reservoir in the Krishna-Pennar Project, the storage part of which is twice that of Pulichintala.)

The observations made by the original author of the scheme, and whose well-known 'Manual on Irrigation,' constitutes the basis of instruction in irrigation in the Engineering Colleges, obviously deserve the greatest consideration.

Some have suggested that as a further stage of the Pulichintala Scheme, water from the Krishna Reservoir could be taken across the Gundalakamma river to the northern dry taluks of the Nellore district to reach the Pennar at

Care Food Package for Free Distribution

Intimation has been received from Mr. E. T. Greaves, Chief of Care Mission in India of a further gift of 72 Care food packages donated by 72 donors in America for free distribution among poor and needy people in the Madras State. Arrangements are being made for taking delivery of the food packages and distributing them in the scarcity areas of this State.

Cotton seeds.—In May 1951 Government imposed a ban on the movement of cotton seeds in the districts of Bellary, Anantapur, Cuddapah and Kurnool except under permits issued by the collectors concerned. The Government have since ordered that the ban should be removed with effect from 28th August 1951.

Research.—At the instance of the I.C.A.R., the Government have sanctioned a scheme for research on cashewnut for a period of one year in the first instance. The scheme envisages the establishment of a cashewnut research station at Mangalore at a suitable site to undertake the study of problems connected with cashew. The necessary staff also has been sanctioned for work connected with the scheme.

Based on the recommendations of Dr. Stewart on Soil Fertility investigations the Government have sanctioned a scheme for manurial, varietal, and agronomic studies to determine the optimum yield, for a period of three years, and the necessary staff for work connected with the scheme has been sanctioned.

False Allegations Against Government Servants : Legal Assistance to be Provided.

The Government have decided that Government servants, against whom false and malicious allegations of corruption are made, should be given legal assistance in order to enable them to take effective action against those making the allegations.

In accordance with this decision, the Government have ordered that, when there is good reason to believe that the allegations made against a Government servant are false and malicious and he wishes to take legal proceedings against the persons making them, the head of the department in the Presidency town, and in the mufassal the district head of the office, in which the Government servant is employed should, in consultation with the collector of the district, arrange for legal assistance through the appropriate law officer of the Government. Where the person defamed is himself the head of the department or the district head, the sanction of the State Government, or that of the authority, who is immediately superior to the district head, as the case may be, should be obtained.

the Sangam Anicut and from there a canal could supply water to the City of Madras. Such a proposal would require the closest possible technical scrutiny before it could be established as feasible. Moreover, the Krishna-Pennar Project provides for the taking of the waters of the Krishna river to reach the Pennar and for the irrigation of considerable area in the Nellore district, besides the supply of water to the City of Madras. There is no reason why extension of a scheme considered unpromising by its own author should be contemplated for the purpose of irrigating lands in the Nellore district and supplying water to the City of Madras, when the Krishna-Pennar Project, investigated only recently, would incidentally cater to the same objectives.

The Krishna-Pennar-Project is considered by experts to be good from every point of view and capable of furnishing a speedy solution to our food problem. It would benefit the districts of Kurnool, Cuddapah, Chittoor and Nellore and incidentally supply much needed drinking water to the City of Madras. It would also benefit a small area in the Chingleput and South Arcot districts. Considerable quantities of power would also be generated under this project and would facilitate the establishment of industries and rural electrification in the Kurnool, Cuddapah, Chittoor and Nellore districts. The Krishna-Pennar Project, comprising two reservoirs one over the Krishna and the other over the Pennar which together will contain nearly three and half times as much water as Pulichintala and would irrigate a total area of 22 lakhs acres of first crop and 15 lakhs acres of second crop, and generate 100,000 K.W. of continuous power out of the installed capacity for generating 250,000 K.W., would cost only about Rs. 133 crores and yield a return of 4 per cent on the capital. It has been designed to be executed in stages and the first stage comprising the construction of both the reservoirs and some of the canals would cost about half the amount and provide water for irrigating about 7 lakhs acres of first crop and about 14 lakhs acres of second crop, besides yielding the power referred to. The return on the capital outlay on the first stage would also be 4 per cent. Even taking the Krishna Reservoir alone of the project, it would hold twice as much water as the Pulichintala Reservoir besides being economic in terms of outlay and quantum of irrigation and production, and would benefit areas which, if the project were not executed, would continue to be hopelessly barren, and backward agriculturally, industrially and in every other respect. Much of the region which would be benefited by the Pulichintala Project has already been developed. The Government have not, however, been unmindful of the needs of the region. Provision has been made, with the concurrence of the Planning Commission and the States concerned, for the use of the waters of the Godavari and benefit and further development of the region in question.

In the circumstances, the obvious and only reasonable course for the Government of Madras to take is to pursue the execution of the Krishna-Pennar Project and utilize the Madras State's share of the waters of the Krishna, devise a co-ordinated scheme for the development of the Godavari and for bringing the Godavari waters to the Krishna, and construct a low dam or barrage at a point a few miles downstream of Pulichintala, where it would be possible to get beyond the hills and difficult country, to develop the region sought to be covered by the Pulichintala Project.

PUBLICATIONS OF THE ECONOMIC ADVISER TO GOVERNMENT OF MADRAS.

I. AN ESSAY ON NATIONAL INCOME AND EXPENDITURE IN INDIA.

By B. Natarajan, M.A., D.LITT.,
Economic Adviser to Government of Madras,
with a foreword by

Hon'ble Sri P. S. Kumaraswamy Raja,
Chief Minister of Madras.

Price Rs. 3.

Pages : 102.

The Information on the geographical distribution of National Income and on the changes in real Per Capita Income contained in your book contributes another important step forward and throws light on important economic problems India is facing.

—J. B. D. Derksen, Statistical Office, United Nations, Lake Success.

The Extrapolation of National Income and its estimated apportionment between provinces, though approximate, should prove useful for a number of purposes.

—Colin Clark, Director, Bureau of Industry, Brisbane, Australia.

II. FOOD AND AGRICULTURE IN MADRAS STATE.

By B. Natarajan, M.A., D.LITT.,
Economic Advisor to Government of Madras,
with a foreword by

Hon'ble Sri J. L. P. Roche Victoria,
Minister for Food and Fisheries.

Price Re. 1.

Pages : XXII 255.

The timeliness of the book, the wealth of factual material which it contains and the scholarly manner in which you have dealt with it combine to make the book a work, which should contribute in a very substantial way, to the solution of problems throughout India concerning the expansion of production and the rational distribution of food in India.

—Clifford C. Taylor, Counselor of Embassy (Agricultural) American Embassy, New Delhi.

While the book bears the marks of complete theoretical knowledge it is very practical and should be of great value to the Food Administrators and Agricultural Policy makers not only in Madras but also in other States.

—Dr. P. S. Lokanathan, Executive Secretary, ECAFE, Bangkok.

Dr. Natarajan's volume is a very helpful publication informative, exhaustive, documented and amply illustrated by charts, graphs and diagrams on a subject of more than contemporary and local importance. The problems discussed are basic to the entire Indian agricultural economy and the solutions suggested of an enduring character.

—All-India Radio Review.

Solution of the food problem has indeed become the main pre-occupation of the state and central Government. And for the citizen no duty seems more important at the moment than to gain an understanding of the real situation on the food front. This is the purpose of Dr. Natarajan's timely publication, which gives a historical account of the growth of the food problem as well as a critical exposition of the steps taken so far to solve it.

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Dr. Natarajan presents an independent and clear estimate of the food situation in the Madras State.

—'The Mail.'

If Rural Economics is to be of any use to our students your book does certainly give them a good deal to learn and think about.

—Rev. Fr. Basenach, Professor of Economics, Loyola College, Madras.

Obtainable from : The Superintendent, Government Press, Mount Road, Madras.

IRRIGATION

The Formula of Remunerative Return and Government's New Attitude

A few weeks ago, there was some criticism in letters to the Press, of Government's policy in taking up unremunerative irrigation schemes for execution. In particular, it was alleged that by taking up such schemes the Government were placing an ever increasing burden on the general tax-payer by way of interest charges. In view of this and other criticisms, the Government desire to place before the public, material to judge for themselves whether the Government policy is sound and desirable.

The idea of securing a remunerative return by way of direct receipts on the funds invested in irrigation projects was initiated in January 1881, by the British Administrators then in charge, who were very reluctant to make any additions to the sterling liabilities of the Government of India. Irrigation projects which yielded an estimated return, equal to the rate fixed periodically as the test of productivity, were considered fit to be taken up, the others being taken up only in very exceptional cases, if they were likely to serve famine-ridden areas, where a departure from the general policy was permitted in rare instances.

The question whether the indirect benefits flowing from the construction of irrigation works should not also be taken into consideration in deciding upon the selection of irrigation schemes for execution was raised by the Government of India with the Secretary of State in 1919. But that did not result in any change in the policy referred to above, with the result that irrigation projects were treated only as business propositions and were taken up only if they promised, in relation to prevailing interest rates, a large dividend in the shape of increased revenue, or in rare cases, if they were likely to reduce losses in revenue arising from remissions of kist.

Policy Reviewed

As a result of the pursuance of the above policy almost all directly remunerative irrigation schemes were executed more or less as commercial ventures, schemes which were difficult and unremunerative being left out of consideration. In 1946, when the Congress Government came into power, the position was reviewed, and the State Government came to the conclusion that adherence to the narrow principle of direct and remunerative return should be given up and the irrigation policy of the Government given a suitable re-orientation, based on considerations of general economic benefit and national well-being. Madras, which has always been deficit in the matter of food supply, was then in a serious predicament on account of the stoppage of imports of rice from Burma and Siam.

The State was faced with an annual deficit of two million tons of rice, while there was the possibility of turning to good account the supply in our rivers for irrigation, by schemes which although they could not satisfy the old criterion of remunerative return, would still be desirable, nay essential, in the context of the prevailing food situation. The Government were incurring very large expenditure in importing and transporting foodgrains at heavy cost to meet the food situation, especially in the unirrigated

areas. If the water resources in the State were developed and harnessed to irrigate the land and make it more productive, the food problem could be solved to a great extent, the expenditure on imported food minimised and the real wealth and well-being of the people improved. The Government therefore came to the conclusion that the productivity test should no longer be a paramount criterion, decided that tracts which had been neglected in the past and others which were susceptible to famine should receive the first consideration, and have been faithfully implementing these decisions.

The old productivity test is therefore no longer the overwhelming criterion in sanctioning an irrigation scheme, but is relegated to its appropriate place as one of the various considerations which should decide the issue. Irrigation projects are now scrutinized primarily to ensure that there is water enough in a normal year to irrigate the area envisaged, that the soil is amenable to irrigated cultivation and that the quantity of additional food which can be raised by the project is commensurate with the outlay on the scheme.

Indirect Saving

No doubt such a procedure increases the Government's liability under interest payments, but as against this, the food resources will be augmented and the income of the people enhanced contributing to a better standard of living and health. In many cases, irrigation schemes incidentally provide assured supplies of drinking water and act as an insurance against failures of seasons. Increased payment under interest charges on capital outlay on projects will tend to be offset by a reduction in expenditure on the import and transport of food. Moreover, irrigation and the attendant development of a tract augment the taxable resources of the State, and will yield increased revenue from Sales Tax, Income Tax, etc. The direct and indirect benefits of irrigation thus make it worthwhile to increase the State's commitment under interest charges. The total capital outlay on irrigation, from loan funds amounted to only Rs. 138.84 lakhs in 1947-48, Rs. 248.67 lakhs in 1948-49, Rs. 476.73 lakhs in 1949-50, Rs. 790.39 lakhs in 1950-51 and Rs. 930.63 lakhs in 1951-52. These outlays can be fully and adequately justified, even on financial grounds, by the direct and indirect benefits that will accrue from them.

Taking for instance the fourteen major irrigation schemes under execution, the saving of the State expenditure on imports of foodgrains, together with the additional revenue from the projects, will contribute a return far in excess of the interest charges. The additional output of foodgrains when these projects are completed will be about 356,000 tons. At the current internal wholesale prices (Rs. 13-1-5 per maund), the value of the additional output will be Rs. 11.13 crores. The value of this quantity at pool price (Rs. 23-6-0 per maund) will be Rs. 22.67 crores. The saving of expenditure on imports will therefore be about Rs. 11.54 crores.

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Benefits to Agriculturists

The benefits in the agricultural sector will be no less large. The fourteen schemes referred to would increase the area under irrigation by about 800,000 acres and provide assured supplies to about 200,000 acres where irrigation facilities are most precarious. Frequent failures of monsoons at the latter end of the crop calendar have inflicted losses on agriculturists who spend large sums in raising crops and watching them until the maturing season, only to see them wither away. On the basis of the cost of cultivation of Rs. 127 per acre, the failure of crops on 100,000 acres, i.e., half the area now having precarious water-supply, would work out to a loss of Rs. 1.27 crores. This will be saved to the community when the projects begin to function. Guaranteed water-supply for about 8 lakhs of acres will give an annual additional yield of 233,000 tons of paddy valued at Rs. 1,133 lakhs, of 123,085 tons of millets valued at Rs. 263.35 lakhs, 14,677 tons of cotton valued at Rs. 110.27 lakhs and 420,000 tons of sugarcane valued at Rs. 200.06 lakhs, or in the aggregate an annual quantity of agricultural produce valued at Rs. 1,686.68 lakhs.

Apart from the fact that the additional output of cotton and sugarcane are essential to augment supplies of raw materials to two major industries of the country, the irrigation projects will be responsible for adding to the income of the agriculture sector Rs. 1,686.68 lakhs which will result in pumping into the agricultural economy an average additional amount of Rs. 4.62 lakhs of per day. This additional income is both the result and cause of additional employment and its effect will spread to other sectors. The multiplier effect will be in operation and the agriculture economy will be placed on an ever rising curve of prosperity.

DISTRICTWAR LIST OF GROW MORE FOOD SCHEMES SANCTIONED SINCE 1ST APRIL 1946, TO END OF JULY 1951.

Serial number and name of district.	Number of schemes sanctioned.	Cost (works). RS.	Ayacut		Anticipated yield.
			New.	Existing.	
1 Visakhapatnam	5	7,67,300	171	3,124	760
2 East Godavari	16	5,51,512	5,052	19,122	8,454½
3 West Godavari	23	21,76,435	19,980	3,672	11,629
4 Krishna	46	33,91,534	34,280	12,025	18,898
5 Guntur	25	30,52,290	13,292	6,767	8,021
6 Kurnool	12	23,03,200	3,779	150	2,112
7 Cuddapah	5	4,98,500	1,834	150	992
8 Anantapur	4	18,81,500	3,530	..	1,765
9 Bellary	8	42,500	465	300	383
10 Chittoor	2	1,00,000	112	28	57
11 Nellore	31	33,10,865	10,307	7,517	6,300½
12 Chingleput	14	14,13,460	2,060	9,667	2,444
13 South Arcot	27	26,59,711	6,487	46,839	5,628
14 Tanjore	30	42,15,554	30,535	21,701	15,972
15 Tiruchirappalli	11	9,08,355	3,778	2,548	2,131
16 Madurai	3	84,000	252	150	133½
17 Tirunelveli	2	3,97,000	550	210	275
18 Salem	2	14,14,420	407	5,002	604
19 Coimbatore	7	9,08,220	6,018	14,150	5,720
20 South Kanara	11	9,42,390	357	1,914	906
21 Malabar	36	12,43,758	9,779	1,338	4,636
Total ..	320	* 3,22,62,504	153,025	157,320	97,821½

* or 4.25 crores including direct and indirect charges.

Delta and Non-delta taluks

The benefits and income accruing from irrigation can be gauged by a comparison of conditions in delta taluks with those in neighbouring non-delta taluks where other factors such as land tenures, wages, agricultural practices, etc., are similar. The following statement gives particulars in respect of the delta taluks of Gudivada in the Krishna district and Srivaikuntam in the Tirunelveli district and the non-delta taluks of Tiruvur and Koilpatti in the same districts, respectively, selected on the random sample principle.

Density of population is higher in the delta taluks than in non-delta taluks. It is 721 in Gudivada and 719 in Srivaikuntam compared to 243 in Tiruvur and 353 in Koilpatti. This indicates that delta taluks with larger irrigation facilities support larger populations. The number of cattle of all sorts per 100 acres of cultivated land is 78 in Gudivada against 66 in Tiruvur, and 64 in Srivaikuntam against 21 in Koilpatti. The average income per acre sown in delta taluks is roughly twice as much as in non-delta taluks.

It will be seen from the above that Government are perfectly justified in pursuing a liberal policy in taking up and sanctioning irrigation projects, not solely on considerations of direct return, but on the basis of improving agricultural production and through it the income, health and well being of the people, in order progressively to secure freedom from want, adequate employment and a better standard of living.

Particulars of Grow More Food and tank improvement schemes sanctioned in the various districts are appended.

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DISTRICTWAR LIST OF TANK IMPROVEMENT SCHEMES IN CHARGE OF PUBLIC WORKS DEPARTMENT SANCTIONED AND UNDER EXECUTION.

District.	Number of works sanctioned.	Cost. RS.	Existing ayacut benefited.
1 Visakhapatnam	21	20,910	2,990
2 Guntur	2	60,800	501
3 Nellore	10	1,71,800	3,155
4 Chittoor	1	17,600	79
5 Coimbatore	18	1,26,454	7,249 plus 335
6 Chingleput	72	6,77,610	11,183
7 South Arcot	70	4,05,560	10,777
8 Tirunelveli	31	1,20,865	10,471
Total ..	225	16,01,599	46,740

NOTE.—230 Schemes are under preparation in East Godavari, West Godavari, Anantapur, Kurnool, Cuddapah, Bellary, Chittoor, Madurai, Ramanathapuram, Coimbatore, etc., districts.

DISTRICTWAR LIST OF TANK IMPROVEMENT SCHEMES UNDER THE CONTROL OF THE SUPERINTENDING ENGINEER (FOOD PRODUCTION) SANCTIONED AND UNDER EXECUTION.

District.	Number of works sanctioned.	Cost. RS.	Extra acreage covered. ACRES.
1 Srikakulam	65	9,02,093	2,520
2 Visakhapatnam	63	8,03,870	2,820
3 East Godavari	52	4,73,260	10,150
4 West Godavari	46	5,19,740	5,414
5 Krishna	90	8,07,290	4,835
6 Nellore	347	47,61,955	24,223
7 Guntur	31	3,15,398	1,089
8 Kurnool	8	82,870	527
9 Cuddapah	18	2,05,478	907
10 Chittoor	193	16,70,850	10,562
11 Chingleput	93	6,46,485	4,026
12 North Arcot	150	9,86,977	6,722
13 Salem	57	1,77,920	1,234
14 South Arcot	74	4,32,748	1,767
15 Tanjore	46	4,22,677	2,478
16 Madurai	136	10,63,004	5,203
17 Tiruchirappalli	68	3,53,429	2,190
18 Tirunelveli	142	12,03,663	7,523
19 Ramanathapuram	568	45,66,750	45,823
Total ..	2,247	2,03,96,457	140,022

Land Utilization in Tropical Areas. F.A.O.'s Invitation Accepted

The Food and Agricultural Organization of the United Nations has invited the Government of India to participate in the Regional Meeting of Land Utilization in Tropical Areas of Asia and Far East to be held in Nuwara Eliya, Ceylon, from 17th to 29th September 1951. The Government of India have nominated Sri M. S. Sivaraman, I.C.S., Director of Agriculture, Madras, as Leader of the Delegation. The members of the Delegation are: Sri N. Sankaranarayana Reddi, Assistant Engineer in Charge of Soil Conservation Scheme, Bellary (Madras), Sri A. De Vajda, Chief Conservation Engineer, Damodar Valley Corporation, Calcutta, Dr. A. K. Dutt, Soil Scientist

in charge of Damodar Valley Corporation, Calcutta and Sri D. D. Saigal, I.F.S., Project Officer, Central Water and Power Commission, New Delhi.

The meeting will be opened with an introductory statement on the existing mal-adjustment and undesirable practices in land use in tropical regions and obstacles to the solution of such problems. It is expected that the agenda will include mapping and classification of tropical land resources, organization, administration and financial support of land utilization and conservation programmes in the tropics, including research, education and extension or advisory work; and need for further research on tropical land utilization problems and international co-operation in furthering the best use of tropical land resources.

59 Minor Irrigation Works Sanctioned

The Government have sanctioned 59 minor irrigation works under the Grow More Food Campaign at an estimated cost of Rs. 6,774 lakhs which would benefit an additional extent of 2,806 acres of land and bring in an additional yield of about 1,400 tons. For this purpose, the repair and renovation of the following tanks have been sanctioned :—

Chittoor district.—Samanthanda Kasam Kalva, Voot-lakunta of Tavalam village.

Nellore district.—Yathalur tank, Vamakotagiri zamin, and Kotha tank in Kocherlakota village.

Srikakulam and Visakhapatnam.—Kotha tank and Nallabanda in Chippirapalle taluk and Kota Banda Tank in Devrapalli of Bobbili taluk.

Krishna district.—Lingamanorin tank in Penugolanu village in Tiruvur taluk, Ravula tank in Nagalur village, Vijayavada taluk, Yera tank in Nanna village, Gannavaram taluk, Kotha tank in Voleru village, Nazvid taluk, Zangamavucheru in Nunna village, Gannavaram taluk, Mangali Gunta, Sobhanadripuram village, Gannavaram, Chinna-mallanna Gunta, Veleru village, Nazvid taluk and Pedda Mallanna Gunta, Veleru village, Nazvid taluk.

East Godavari district.—Peddintamma tank, Surappa tank and Panta Cheruvu.

West Godavari district.—Gangole tank, Rangam tank, Pedda tank and its supply channel, Nuvvulakunta in Challa Chintalapudi, Eluru taluk, Pedda tank in Thora Chakkavayadupalem village, Chintalapudi taluk and Pedda tank in Kadakatla village, Tadepalligudem taluk.

South Kanara district.—Spring pond in Balkudru village and Spring pond in Kattingere village.

South Arcot district.—Shro. Kotlambakkam tank and supply channel in Cuddalore taluk.

Tirunelveli district.—Tammalai and Vedamalai tanks, Sankarankoil taluk, Mela Alangulam tank in Jeeramadam village, Velladapudukulam in Sivanandanur village, Vavval Pudukulam in Pidanneri village and Palakulam in Vara daraja Reddipatti village.

North Arcot district.—Nochimalai tank in Tiruvanna-malai town, Elavambady tank in Vellore taluk, Nookam-badi tank in Tiruvannamalai taluk, and construction of a syphon across Kallar river for Kodayangi spring channel.

Tiruchirappalli district.—Perungudi kulam in Perungu-dipatti village, Kulathur taluk, Velankurichi Rajakulam tank in Veiankurichi village, Kulitalai taluk, Karunkulam in Kilapalur village, Udayarpalayam taluk, Ammani kulam tank in T. Edayarpatti village, Kulitalai taluk, Pudukulam eri in T. Edayapatti village, Kulitalai taluk, Kalinkakulam tank in Kalinkapatty, Kulitalai taluk, Serikulam in T. Edayapatti village, Kulitalai taluk, Madayarakulam, in Madayarpatti village, Kalathur taluk, Pullankulam in Surevur village, Kulathur taluk, Thirumachikulam in Mangadu village, Alangadi taluk, Odayani Kanmoi in Thikkathur village, Tirumayam taluk and Arasankulam and Kuringenkulam and their supply channel.

Ramanathapuram district.—Kambikudi tank and supply channel in Arupukottai taluk, Nadukkanendai tank in Nadukkanundai village, Sivaganga taluk, Mela Sakkulam tank, in Melasekkulam village, Mudukalathur taluk, Valaneri tank in Valaneri village, Tiruvadam taluk,

Punnakulam tank in Punnakulam village, Sivaganga taluk, Tiruvethiyur tank and Anjukottai tank.

Tanjore district.—Special repairs to Sukudieri in Sengapatti village, Tanjore taluk, Repairs to Amanji eri in Amanji village, Arantangi taluk, Serambadi eri of Nanda-vannampatti village, Tanjore and Palchilamban eri of Manaiyeripatti village.

Cuddapah district.—Anicut across Chella kalva.



Dr. A. Lakshmanaswami Mudaliar, Vice Chancellor of the University of Madras (sitting centre) recently inaugurated the Refresher Course in English for teachers organized by the British Council. Mr. F. L. Billows, Linguistic Adviser to the British Council in Turkey and the Director of the Course is seen speaking. Sitting on the right of Vice Chancellor are Mr. S. C. G. Bach, Regional Representative of the British Council and Sri K. M. Unnithan, I.C.S., Secretary, Education Department. (Below) Teachers and educationists attending the course



Agricultural Round-up

Experiments conducted in the several Agricultural Research Stations in regard to the manuring of paddy with rural compost have given the following results :—

Station.	No manure.	Rural compost.	Increase.	Increase in yield per 100 lb. compost.	Rate of compost application.
	LB.	LB.	LB.	LB.	
1 Agricultural Research Station, Aduthurai.	2,419	2,777	358	8.95	30 lb. N.
2 Do. do.	2,734	3,144	410	5.13	60 lb. N.
3 Do. do.	2,097	2,196	99	1.24	60 lb. N.
4 Do. Pattambi.	1,827	2,067	237	2.12	5 tons.
5 Do. do.	1,827	2,088	261	1.17	10 tons.
6 Do. do.	1,827	2,267	440	0.98	20 tons.
7 Do. do.	1,670	1,767	97	0.44	10 tons.
8 Do. do.	1,670	1,732	62	0.14	20 tons.
9 Do. Marutteru.	3,092	3,186	94	1.18	60 lb. N.
10 Do. do.	2,841	2,903	62	9.78	60 lb. N.
11 Do. Tirukuppam.	1,509	2,285	776	0.70	60 lb. N.
12 Do. do.	1,234	1,407	123	1.54	60 lb. N.
13 Do. Samalkot.	1,888	2,021	133	3.33	30 lb. N.
Average ..				2.8	

Average increase in yield for every 100 lb. compost applied—2.8 lb.

Yard stick : 2.8 per cent increase in yield on weight of compost applied.

The result of the manuring of paddy with ammonium sulphate are given below :—

Station.	No manure.	Sulphate of ammonium 150 lb. per acre.	Increase in yield.	Increase per lb. of ammonium sulphate.
	LB.	LB.	LB.	LB.
1 Agricultural Research station, Maruteru ..	..	1,697	2,118	421
2 Do. do.	..	2,586	2,869	283
3 Do. Tirukuppam ..	..	1,005	1,103	98
4 Do. do.	..	2,018	2,191	173
5 College Farm, Bapatla ..	..	1,561	1,931	370
6 Do. ..	..	2,335	2,601	266
7 Paddy Breeding Station, Coimbatore ..	..	3,127	3,580	453
8 Agricultural Research Station, Maruteru ..	..	1,215	1,615	400
Average ..				2.96

Increase in yield per 100 lb. of sulphate of ammonia—296 lb. or 300 lb. paddy or 200 lb. rice.

Yard stick : 200 lb. rice for 100 lb. of sulphate of ammonia.

It is seen from the average increases in the yield that the application of manures will yield a higher yield. The increase in yield are different for compost and artificial fertilizer. The Agricultural Department has always recommended the use of both organic and inorganic manure from the point of view of soil fertility.

Facilities of lift irrigation.—Mechanization of agriculture and the use of machinery has made steady progress during the last five years. 594 portable oil engine sets were on hire in the district besides petrol-driven pumping plants. From 1946, the Agricultural Department has directly sold 452 petrol sets and 211 oil engines to agriculturists. Besides this a considerable number of sets,

both oil engines and electric motors, have been arranged for supply direct from the local manufacturers' representatives. In spite of the difficulties in production and procurement of pipes and fittings, the Department continues to obtain the maximum quantities of these parts essential for power pumping installations. During April-July 1951, 105,475 feet of pipes were sold to the ryots by the Departmental depots.

In addition to the 300 oil engines sanctioned during July 1951, the Government have recently approved the proposal for the purchase and distribution of a further batch of 325 oil engines under the hire purchase system. Up to 31st July 1951, 1,280 oil engines and 239 electric motor pumping sets have been actually delivered.

In order to utilise the waters in the perennially running rivers and streams that are now going to waste, for irrigating a large number of fields forming compact blocks, during the 2nd and 3rd crop seasons, and to bring as much area as possible under assured crop production on a permanent basis, it is proposed to instal pumping plants of suitable size on the banks of such rivers and streams at suitable places. Necessary charges for supply of water will be levied. Two such schemes are already working in Nelvay and Pinayur in Chingleput district and two schemes for Malabar and South Kanara have also been approved. The latter will be given effect to shortly. The ayacut expected to be benefited under the schemes is furnished below :—

	Number of instal-lations.	Estimated acreage to be benefited.	Estimated additional production in a year.
		ACRES.	TONS.
1. Chingleput—			
(i) Nelvay	1	920	1,500
(ii) Pinayur ..	1		
2. Malabar ..	2	507	125
3. South Kanara ..	2	685	170

The above schemes will be run on an experimental basis in the first instance. A similar installation is already functioning in Ramanathapuram district operated on a hire basis. There are requests for installing river pumping sets in a number of places in the districts and investigations are in progress.

Tractors and bull dozers.—These continue to play an important role in the Intensive Food Production Drive by helping to bring under the food crops a large extent of virgin lands and old and new fallows. There are at present 268 tractors with the Agricultural Department. During August 1951, the Government have ordered the distribution of the five tractors (previously purchased) to the ryots under the hire purchase system. An extent of 32,510 acres of both virgin and current fallows were tackled by the Departmental bull dozers during April-July 1951.

The new "Rotary" cultivator was recently demonstrated with success under different soil conditions at Papanad, Tirithurai, Nedumbalam and Aduthurai in Tanjore district for over a fortnight. Demonstrations of this "Rotary" cultivator attached to the tractor were held at the Paddy Breeding Station, Agricultural College, Coimbatore on 31st July 1951 in the presence of the Hon'ble Shri K. M. Munshi, Minister for Food and Agriculture, Government of India, when he visited that place in connection with the College Day and Conference. The unit can be worked both under dry conditions for ordinary ploughing and also in wet lands for puddling, green manure trampling and levelling. Puddling operations can be performed with speed, economy and efficiency under varying conditions and it is a boon to the rice producer. The "Rotary" cultivator produces a level tilth ready for sowing or planting in one operation unlike the orthodox type of ploughing, harrowing, etc., and may be expected to revolutionize cultivation practices. Its performance, is found to be uniformly good. This is an all-purpose implement useful for all cultivation purposes. Further demonstrations have been arranged by the Agricultural Department in the districts of Nellore and Guntur.

Distribution of manures and seeds.—The following statement shows the distribution of fertilizers, manures and improved seeds during 1951-52 from the 1st of April 1951 till the end of July 1951 :—

Name of Scheme.	Target for 1951-51.	Quantity distributed from 1-4-51 up to 31-7-51.
	TONS.	TONS.
Ammonium sulphate ..	116,000	11,698
Phosphatic manures ..	28,000	2,574
Rural compost ..	104,706	30,997
Urban compost ..	232,000	27,396
Green-manure seeds ..	3,214	290
Paddy seeds ..	14,572	6,272
Millet seeds ..	2,030	105
Total ..	500,522	79,332

The cultivation and manuring season has commenced in most of the districts. Instructions have been issued to the Collectors of all districts to watch the progress in the distribution of fertilizers and manures carefully and to take prompt steps to localize the extents receiving these benefits with a view to assessing the results in proper time. They have also been asked to keep a close watch over the stock position of fertilizers and manures in all the areas so that the season for application of fertilizers and manures is utilized to the maximum possible extent.

The acreages covered so far under the works schemes and the supplies schemes are as shown below :—

Name of the Scheme.	Total targets.	Extent covered up to 31st July 1951.
	ACRES.	ACRES.
Works schemes ..	787,751	19,412
Supply schemes ..	4,958,341	133,333
Total ..	5,746,092	152,750

Contour bunding.—As reported at the last Conference, the actual work of laying contour bunds and trenches, etc. in the first 4,800 acres in the Ceded districts where an area of 19,902 acres has been topographically surveyed is proceeding. More than 3,000 acres have already been actually bunded.

Schemes for taking up similar schemes in Visakhapatnam, Tirunelveli and South Arcot districts are under consideration of Government as also a proposal to undertake research work on the soil erosion and contour bunding problems in the Nilgiris area where the erosion damages are great. Preliminary survey works to know the actual conditions in the different parts and soil in the Nilgiris zone has also been taken up by a special investigational staff.

Assessment of fulfilment of targets under the Intensive Cultivation Schemes.—The second year of operation of the Intensive Cultivation Schemes came to a close on 30th June 1951.

The progress made in the additional production of cereals against the targets for 1950-51 up to the end of June 1951 was as follows :—

Scheme.	Additional production arrived at with reference to units achieved by 31st March 1951.	Additional production verified by Collectors up to 30th June 1951 against 1950-51 targets.
	IN TONS.	IN TONS.
1 Works Schemes ..	100,935	57,983
2 Supplies Schemes—		
(a) Fertilisers ..	137,411	79,891
(b) Manures ..	12,962	27,897
(c) Improved seeds ..	16,939	16,365
	268,247	182,136

The additional production realised from the Intensive Cultivation Schemes is being verified by the local Revenue Officers wherever possible by actual field inspection, and in other cases by enquiry about the use of Grow More Food benefits and it cannot be said that the entire additional production has been assessed and brought to account by them. Another main reason for the shortfall in the additional production compared to the target, is the general failure of the monsoons during 1950-51.

Distribution of loans.—A sum of Rs. 2,49,995 was disbursed as loans to ryots during June 1951 for purchase of seeds, manures and implements. Particulars of loans disbursed under different categories are indicated below :—

	RS.
(i) Purchase of seeds and manure ..	111,170
(ii) Purchase of Agricultural implements ..	680
(iii) Purchase of Chemical fertilisers under intensive manuring scheme.	138,145
Total ..	249,995

Cotton Production

Rajapalayam Uganda Cotton Certification Scheme.—A Scheme for the certification of Co 4 cotton popularly known as Rajapalayam Uganda, grown in the districts of Madurai, Ramanathapuram, Tirunelveli, Coimbatore and South Arcot during the 1951-52 season, was sanctioned by the Government. Certification of this variety of cotton will enable it to get exemption from price control now imposed by the Government of India. In consequence growers can get higher prices. The scheme will therefore benefit all cultivators growing Uganda cotton in these districts. This will give an incentive to an extension of the area under cotton. The purity of the Uganda cotton will also be maintained.

It is proposed to examine about 31,800 acres (in the notified districts) of Uganda cotton producing 22,230 bales

of 392 lb. each. The cotton will also be ginned in specially licensed gins and pressed in licensed presses so that purity is controlled at all stages. A special staff has been sanctioned for work connected with the scheme. The head quarters of the Certifying Officer will be at Rajapalayam. The Scheme has been in operation from August 1951 and it will be up to November 1952.

(b) The Government have recently sanctioned a Scheme for the multiplication of Uganda Cotton in the winter cropped area in the Coimbatore taluk for a period of two years with a view to build up sufficient stocks of seeds for launching on a larger scheme from 1st July 1953 onwards. The Government have also sanctioned a Scheme for the multiplication and distribution of 6,500 bags of Western-1 Cotton seeds in the Bellary district during the current year.

Establishment of regulated markets in the Ramanathapuram and Tirunelveli districts.—During May 1951 the Government declared that :—

(1) the area situated within the limits of the district of Ramanathapuram shall be a notified area for the purposes of the Madras Commercial Crops Markets Act in respect of Cotton and Groundnut ; and

(2) the area situated within the limits of the Tirunelveli district shall be a notified area for the purposes of the said Act in respect of cotton. Steps are being taken to establish market committees in the Ramanathapuram and Tirunelveli districts to regulate the purchase of cotton and groundnut in the former district and of cotton on the latter district.

Research

Scheme for conducting Research on Cashewnut.—The Government have sanctioned for a period of one year the scheme for the establishment of a Cashewnut Research Station at Mangalore with necessary staff for conducting Research on cashewnut.

Scheme for the opening of an Agricultural farm at Paramakudi in Ramanathapuram district.

The Government have sanctioned the opening of an Agricultural farm at Paramakudi in Ramanathapuram district during the current year with the necessary staff. The Scheme envisages the demonstration of the usefulness of well-irrigation and scientific methods of agriculture to the ryots of the backward zamin areas of Madurai and Ramanathapuram where agriculture had not progressed much under the Zamindari system.

Scheme for manurial, varietal and agronomic trials to determine optimum yield.

At the instance of the Indian Council of Agricultural Research the Government have sanctioned a Scheme for soil fertility investigation, in the State for conducting simple experiments on ryot's fields.

The benefits expected by the implementation of the scheme are :—

(i) Practical realisation of the ryot's farm of the benefits occurring from experimental work on Government's farms ; and

(ii) Gathering of information as to how to overcome the impoverishment of soil resulting from cultivation over a long period. The scheme is to be run for a period of three years.

3 Number sent for Organizer's Training.	1
4 Number sent for Teacher's Training..	2
5 Number sent for higher studies ..	4
6 Balasevikas	3
7 House-keepers and matrons	3
8 Posted as conductress	1
9 Rejoined husband	3
10 Got married	2

Attempts are being made to shift the Service Home and Training Institutes to Red Hills where it would be possible to work out the scheme most effectively. There is a proposal under the consideration of Government to start a Service Home at Coimbatore next year. The idea is to have a Home for each region, i.e., four for the State.

(b) The number of young women who are anxious to learn a trade which would help them to eke out their living has increased of late in the urban area and as these do not come within the purview of the Service Home, an Industrial Training Centre has been started by the Ministry of Labour, Central Government, and with the concurrence of the Madras Government and is managed by the Department of Women's Welfare. There is one such Training Centre for women in Delhi and the Centre in Madras is the second. Training is given at present in such profitable trades as tailoring, hand-weaving, knitting, glass beads and chalk-making, etc. The strength is 64 of whom 48 are scholarship-holders.

4. It is quite obvious that everything depends upon the workers if the aims of the Department are to be achieved. Not only is it essential to have the right type of workers with the right spirit and who are willing to settle and work in villages, but it is of the utmost importance that the worker is well-equipped and trained. Hence there is a Training School in Madras (usually known elsewhere as the School of Social Work) where training as per syllabus is given every year to selected organisers already tried and observed in field work. These form the backbone, so to speak, of the entire scheme since they are the workers who must be trained and guided to implement the objectives of the Department in general and more special in rural areas.

Training is given in the following subjects :—

Generic.	Special.	Field work.
Psychology.	Medical Informa-	Family survey and
Sociology.	tion.	case study.
Economics.	Child-care.	Pre-basic class.
Political	Community and	Investigation and
Science.	Group	Special Medical
History of	Organizations.	case work.
Social Work.	Nutrition, Home,	Camps in villages.
	Economic and	Visits to Institutions.
	Home Crafts.	Spinning and other
	Administration	Crafts.
	and Public	Community Service
	relation.	Centres.
	Cultural activities.	

There are at present 51 rural and 20 urban branches, besides one branch for Todas and one for the Agency. The policy is to take all work to the villages where the need

is great. The policy of Government also is to take up this work with a view to run its branches and special institutions as models and set up standards. Local initiative and private enterprise must be encouraged to come forward and take up the work in other areas. Under the post-war Economic Development and expansion of social service programme, Government have a five-year plan for the expansion of the Department. There is also a ten-year scheme under consideration to carry on the special welfare work in the Agency areas. Already a branch for women and children has been started at Rampachodavaram, East Godavari and one in Araku colony and another in Gummalakshipuram, Visakhapatnam district, will be started soon. The work amongst the Toda women in the Nilgiris is encouraging.

5. The Journal which is being published is still in its initial stage for various reasons but will be developed soon in a way that will play a great part as public relations section in the social welfare scheme and for the following purposes :—

(a) It will explain to the public the policies and programme of the Department and their need; of similar activities elsewhere; comparative studies; study of special needs; problems and situations; collection of statistics and information, etc.

(b) It will educate those for whom the services are intended and in general supplement and follow up the work of the field staff.

(c) It will provide means for exchange of ideas by those who are benefited.

(d) It will be useful for exchange of experiences, discussions of problems, etc., etc., for the benefit of field staff and students in training.

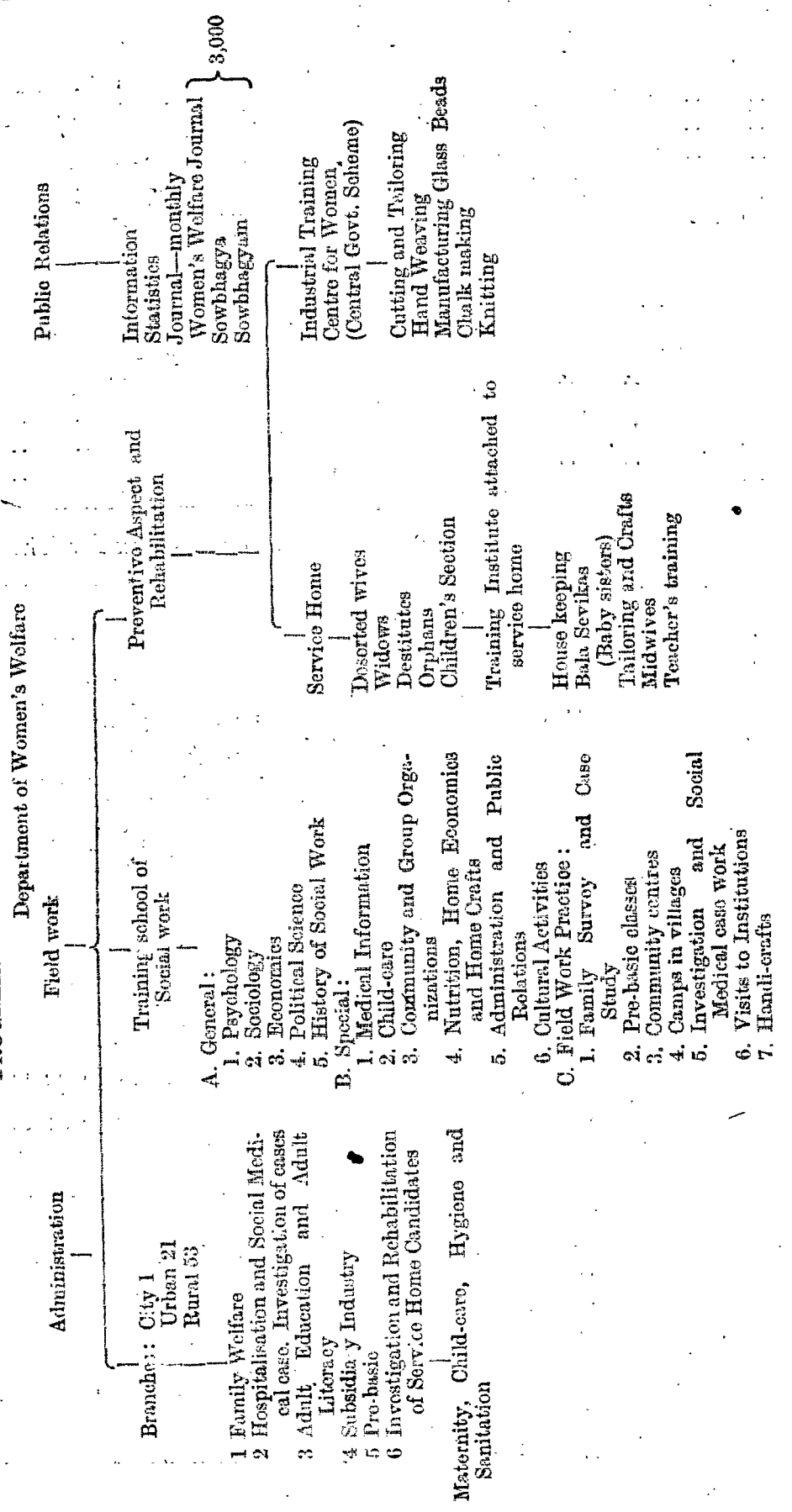
(e) It will be helpful as a means of staff development.

There is a State Advisory Committee consisting of prominent ladies interested in welfare and social work and appointed by the Government after careful consideration.

A chart showing the distribution of work is enclosed. (Annexure A)—also figures relating to the period 1st April 1950 to 31st March 1951 which will give an idea of the ground covered and results achieved within the short period. (Annexure B.)

The work is no doubt popular as many are now realising the need for such a scheme and the requests for starting branches from many villages are increasing. There is a vast field which has to be covered but it is an up-hill task which must be undertaken by all—the Government, private and voluntary bodies—all co-operating and co-ordinating their efforts towards the common goal. The idea of welfare work on scientific lines by professionally trained workers is itself only now being gradually understood. Therefore along with tackling the problems from different angles simultaneously the public themselves have to be educated in the significance and need for programmes such as this to be carried out by trained personnel with their co-operation. A good beginning has been made and success so far achieved is a great encouragement for further efforts in this direction.

Annexure A
PROGRAMME AND PLAN OF WORK BRIEFLY DESCRIBED
Department of Women's Welfare



Building Happy Homes

"A country's greatness is seen in the happy homes of the people; in other words, it rests with the women. Let us bear this in mind when we build our homes and let us build for the future of our children and our country."

Mahatma Gandhi had realized this long ago and as we know was mainly responsible for making our women come out of their shells and taking up their share in the constructive work that faced the country as a whole. Whatever may be the openings for a modern woman, we believe that for a greater section of these, their proud privilege is that of building their homes. In this connexion, the present age places on every woman a tremendous responsibility, not only as women but as members of the community as well, for unless the homes and home life are strong and healthy our society itself cannot grow and vice versa. Hence an attempt is made through the Department of Women's Welfare to work for women in relation to the Home and the community, the happiness and well-being of each being dependent on the other. The Madras State is the first in this country to implement one of the cherished programme of Mahatma Gandhi in working for the welfare of women and children which is really the welfare of all families and therefore of the society and the State.

The aims and objects of the Department of Women's Welfare are:—

(i) To promote, with special reference to villages, the welfare of families in all its aspects through educational preventive and protective services, and with a view to gradually raise the standard of living consistent with our conditions.

(ii) To work for the community welfare in relation to the families to show the close connexion between the two and to assist each member to contribute to the general well-being of the community in order to ensure the well-being of each family.

(iii) To run the community service centres which provide facilities for such contacts and exchanges for leadership and citizenship training.

(iv) To provide facilities for economic relief by helping to secure employment by supplementing family income through simple cottage industries in rural areas, by giving special training in a gainful trade in the city for urban candidates.

(v) To provide child-care both in homes, in pre-basic classes and in the children's sections of the special institutions.

(vi) To give an intensive and sound professional training for field-workers and develop skills and technique necessary for such services.

In pursuance of these objectives and having in the forefront always the family and community welfare so dependent on each other, the work of the department comprises of educative, preventive and rehabilitation aspects of social services; they are worked as follows:—

(1) (a) Family survey by the professionally trained field staff. In the course of their visits, family conditions are surveyed and assistance rendered, women education, guidance and counselling given in such matters as are

necessary for each particular family, as for instance on nutrition and food values (importance of non-cereals at present), home remedies and home nursing, sanitation and hygiene, medical aid, maternity and child care, any assistance or information required given directly or indirectly acting as liaison with other departments.

(b) Families with special problems (including behaviour problems, employment, etc.) are noted for family case study and receive concentrated attention in order to help them constructively.

(c) Certified midwives are also trained as social workers and both the welfare organizer and midwife work for the welfare of the families, educating the women all the time.

(d) Child care is given prominence. Children below two years are taken care of by the organizer and midwife in the course of their daily visits. For children between two and six there are the pre-basic sections attached to each branch, where their personal cleanliness receives attention and classes conducted as per the syllabus to build their character and develop healthy and other good habits. In some places the local people contribute for their feeding.

(2) Community service centres held in the afternoon hours where facilities are provided to promote civic consciousness; community life by means of contracts and social education programme which comprise the following:—

(a) Citizenship training—facilities to perform civic duties—Recreational activities. A tremendous impetus is given to help them give up distinctions, as women of different creeds, castes and status are brought together to mix freely and exchange their views and experiences. Current events and Government policies are explained.

(b) Adult education relating to their home and their environment—Instructions are given in mother craft and child care, home-craft, kitchen, gardening, first aid, home-nursing, home remedies, physical activities, leisure time occupations; etc. Opportunities are provided to develop the talented among them.

(c) Adult literacy is being spread in the mother tongue, regional language and Hindi.

(d) Cottage industries are becoming a progressive aspect of the work of the department. Spinning, weaving, tailoring, mat and tape-weaving, coir-making, soap-making, hospital linen stitching, etc., are some of the industries selected and done in the branches. These have been introduced mainly to help the poorer members to supplement their meagre family income. Though they are started only recently on a very small scale, the results are very encouraging.

(3) (a) In its preventive and rehabilitation side, the department runs the Service Homes. In the course of the family case study, special cases are taken up for special consideration and help and if they cannot be otherwise assisted, they are admitted after careful investigation into the Service Home. There are the deserted wives, widows and destitute women who are stranded and if relief is not provided, go astray or commit suicide. Several such occurrences have been prevented by timely admissions. General education and special training are given to the

inmates for three years but discharged if rehabilitated earlier. Their children also are admitted so that they are given a good start in life. Training for the adults is given in the following subjects:—

1. *General*.—Three R's instruction in mother tongue, science and social subjects up to III form, Hindi, First Aid and home nursing, spinning, cutting and sewing, simple handicrafts and gardening and music.

2. *Special*.—Special instruction in one of the following subjects is given: (a) Tailoring, spinning and weaving; (b) House-keeping; (c) Balasovikas (with training in pre-basic and basic education); and (d) Helped to go for Midwifery and Teachers' training.

At present there are 150 inmates in the Service Home in Rayapuram with a children's section of 50. Another Service Home is run with the Government aid by the Director, Gandhigram, with 40 inmates. Settling them in life is the most important and difficult aspect of the work of the Department.

There have been so far 228 applications for admission into the Service Home, Rayapuram. Below are given

figures relating to applications received from January to August 1951 and rehabilitation of the first batch of 50 and 7 in the second batch.

Applications—

1 Number of applications received (from January to August 1951)	228
2 Number of urgent cases admitted when vacancies were available	16
3 Number of cases investigated by Assistant women's welfare officers.	77
4 Number of cases informed of no vacancy	65
5 Number of cases found ineligible (overaged, underaged or deformed).	35
6 Number of cases where counsel or help was given	19

Rehabilitated—

1 Number admitted into Technical Training	23
2 Number sent for Midwifery	16

Extension of Electricity to Villages

The Government have sanctioned the extension of supply of electricity from the Mettur Electricity System to Machari and Randam villages in North Arcot district for 49 agricultural pumpsets and three industrial services at a cost of Rs. 1,06,909.

Extension of supply of electricity has been sanctioned to Sriperumbudur in the South and to Aranvayal, Tirur, Tolur, Tannirkulam, Tandalam and Kalambakkam villages in Tiruvellore taluk in the North of Chingleput district for agricultural, industrial, domestic and street lighting purposes at an estimated cost of Rs. 6.51 lakhs, initially, rising to Rs. 10.05 lakhs in ten years.

Government have sanctioned the extension of electricity from the Andhra Power System to 77 Mica Mines in Gudur Area in Nellore district at an estimated cost of Rs. 13.6 lakhs.

Sanction has also been accorded for the extension of electricity from the same system to Amalapuram, Razole and 16 other surrounding villages in East Godavari district for domestic, industrial, agricultural and street lighting purposes at an estimated cost of Rs. 15.547 lakhs. The extension scheme involves also an additional expenditure of Rs. 5.847 lakhs debitable to the sanctioned Machkund Scheme.

Supply of Electricity for Agriculture

The Government have sanctioned the extension of supply of electricity for agricultural, industrial, domestic and street lighting purposes at Yemmiganur in Adoni taluk, Bellary district, at an estimated cost of Rs. 1.494 lakhs. The proposal also involved an additional expenditure of Rs. 4.06 lakhs under the sanctioned Tungabhadra Hydro-Electric Scheme.

Sanction has also been accorded for the extension of supply of electricity from the Andhra Power System to 13 agricultural pumpsets in Mirisapur village, Nuzvid taluk, Krishna district at an estimated cost of Rs. 32,300.

Extension of supply of electricity from Mettur Electricity system, has been sanctioned to Balakanampundi, Ramakrishnarajupet, Pannuru, Chellathuru, Vellathuru, Madurapuram, Sirigiri, Badraju, Kandigai and Chengal-rayakandigai villages in Tiruttani taluk, Chittoor district, for 173 agricultural pumpsets, industrial, domestic and street lighting purposes at an estimated cost of Rs. 4,16,100.

Extension of supply to Kesariyangaram village in Bhavani taluk, Coimbatore district, from the Mettur System has been sanctioned for eleven agricultural pumpsets and one industrial service at a cost of Rs. 33,600.

Sanction has also been accorded to the extension from the same electricity system to Nanjaipugalur, Punjaipugalur and Velayudapalayam villages in Karur taluk, Tiruchirappalli district, for 14 agricultural pumpsets, 3 industrial loads, 42 domestic services and one cinema house at an estimated cost of Rs. 55,700.

The balance of the cost of setting up the plant will be met by the Provincial Society from its funds.

The Government have sanctioned the Registrar's scheme for advancing interest-free loans to 1,000 nearly deserving poor weavers outside the co-operative fold in West Godavari district at the rate of Rs. 25 per weaver, in order to enable them to become members of weavers' co-operative societies and to pay the requisite share capital and have an assured supply of yarn. A sum of Rs. 25,000 is placed at the disposal of the Registrar for disbursement to the weavers certified by local Tahsildars as eligible for the advance. The amount advanced is recoverable from the wages of the members concerned in 12 monthly instalments.

Housing

Co-operative Housing is receiving special attention from Government. There are now 290 housing societies of various types in the State. During 1950-51 they obtained loans amounting to Rs. 80 lakhs from Government and completed 1,739 houses in addition to 1,863 houses which were under construction at the end of the year. An interesting experiment of organizing rural housing societies was introduced during 1949-50 and an additional sum of Rs. 15 lakhs was provided for loans to these societies. Under the scheme, 25 housing societies were organized at the rate of one in each district during 1950-51. The rural housing scheme has been continued during the current year also and a budget provision of Rs. 15 lakhs has been made towards the grant of State loans to rural housing societies. The Government have permitted the organization of a second rural housing society in each district during the current year.

The Venkatesapuram Co-operative Housing Colony at Ayanavaram was declared open by His Excellency the Governor of Madras on the 14th July. This is the second colony established by the Madras Co-operative House Construction Society, the first being Gandhinagar in Adyar. The Venkatesapuram colony is situated in the Konnur High Road and is intended to provide 135 lower middle-class houses, the cost ranging from Rs. 6,700 to Rs. 10,800. The society acquired an extent of 21 acres at a cost of Rs. 2.2 lakhs and after setting apart about seven acres for common purposes such as roads, streets, etc., parcelled out the area into 135 house-sites. The estimated cost of a plot of two grounds, inclusive of the cost of amenities, etc., is Rs. 3,200. The society has provided underground drainage, street-lighting and roads for the colony. About 65 houses have been completed and 25 of them have been occupied. The remaining houses are expected to be completed by September 1951.

Interest-free loans to Milk Supply Societies

The Government are giving interest-free loans to members of milk supply societies for the purchase of milch cattle. An amount of Rs. 12.5 lakhs was given as loans, during 1950-51. A few schemes sanctioned recently are mentioned below:-

Assistance to Ponnani Arecanut Marketing Society in Malabar.—The Government have approved the scheme of the Registrar for the grant of financial assistance to the Ponnani Taluk Arecanut Processing and Marketing Society to enable it to process and market the arecanut crop in the Malabar district on co-operative basis. They have sanctioned the employment for three years of one Senior

Inspector, one upper division clerk, one typist, one maistry and one peon.

They have also sanctioned—

(1) a recurring subsidy of Rs. 1,200 per annum towards rent for its curing yard and godowns;

(2) a non-recurring subsidy of Rs. 16,200 towards the cost of construction of a dry chamber (Rs. 2,500) and the purchase of a weighing machine and one 3-ton lorry (Rs. 13,700); and

(3) an interest-free loan of Rs. 36,000 to enable the society to repay its dues to the Malabar District Co-operative Bank. Fifty per cent of the cost of the staff and of the recurring subsidy towards the rent of curing yard and the godown, will be met from the funds of the Indian Central Arecanut Committee sanctioned by the Government of India. They have also agreed to grant from the funds of the Arecanut Committee Rs. 18,000 as interest-free loan towards the advance of Rs. 36,000 sanctioned by Government. The loan is repayable in six years.

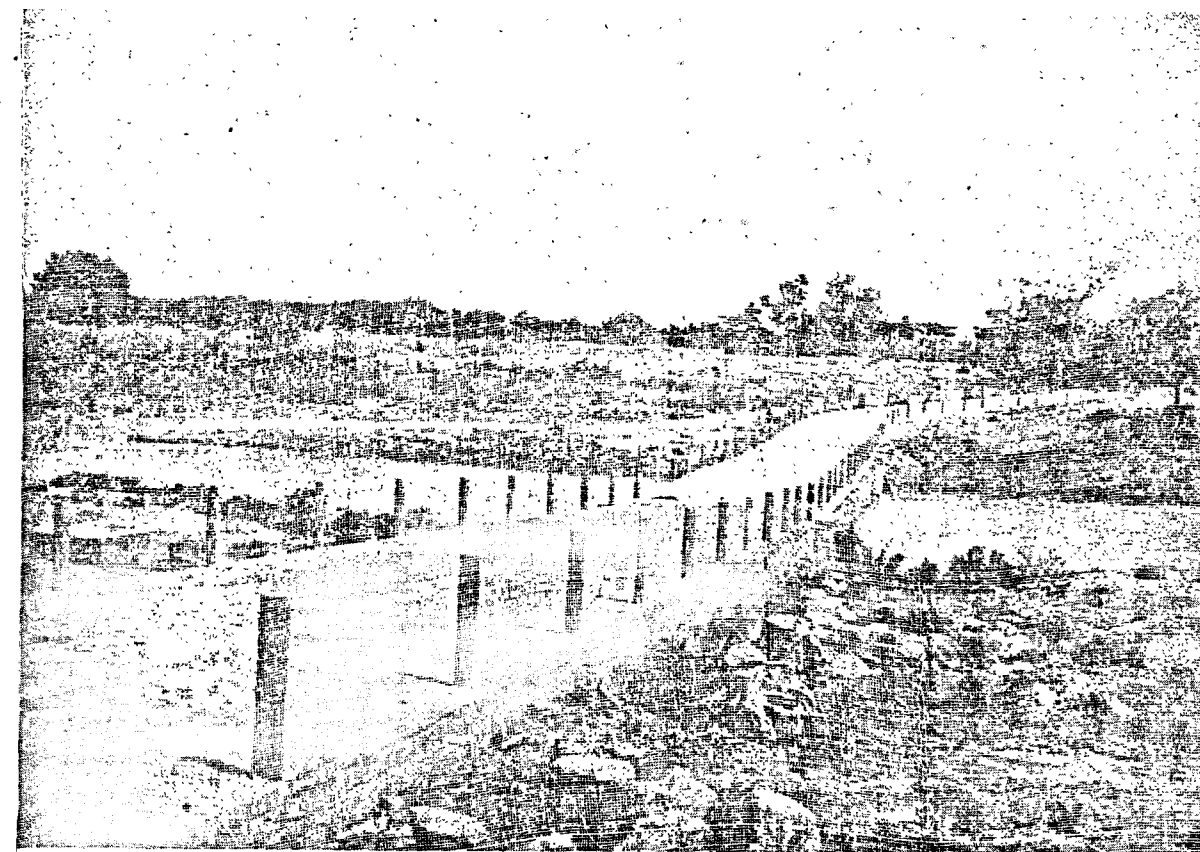
Floitation of Debentures by the Central Land Mortgage Bank

In June 1951, the Madras Central Land Mortgage Bank floated the 46th series of debentures at 3 per cent interest to the extent of Rs. 30 lakhs. The issue price was fixed at Rs. 99-8-0. The debentures are guaranteed by Government for the payment of interest and repayment of principal to the debenture-holders. Government advised the local bodies to invest their funds in these debentures on the usual terms. As suggested by the Registrar, the Reserve Bank of India purchased 20 per cent of the total issue. One special feature of the series is that the Central Banks were requested to secure applications for the debentures from the surplus funds available in the countryside. Such collections amounted to Rs. 4,49,400.

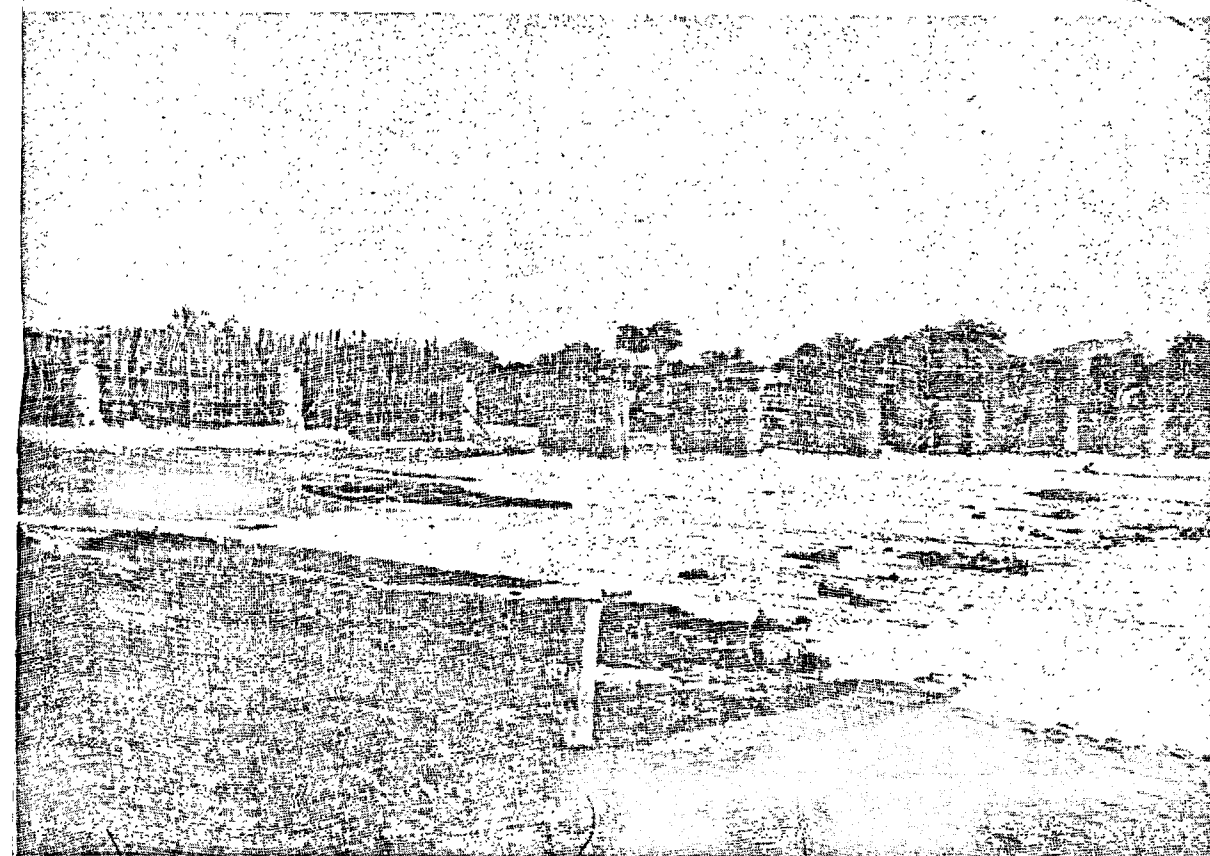
Committee to Advise on Rural Finance

At the informal conference convened by the Reserve Bank of India in February 1951 to review the role of the Reserve Bank in the sphere of rural finance, a number of important recommendations were made with a view to enable the Reserve Bank of India to participate more effectively in financing the needs of the rural areas. One of the recommendations of the conference was that steps should be taken to establish a closer liaison between the Reserve Bank of India and the co-operative banks and to this end a small Standing Advisory Committee which might be an Expert Committee should be associated with the Agricultural Credit Department of the Reserve Bank of India. This was accepted by the Reserve Bank and a Committee of 12 members has been constituted.

The Governor of the Reserve Bank is the Chairman and Sri B. Venkatappiah, Executive Director of Reserve Bank, is Vice-Chairman. Messrs. T. A. Ramalingam Chettiyar, M.P., President, Madras Provincial Bank and J. C. Ryan, Registrar, have been appointed as Members of the Committee, from the Madras State by the Reserve Bank. The functions of the Committee will be to advise the Reserve Bank of India on matters pertaining to the Agricultural Credit Department and on subjects allied to these matters. The Committee will meet once in six months or oftener as may be necessary. The term of the Committee is two years.



The Hanumatheerthan Causeway recently opened at Salem by Sri M. Bhaktavatsalam, Minister for Public Works. The causeway connects two important marketing centres.



The Kaveripatnam bridge under construction in Salem District

Annexure (B).

Figures for 1st April 1950 to 31st March 1951.

Rural branches	51 (2 to be opened shortly).
Urban branches	20
Madras City	1 (run by the Training School).

Special branches—	
1 For Todas at Ootacamund.	1
2 For Agency Tracts at Rampachodavaram ..	1
	74

	NUMBERS.
1 (a) Total number of centres	167
(b) Number of centres for poor and lower middle class people.	73
(c) Number of slum centres	94
2 Total number of families coming under survey.	12,064
3 (a) Total number of first visits paid to these families.	12,064
(b) Subsequent visits	73,874
4 Total number of families coming under family case study, counsel, guidance and assistance.	5,088
5 Number benefited by—	
(a) Hospitalization	1,877
(b) First aid and any kind of medical aid given in the branch.	4,432
6 Number who have been rehabilitated and who have received other help such as securing employment, admission into Training School, Midwifery training, admission of children in schools, etc.	1,920
7 Number of investigations made, admission into Service Home, medical case study, i.e., T.B. investigation, etc.	2,723
8 (a) Total number of times the community service centre meetings were held.	24,016
(b) Average attendance in community service centres.	5,310
(c) Number of persons coming to the branch centre at times other than centre time for assistance or to make use of the facilities there.	1,323
(d) Number of monthly meetings held.	1,424
9 Number of active voluntary helpers ..	403
10 Number attending literacy class ..	2,815
11 Number of demonstrations conducted.	649
12 (a) Number benefited by subsidiary industries (started from January 1951 only).	1,508

	RS. A. P.
(b) Wages earned by the members ..	3,114 7 8

13 Other receipts—	RS. A. P.
(a) Sale proceeds of finished articles.	5,851 1 2
(b) Sale of individual copies of journal.	1,723 3 10
(c) Subscribers—renewals and new subscribers.	3,362 0 0
(d) Receipts from advertisements.	979 6 0
(e) Donations—cash and kind ..	1,698 0 0
14 Pre-basic attendance (average) ..	1,361
15 Maternity (figures relating to last two months only)—	
(a) Number of families contacted.	929
(b) Pre-natal	133
(c) Post-natal	557
(d) Delivery cases	95

No Sales Tax for Three Years on Milk Co-operative Societies

The Government have directed that Co-operative Milk Supply Societies and Unions, which have been formed on or after July 1, 1949, and which may hereafter be formed, be exempted from the payment of sales tax for a period of three years from the date of starting of the Society or Union, as the case may be.

This action has been taken by the Government in order to give some relief to the newly formed Co-operative Milk Supply Societies and Unions.

Community Listening Sets Installed

The State Broadcasting department have installed community radio sets at Brahmanakraka, Talamanchi in Nellore district, Parakudi in Ramanathapuram district, Bevinahali in Bellary district, Singapadi in Madurai district, Vijayavada Municipal High School in Krishna district and Dharapuram in Coimbatore district.

Inam Estates to be taken over by the State

The Government of Madras have decided to take over 3,000 and odd inam estates under the Zamindari Abolition Act. A notification to this effect will be published in the *Fort St. George Gazette* on September 7, 1951, and the estates will actually be taken over by the Government on October 1, 1951. These relate to cases where Miscellaneous Settlement Officers have already adjudicated, or which were referred to the Tribunal on appeal, or where no appeals have been filed, or where appeals filed have been disposed of by the Tribunal.

Progress of the Co-operative Movement

The Co-operative movement in Madras State is now over forty years old. For a long time the movement remained predominantly a credit movement. The conditions created by the war and the various economic and social problems that the country had to face in the postwar years gave ample opportunities for the many-sided development of the Co-operative movement. So much so the co-operative agency is now handling with a considerable amount of success such problems as procurement and distribution of foodgrains, supply of yarn to weavers, relieving housing shortage, resettlement of ex-service men, rehabilitation of ex-tappers, development of village industries, etc. The activities of the co-operative movement in some of the important spheres is mentioned below.

Conversion of Rural Credit Societies into Multipurpose Societies

The Government have sanctioned a scheme in order to enable all the existing rural credit societies to undertake multipurpose activities and for the organisation of more such societies in order to bring at least 50 per cent of the villages and 30 per cent of the population within the co-operative fold. These multipurpose societies will cater to all the economic needs of their members besides supply of credit. The scheme has now been in operation for about 2½ years during 1951-52 alone the Government have sanctioned an expenditure of Rs. 2,18,124 for the grant of subsidies to central banks under this scheme. The Village Societies now cover 64.6 per cent of the villages and 17.28 per cent of the population.

Special attention to Rayalaseema

The Government are paying special attention to the credit needs of the Rayalaseema. A subsidy of Rs. 1,61,700 was granted in 1949-50 to the five central banks in Rayalaseema in order to enable them to wipe off their bad and doubtful debts. A subsidy of Rs. 71,700 was granted to them during 1950-51 to enable them to advance loans at a rate not exceeding 5 per cent. A similar subsidy has been granted during 1951-52 also. A special subsidy was granted to the central land mortgage bank to enable it to advance loans through the primary banks at 4 per cent, instead of the normal rate of 5½ per cent. The subsidy estimated on this account comes to Rs. 6.75 lakhs spread over a period of 24 years. Village Credit Societies as well as Land Mortgage Banks in Rayalaseema were given full exemption from payment of registration fees.

Co-operatives and Food Production

Co-operatives in this State are being utilised in an increasing measure in schemes of food production. The distribution of chemical fertilizers like ammonium sulphate super-phosphates and iron and steel, is now in the hands of the Co-operative organizations. The Government have sanctioned a scheme of intensive food production through village co-operative societies in seven select districts and its extension to some more districts is under consideration. Under the scheme the village co-operatives undertake the distribution of seed, manure, agricultural implements and encourage the manufacture of rural compost. They take fallow lands for cultivation where it is possible. It is reported that 107 societies have applied to the Revenue Department for leasing out nearly 8,000 acres of Government waste lands and that in several

districts extensive areas of Government land (1101.39 acres in all) have been brought under cultivation. Deputy Registrars have been instructed to relax the usual credit limits of borrowings in rural societies so that increased facilities might be available to members to go in for costly agricultural implements like oil engines and pumping sets for irrigation.

Furtherance of the Grow More Food Campaign was also contributed by agricultural land colonization societies. It is the object of these societies to help the agriculturists not only to secure land for cultivation but also to secure for him such of the agricultural facilities which a poor cultivator cannot afford individually. Twenty-seven land colonization societies for civilians as distinguished from those organised for the benefit of ex-service men have been working and they were assigned over 11,200 acres of the Government land. Nearly 9,800 acres were reclaimed by these societies and made fit for cultivation. At a departmental conference held in March last it was decided to implement six more land colonization schemes during the year 1951-52 and to allow enhanced scale of financial assistance to these new societies. More schemes could not be considered on financial grounds.

Subsidy for Construction of Godowns

Lack of godown facilities has been a serious handicap for the development of the activities of the credit and marketing societies. The Government have sanctioned a scheme for the grant of subsidies to co-operative societies for the construction of godowns, to the extent of 50 per cent of their estimated cost, the remaining 50 per cent being met from the societies' own resources or from State loans. A provision of Rs. 5 lakhs is made annually for this purpose. This has attracted a large number of applications from rural societies.

Development of Handloom Industry

Co-operatives in Madras are playing an important part in developing rural industries. The most important industry which has been successfully developed on a co-operative basis is the handloom industry. The Madras Handloom Weavers Provincial Co-operative Society with its 964 affiliated weavers' societies command 149,802 looms which represent nearly one third of the total number of looms in the State. The annual production of handloom goods is Rs. 323.16 lakhs and the total sales Rs. 421.3 lakhs. Distribution of yarn through co-operative societies has helped the weavers to get yarn in reasonable quantities.

The Government have sanctioned the starting of a co-operative spinning mill at Guntakkal with 11,000 spindles allotted to it by the Government of India. The mill is intended to supply cotton yarn to handloom weavers through primary weavers' societies at cost price.

The Government have approved the scheme formulated by the Madras Handloom Weavers' Provincial Co-operative Society for the installation of a calendering and other plants at an estimated cost of Rs. 5.60 lakhs. It is considered that when the plant is set up, it will be possible to give better finish to the Handloom cloth. To enable the society to implement the scheme, the Government of India have sanctioned a grant of Rs. 2,15,700 from the Handloom Development Fund. The Madras Government have sanctioned a grant not exceeding Rs. 1.40 lakhs or 25 per cent of the cost of the scheme, whichever is less.

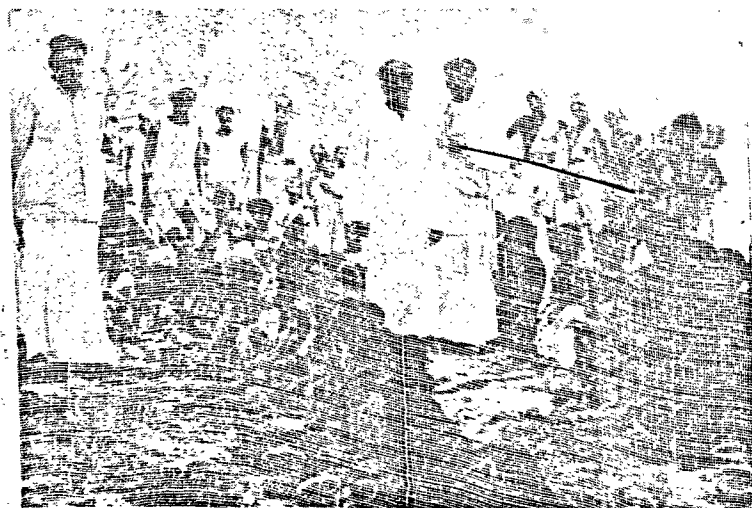
MINISTER'S VISIT TO THE GRUEL CENTRES



Recently Hon'ble H. Sitharama Reddy visited a number of gruel centres in Coimbatore district. Poor villagers have assembled to get their feed at the gruel centre.



Children and adults sit in order



Hon'ble the Revenue Minister mixes freely with the poor and personally inspects the arrangements for feeding.

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"WE SEEK TO SERVE AND NOT TO COMPETE"

November 1951

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Cover page : A view of the Hogenakal Waterfalls in Salem District.

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South Arcot	Bellary		
Chingleput	Chittoor	Malabar	Bellary
Coimbatore	Cuddapah		South Kanara
Madurai	East Godavari		
Nilgiris	West Godavari		
Ramanathapuram	Guntur		
Salem	Krishna		
Tanjore	Kurnool		
Tiruchirappalli	Nellore		
Tirunelveli	Srikakulam		
	Visakhapatnam		

PROGRAMMES

3

MADRAS INFORMATION

Make the Elections a Success

Collectors' Duty Stressed

By Hon. SRI P. S. KUMARASWAMI RAJA, Chief Minister

(Address delivered at the Collectors' Conference held recently.)

You are assembled here in this Conference on the eve of a great event of constitutional and general importance, which is to take place shortly.

As you are aware, the largest democratic elections ever attempted so far in any country in the world will be held shortly throughout the Indian Union. The law relating to these elections is complicated enough; but even more formidable are the administrative problems confronting those responsible for its implementation. It is not merely a matter of prestige, but the bare duty of any civilized Government that elections should be conducted with absolute fairness and impartiality; and we all owe it to ourselves and to our Republic to see that the assurance given in this regard by His Excellency the Governor in his recent address to the State Legislature is fully implemented.

Severe Test

We, in this State, have good reason to be proud of the general efficiency and integrity of our administrative machinery, not only in the matter of general administration, but also in the matter of ensuring peaceful, fair and free elections. The gigantic task involved in carrying through successfully the forthcoming General Elections will be a more severe test than this machinery has ever been called upon to face, but I am sure all our officers will take up this challenge also and give a good account of themselves, and thereby maintain the proud record of this State and earn a good name for this State and our Republic in conducting the first General Elections in Independent India.

No doubt, it is the Returning Officer who is statutorily responsible for the arrangements within his constituency, but he must necessarily depend on the co-operation of the entire administrative machinery within his constituency. You are yourselves the Returning Officers for a number of constituencies, but your administrative responsibility will necessarily extend over a larger and wider field and cover the entire area within your normal territorial jurisdiction. In connection with these elections also, you will continue to be the pivot of the whole machinery, and the central directing authority within your respective areas. The Government, therefore, attach the greatest importance to this Conference of Collectors and the Commissioner of the Corporation of Madras.

Work Hard

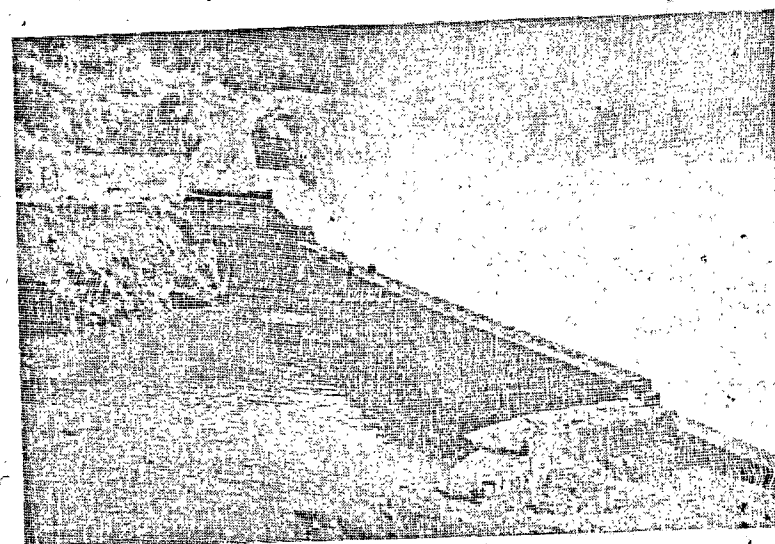
There is a formidable agenda before you, and it is up to you to spot all the administrative snags and suggest solutions for them, and the Government will take decisions and communicate their formal instructions in the light of your discussions here. Owing to the enormous expansion of governmental activities in recent

years, particularly on account of the controls, including food control, all our staff is not up to the old standard, and requires more detailed guidance and supervision than in the past. Elections are not a matter where we can leave anything to chance, or take risks or trust to good luck. Our country has a right to demand that you should deliver the goods in regard to the conduct of these elections, and you can do so only if the subordinate official machinery is adequately guided and supervised by you. Human nature being what it is, it is only when your subordinates find that you yourself are working hard, paying attention to the minutest details, day-in and day-out, in connection with these elections, and that you are giving topmost priority to it and your continuous personal attention, they will achieve cent per cent of their potential capacity for efficiency and systematic work.

Be Impartial

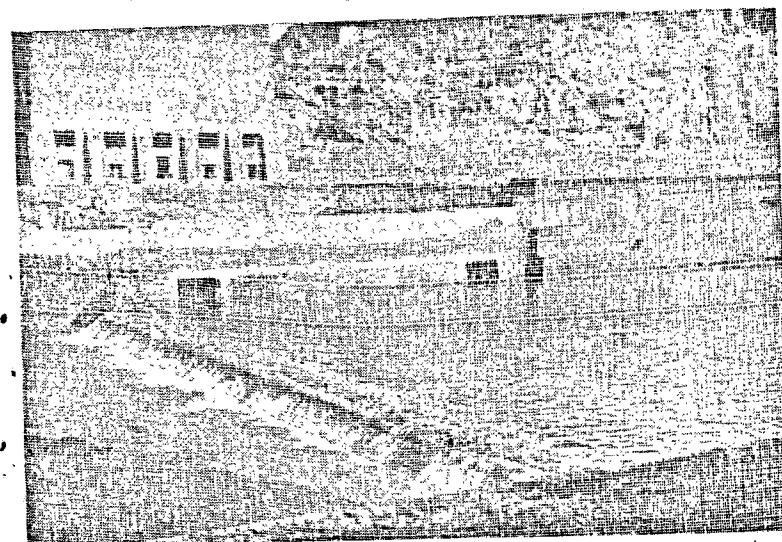
As heads of executive administration in your respective districts, you are charged with the responsibility of conducting the General Elections strictly in the manner envisaged by the Election Laws. The discharge of that responsibility calls for the display of not only great efforts, mental and physical, but also the virtues of your personal integrity and also strict impartiality in the discharge of your duties. As members constituting the permanent machinery of governmental administration you are to be guided solely by your high sense of duty in discharge of your functions, untrammelled by any political or party considerations. Political or party considerations are matters for politicians and non-officials, and not for the servants of the Government, who should always be far above such considerations. The work relating to the General Elections which you are going to undertake, is vast indeed. The number of polling stations being large and the voters going to the polls being vast, it behoves every one of you, as the chief administrative head of the district you represent, to see to the conduct of the General Elections strictly as per the laws of election. The scale of the operations required on the administrative side in connection with these elections is so colossal that careful forethought and planning in regard to every detail connected with them is necessary from now, and we have hardly three months before us.

Gentlemen, I will now leave you to your deliberations. Myself and my colleague, the Finance Minister, will participate in your discussions as much as we can, and for the rest, we shall await with interest the results of your discussions. In conclusion, I would like, on behalf of my Government, to assure you, and through you, the subordinate officers, that the Government will stand solidly behind every public servant so long as he discharges his duties in connection with these elections, as I am sure you all will, efficiently and without fear or favour and in accordance with the election law and the instructions issued by the Government.



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METTUR CANAL SCHEME



Photos taken at the Headworks, showing progress of work (top). Diversion of water into canals (centre) another view (bottom). Bridge under construction for taking canal water to the other side of the river.

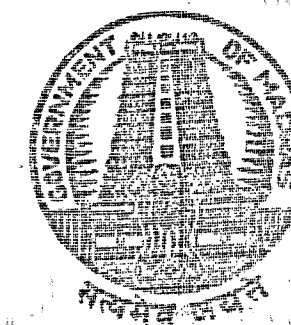


MADRAS Information



135151

November 1951
Price As. 3



Call to Government Servants

As you are aware, the first General Elections to the Legislatures in Independent India will be held shortly in this State. The actual polling will take place only in January 1952, but preparations made well in advance and carefully planned will obviously be needed to ensure the success of what will be the largest democratic elections ever attempted so far in any country in the world. These elections will be an exacting but appropriate test of our fitness for the ambitious and up-to-date democratic Constitution that we have framed for ourselves. The task of organizing efficiently the elaborate arrangements necessary for holding these gigantic elections naturally falls on the officials, though, if they do their work efficiently and impartially, they can fully count upon the co-operation of the public and the political parties. The efficient conduct of these elections will require cent per cent efficiency on the part of every Government servant connected with it, whether he be a Returning Officer, or a Presiding Officer, or a Polling Clerk, or a Police Officer, or only a peon, or a village servant detailed for duty at a polling station. I am sure you will all realize that not only your own personal reputation for efficiency and integrity is at stake, but also that the good record of this State for peaceful and fair conduct of elections has to be maintained, and that by seeing the elections through successfully, you will not only earn a good name for yourself, but also for this State and the country as a whole.

Fairness and Impartiality Essential

It is obviously important, that, as required by law and as expected by the Government, you should be scrupulously impartial in your work in connection with the elections and implement the assurance given by His Excellency the Governor in the course of his recent address to our

Legislature that the elections will be conducted with absolute fairness and impartiality. You are free to exercise your own vote in accordance with your best judgment, but otherwise, your activities and interest must be confined to the careful and thorough carrying out of all the duties entrusted to you by the competent election authorities. Election procedure is a matter governed by rigid statutory provisions. It is, therefore, important that you should familiarize yourself with the provisions of law relevant to your work, and which will be explained to you at the training classes, so that you may commit no irregularities in discharging the duties entrusted to you.

Only by setting a good example himself by working hard and carrying out his own duties carefully and thoroughly, can any officer ensure equal care and efficiency on the part of his subordinates. It is of the utmost importance that everyone of you should give matters connected with these elections the topmost priority from now on until the elections are over, and see that there is no delay at any stage.

On behalf of my Government, I must inform you that the efficiency displayed by an officer in his election work will be an important item to be taken into account in judging his record during the year and for assessing his merits for promotion. Good work done in connection with the forthcoming elections will accordingly be duly recorded in the Personal Files of officers, while carelessness, inefficiency and even indifference will lead to disciplinary action being taken.

I am confident that in connection with the forthcoming General Elections also, officers of all ranks in this State will rise to the occasion, and not only give a good account of themselves, but also maintain the good record of this State and come out of this severe test with glowing colours.

Census Publications

The 1951 Census Publications will be available for sale commencing from the third quarter of 1952. The publications will consist of the following :—

(i) *General Reports*.—There will be a series of general reports for All-India, as well as for different States. Each report will be ordinarily divided into two parts, one containing the basic statistical tables, and the other containing narrative commentaries and subsidiary tables.

(ii) *Brochures*.—The scope of the 'General Reports' will be limited to the presentation of demographic and economic data collected at the 1951 census, and explanation of their significance. Information on other topics will be made available separately in a series of Brochures on special subjects, such as Displaced Persons, Backward Classes, Literacy and Education, Language, Religion, etc.

2. In view of the widespread public interest displayed in the first census of Free India, the Government of India desire that the likely demand for copies of these publications should be ascertained beforehand and sufficient number of copies printed so as to meet the demand in full, at the minimum price necessary to cover costs.

All persons who are interested in securing copies of the 1951 census publications are, therefore, invited to communicate their requirements to the Manager of Publications, Civil Lines, Delhi. If firm orders are placed in advance, they will be registered and copies will be supplied as soon as possible after publication.

Reservation of Appointments under the Constitution

Madras Government's New Order

The Government have carefully examined the judgment of the Supreme Court, regarding the validity of the order, dated November 21, 1947, according to which appointments to the Public Services in the State were reserved for qualified and suitable members of the following Communities: Non-Brahman (Hindus), Backward Hindu Communities, Brahmans, Harijans, Anglo-Indians and Indian Christians and Muslims.

The Government consider that in view of the judgment of the Supreme Court, appointments cannot be reserved, under Article 16 of the Constitution, for any community other than the Harijans and Backward Classes. The question regarding the changes to be made in the existing rules and orders relating to the representation of several communities in the Public Services under the State has therefore been considered. The Government have decided that, in lieu of the existing allocation of appointments, based on a unit of fourteen, the following system should be adopted :—

The strength of the unit should be raised to twenty appointments, and out of those twenty, three should be reserved for the Scheduled Castes and the Scheduled Tribes, and five for the Backward Classes, the remaining twelve being filled on the basis of merit.

Competitive Examination

Merit will be determined, in the case of recruitment on the basis of a competitive examination, by the results of an examination, comprising a written test or an oral test in the shape of an interview only, or both written and oral tests, as the case may be, as may have been prescribed for selection to the services and posts concerned; and in other cases, on the basis of the previous record of the candidates, taking into consideration also the recommendation of the Head of the Department concerned. Where selection is made on the basis of a competitive examination, including an interview, the selecting authorities will also take into account the activities of a candidate in sports and in the National Cadet Corps, and also his general physique and aptitude for the service or post concerned.

Backward Classes and Scheduled Castes

All classes specified by Government as Backward Classes, and converts to Christianity from the Scheduled Castes will, for the purpose of reservation of appointments for Backward Classes, be regarded as belonging to those classes. The claims of members of the Scheduled Castes and the Scheduled Tribes and the Backward Classes should also be considered for the remaining twelve appointments mentioned above; and where a candidate, belonging to a Scheduled Caste, Scheduled Tribe or to a Backward Class, is selected on the basis of merit, the number of posts reserved for Scheduled Castes and Scheduled Tribes or

for Backward Classes, as the case may be, will not in any way be affected.

Rotation Order Changed

Recruitment to some of the services and posts in the State is now made on a rotation basis. Consequent on the change in reservations ordered, it has become necessary to change the order, in which appointments by rotation are to be made. The Government have decided to change the order of rotation in every cycle of 20 vacancies as follows :—

1. Open Competition.
2. Scheduled Castes and Scheduled Tribes.
3. Open Competition.
4. Backward Classes.
5. Open Competition.
6. Do.
7. Backward Classes.
8. Open Competition.
9. Scheduled Castes and Scheduled Tribes.
10. Open Competition.
11. Do.
12. Backward Classes.
13. Open Competition.
14. Backward Classes.
15. Open Competition.
16. Scheduled Castes and Scheduled Tribes.
17. Open Competition.
18. Do.
19. Backward Classes.
20. Open Competition.

The orders referred to above will come into force immediately. In the case of representation by rotation, the rotation should start afresh, the start being made with the first selection or appointment to be made after the date of this order and begin at the first turn in the cycle, namely, the turn reserved to be filled by open competition. If a qualified and suitable candidate, belonging to any of the Scheduled Castes and Scheduled Tribes or the Backward Classes, is not available for appointment in the turn allotted for them in the cycle, the turn will lapse and the vacancy will be filled by the next turn in the order of rotation. No account should be taken of any passed-over turns of the Scheduled Castes and the Scheduled Tribes or of the Backward Classes under the existing rules or orders; nor will any vacancies, passed over under the revised orders, be carried forward to be filled by subsequent appointments. Candidates belonging to the Scheduled Castes and the Scheduled Tribes and the Backward Classes, will also be eligible for appointment to any of the vacancies to be filled by open competition on the basis of merit.

The Pykara Dam

Extension Scheme Explained

The construction of the Pykara Dam is one of the works under the Third Stage Extensions of the Pykara Hydro-Electric Development which are now in progress as one of the Power Projects under the Five-Year Plan, 1951-56.

A brief description of the scheme since its inception and its location is given below :—

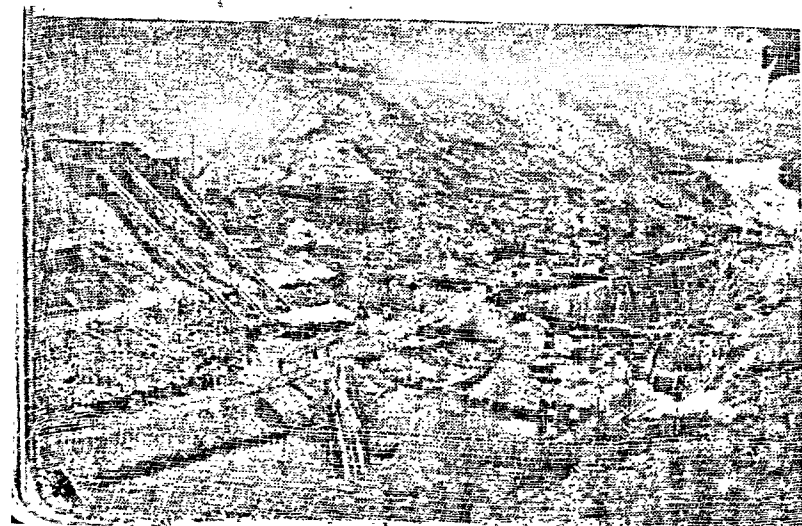
The Pykara river rises in the eastern slopes of the Western Ghats at about 15 miles west of Ootacamund and flows towards the north-east. The river falls in escades from the Nilgiris Plateau (at an elevation of about 6,500) to the Mysore Plateau at about 3,000. This fall of about 3,500 feet has been already partly utilised to develop Hydro-Electric Power in the river.

The flow in the river is varying between very wide ranges, i.e., in the summer the flow is as low as 3 to 4 c.ft. per second while during heavy floods the flow is as high as 20,000 c.ft. per second. For Hydro-Electric Development the quantity of water required should be as uniform as possible. Hence the necessity for storage reservoirs to store water during periods of floods for utilisation during periods of low flow or drought and thus have a regulated flow throughout the year.

First Stage of Development

In the first stage of Pykara Hydro-Electric Development during the years 1929-33 run in the river alone with storage for variations in day-to-day load only in the forebay was utilised to develop power at Singara Power Station to an extent of about 12,000 K.W. As the development proceeded further, a storage reservoir at the Mukurthi river, a tributary of the Pykara with a capacity of 1,800 million c.ft. followed by the installation of an additional generating capacity of 25,000 K.W. was built between the years 1935-40. Even as early as 1943 the station was fully loaded necessitating additional development. This development is called the third stage extensions expected to cost approximately 4 crores rupees. The work was commenced in 1946 and is expected to be completed by 1954.

A general view of the dam in progress. At the right hand middle is seen the dam structure in which is a water-way for diverting water.



The work comprising the third stage extensions are briefly (i) construction of a storage reservoir to store 2,000 million c.ft. at about 12 miles from Ootacamund on the Ootacamund-Mysore road on the Pykara river and (ii) to extend and install in the existing power station at Singara, two additional generating units of 13,600 K.W. each with necessary additional pipe lines, valves, meters, etc.

This article describes briefly item (i) listed above, viz., the Pykara Dam.

Best Possible Site Chosen

The site for the dam is situated about a furlong up-stream of the highways bridge spanning the Pykara river at the 12/2 mile stone of the Ootacamund-Mysore road. This site was the final one chosen as the best possible in this region after a series of explorations by drilling during the years 1943-44. At this site the catchment area of the stream is 38 sq. miles. The average rainfall in the catchment is about 80 to 100 inches per annum and the run off normally is about 7,000 million c.ft. With a storage of 2,000 million c.ft. possible at this site a constant flow of 200 c.ft. per second can be ensured even in a series of bad years of rainfall.

The area of the sheet of water when the lake is full would be approximately 1,000 acres. All this area is now forest land studded with grass with a few patches of sholas here and there. There are no villages or valuable property submerged due to this construction.

The dam is 705 feet long and can be divided into three parts. In the centre, i.e., the river-bed portion a spillway of 121.5 feet width will be built, over which the waters will be allowed to overflow during floods. On the left, where good rock is available for foundations, outlet pipes to pass off water during periods of normal flow are located. This portion and the river-bed portion comprising a length of 480 feet is being built of masonry and the portion on the right side to a length of 225 feet is being built as an earthen dam to suit the foundations available there.

Height of the Masonry Dam

The height of the masonry dam is 180 feet above foundations and 120 feet above the bed of the river. In the spillway section, to safeguard the rear of the dam from damage, extensive precautions are taken by protecting the bed of the river by suitable aprons.

On the top of the dam, there will be a roadway 18 feet wide for purpose of inspection and operation of the gates at the spillway. The gates are three in number, 35 feet wide and 20 feet high capable of passing a maximum flow of 31,000 c.ft. per second.

The quantities involved in the work are—

- (i) 50 lakhs c.ft. of stone masonry and
- (ii) 50 lakhs c.ft. of earth-fill.

The materials required for the construction are therefore—

- (1) Stone—50 lakhs c.ft.
- (2) Sand—25 lakhs c.ft.
- (3) Cement—6 lakhs c.ft. or 24,000 tons.
- (4) Steel—200 tons.

Stone of good granite variety is available nearby within a distance of 1 to 2 miles. As no natural river sand deposits are available nearby within economical distances small stones are crushed into powder to be used as sand.

Stone-in-Mortar Construction

The dam is being built of stone in mortar, the mortar proportion being 1 of cement to 4 of sand (got by crushing rock). In the reservoir side of the dam, mortar of 1 of cement to 3 of sand will be used to a width of 5 feet at top for making the dam impervious to percolation of water. The exposed faces of the dam will be faced with squared-face stones hammer-dressed. The portion of the dam where the water overflows will be of chisel-dressed face work to give a smooth surface for the flow of water.

To reduce uplift pressure and to prevent leakage, if any, through fissures or joints in rock foundations, three rows of holes 3 inches diameter are drilled staggered, varying in depth from 72 to 48 feet and grouted with cement at 100th pressure.

A drainage gallery will be built along the masonry portion of the dam, as is usual in the case of such dams, for facilitating inspection of the dam for percolation.

Localising the Cracks

The cement that is used for construction emits heat for a considerable period of time after construction and then the structure cools and shrinks. This would cause cracks on the dam which is undesirable. Hence the cracks are localised by building the dam in sections and leaving joints. These joints are at about 120 feet intervals along the length of the dam. To prevent leakage of water through the joints copper strips are used and joints made water tight.

The outlet pipes located on the left side of the dam for passing water for power generation can discharge 200 c.ft. of water per second. They are 6 feet in diameter and made of iron plates $\frac{1}{2}$ inch thick. There will be gates in front and valves in rear to control the flow. Power to the extent of 2,000 K.W. is capable of being developed at this dam site itself utilising the head of water in the reservoir apart from the power to be generated under Pykara III Stage Extensions. Necessary provision has been made over now in the arrangement of works for power generation at the dam site.

Protection against Wave Action

The earthen fill on the right side of the dam will be formed in layers 4 to 6 inches thick consolidated by rollers. To prevent wash due to wave action, the reservoir side of the bund is protected by stone rivetment 3 feet thick. The rear slope will be protected from erosion due to rain, by turfing.

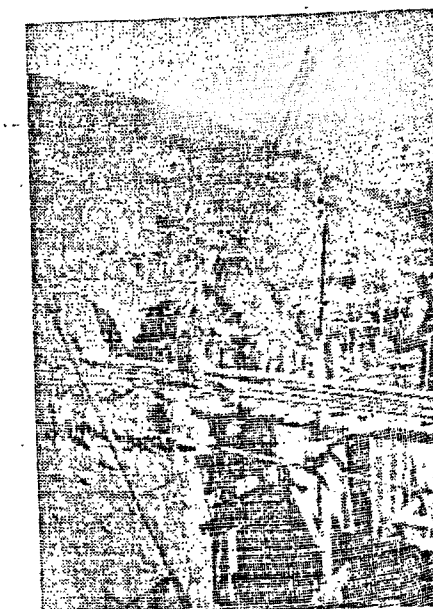
Unlike the present practice of using machinery on a large scale in the construction of such dams, only just sufficient machinery which will not displace labour are being used. The machinery used is mostly for crushing sand, mixing mortar, drilling blast holes in rock and lifting or lowering big stones in trenches, etc., which cannot be done by manual labour economically.

Climatic Conditions

The worksite being at about 7,000 feet above mean sea level in the Nilgiris district, the climatic conditions are trying. As there are no skilled or unskilled labour available in the district for the work, the labourers have to be brought mostly from the plains. During the period of south-west monsoon (June to August) due to heavy winds and rain, no work is possible. Again during the months of December and January it is extremely cold. Thus the work is purely seasonal and has to be started every year in September and the labour dispersed in May and on the onset of the monsoon.

To make the labour as comfortable as possible and to house them and the supervisory staff a colony has been built at the dam site. The colony is electrified and supplied with good chlorinated water.

The construction of the dam was started in 1947 and due to unexpected difficulties in foundations the progress could not be achieved according to programme. Up till now major portions of the foundations have been opened and covered with masonry and the dam has come well above bed level of the river. The difficult portions of the work are now almost over and it is expected that the dam will be completed by 1954. The cost of the work inclusive of overhead charges is estimated to be in the neighbourhood of Rs. 160 lakhs.



Cranes at work in lifting excavated earth for deep trenches outside.

Ceded Districts Grid

The Ceded Districts Grid envisages ultimately a net work of transmission lines of 66 KV, 33 KV and 11 KV with two Hydro-electric Power Stations one at Tungabhadra Dam site and another about eight miles down along the Irrigation Canal at Kamalnagar with step-down stations wherever needed for supplying electric power to the various villages and towns in the Ceded Districts comprising Cuddapah, Kurnool, Bellary and Anantapur districts. As generation from Tungabhadra Scheme is expected to commence only in 1955-56, with a view to meet the immediate post-war demand in this area and to build up in advance a sizeable load for the Tungabhadra Hydro-station when the latter materializes, a proposal to purchase bulk power from Mysore Government from their Jog Hydro System and extend supply to the districts of Bellary and Anantapur was sanctioned by Government in July 1946 at an estimated cost of Rs. 700 lakhs.

Work on this has been almost completed and Mysore supply has been already extended to Kudligi, Hospet, Bellary, Alur, Adoni, Guntakal, Hagari, Halaharvi, Kottur, etc. The Tungabhadra Scheme costing about Rs. 7.3 crores was included in the second five-year plan of the State and is expected to be completed in all respects by 1955-56. When generation commences under the Tungabhadra Scheme, the Grid will be supplied by the two powerhouses with installed capacities of 15,000 KW at Dam site Powerhouse and 15,000 KW at Canal Powerhouse. The Grid may be linked up with thermal stations that may be installed at a future date, one at Kurnool and the other at Cuddapah if power demand warrants it.

Jog Scheme Preferred

Under the original first five-year hydro plan for electrical development in the Madras State, a scheme for extending supply in the Ceded Districts initially by the installation of a thermal station at Hagari, was given full consideration as compared to the possibilities of taking Jog supply. As the Mysore Government were in a position to supply our requirements of power needs from their Jog scheme (up to 4,000 KW) it was found more advantageous to take supply from them rather than erect a thermal station at Hagari, which would involve a large capital investment. Mysore power would also serve the needs for the construction

Bellary Sub-station

of the Tungabhadra Project for its speedy completion besides developing the load in the Ceded Districts and preparing the ground for the Tungabhadra Hydro-electric scheme, so that when the latter commences generation the loads can be switched over to the new Hydro-Electric Stations.

Till about two or three years back, the generation and distribution of electricity in the Ceded Districts was confined to a few local electrical undertakings, at Hospet, Bellary, Adoni, Anantapur, Cuddapah, Kurnool and Hindupur, supplying very limited energy in the towns concerned, by generation of power from oil engines. Supply was generally unsatisfactory, owing to the fact that these engines were getting old and there was considerable difficulty (during the war) in getting spare parts for keeping them in good conditions. For example, in Hospet the power supply had to be closed down for nearly two years due to breakdown of the licensee's plant. It may be mentioned in this connection that all the above undertakings have been since taken over by the Government except Adoni (which will also be shortly taken over) and the supply position has been improved in all these places.

Industrial Consciousness

The need for power supply came to be felt more keenly with the industrial consciousness of the people of the districts in the wake of World War II for building up the undeveloped areas. This area had badly suffered for want of electric power for development both of industry and agriculture. The Government, therefore, decided to take supply from Jog and purchase of a block power of 4,000 KW from Mysore was negotiated. Thereupon the Ceded Districts scheme, costing Rs. 75.78 lakhs was sanctioned as a post-war scheme with high priority in July 1946. The scheme provided for 112 miles of 66 KV transmission lines from the Mysore border, i.e., Sokke village (Mysore supply point) to Hospet, and thence to Bellary and Guntakal with 66 KV step down stations at Kudligi, Dam site (Hospet) and Bellary. Besides, a 33 KV line of 41 miles long was to be extended to Adoni from Bellary, for supplying the industrial needs of the growing town of Adoni with the newly sponsored Rayalaseema textile mills.

The technical designs and preparation of specifications were taken up in July 1946, and actual erection was begun in 1948. Many hurdles had to be overcome during the period of construction. Commencing with the supply of structural materials for towers for 66 KV lines and supports for 33 KV and 11 KV lines, right up to the last bit of material, there were difficulties in procurement and transport. Foreign deliveries were protracted. Local labour was either poor or not forthcoming at all for the construction work. Labour had to be imported from outside and maintained with great tact, lest they might go away. Besides, the region between Sokke (Mysore supply point) and Hospet is highly malarial. Free distribution of preventive medicines against malaria to the labourers and provision of accommodation and supply

of rations regularly kept their morale at high level, and enabled the department to get the works completed in the stipulated time.

Labour and Material

Mustering all the resources for labour and material, by diversion of stores from other systems of the department, the first section of the 66 KV lines between Sokke and Kudligi was completed in April 1949 and supply availed from Jog on 7th April 1949.

The section between Kudligi and Dam site was subsequently completed in September 1949 and supply effected to Tungabhadra Dam Project and to the Hospet Electricity undertaking. The lines were then extended from Hospet to Bellary and then to Adoni in March 1950; and supply to Rayalaseema mills commenced on 6th April 1950. Supply to Guntakal, Alur and Halaharvi was also switched on 28th December 1950 and to Kottur Panchayat on 23rd July 1951.

In addition to the main scheme detailed above, there are several proposals totalling nearly Rs. 30 lakhs, for extending supply to the villages in the neighbourhood of the various sub-stations especially Bellary and Adoni, prominent among which are Rayadurg, Urvakonda and Emiganur. Small villages like Hatti Bellagalla, Bisulihalli, Bevanahalli, and Prasadavarhali will also have very early benefit of electricity for domestic and agricultural purposes. Feasibility of extending power supply to meet the agricultural needs in Kosigi, Kampli, Kudligi, etc., is also being investigated.

The growth of power development in this area has been very encouraging. The demand has risen to 2160 KW by 31st March 1951, supply having commenced only on 7th June 1949.

Pilot Oil-Engine Stations

The Government have also sanctioned in 1949 the installation of small pilot oil engine stations at Nandyal and Tadipatri with a view to supply the power needs in and around these places and to build up load for Tungabhadra Hydro station. Work is progressing at both the places and the schemes are expected to get completed and supply commenced in September 1951.

Similarly a scheme has been sanctioned by Government for supply to Madanapalle in 1950 the work on which has been just begun. Land acquisition for Power House site is in progress and the materials required for the work are being collected.

A scheme for taking Mysore power at another point on the Mysore border near Hindupur and for extending supply in and around Hindupur was sanctioned by Government in 1947 at a cost of Rs. 4.2 lakhs rising to Rs. 9.0 lakhs. The work has been almost completed and Hindupur is having Mysore power from June 1950 onwards. Extension to neighbouring agricultural and industrial loads is on hand.

Future Programmes

As for future programmes, the preliminaries for the construction of the two powerhouses under Tungabhadra Scheme are under way. Transmission lines from

the two powerhouses, to Kurnool and to Cuddapah up to Kodur via Bellary, Guntakal and Gooty are to be erected for providing adequate supply of power to every corner of these districts and enabling these areas to develop industrially and agriculturally. Designs and specifications for the generating plant and indoor switch gear at Power Stations, 66 KV transmission lines and power transformers and switch gear for sub-stations have been prepared and tenders have been called for. Supply and erection work is to be taken on hand shortly. Already advance construction of certain sections of lines are arranged to be taken up with a view to supply power from the existing oil engine stations to areas where it is needed badly and to form the nuclei, for large power being utilized later on, when the Hydro-electric scheme is completed.

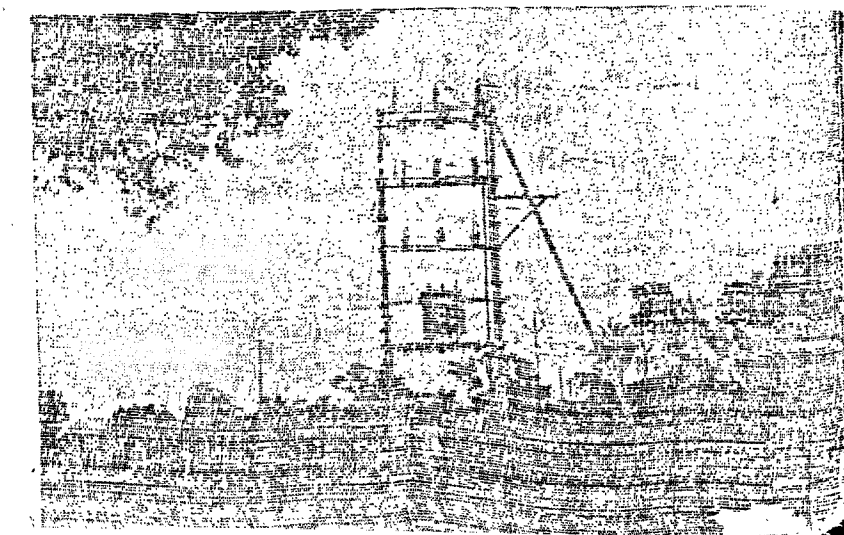
With a view immediately to improve supply position in the former licensees' areas, the Government have been steadily going ahead with the policy of taking over private and local authority undertakings. Kurnool, Cuddapah and Anantapur undertakings were taken over in 1947-48, 1948-49 and 1949-50 respectively. Hindupur, Proddatur, Bellary and Hospet have been taken over in 1950-51 and the conditions of supply in all these places made better than before. Hindupur, Bellary and Hospet are now served with hydro power from Jog system. The generating capacities in other undertakings like Cuddapah, Kurnool and Anantapur have been and are being augmented by installing new diesel engine sets with a view to cover a wider area of supply.

When the Ceded Districts Grid which has already begun to take shape is completed, this area will be having a net work of lines forming the arteries for supply of power, the most essential and modern necessity for the people for their prosperity and increased standard of living.

Power Looms for Kollegal Filatures

The Government have sanctioned 20 power looms at a cost of Rs. 1 lakh for installation in the Government Silk Filatures, Kollegal, Coimbatore district. The power looms are intended for the production of twisted yarn for the manufacture of twisted silk cloth in the Government Silk Filatures.

Rural Distribution transformer Station at Kottur



Exploitation of Fisheries in the Mettur Reservoir

Wholesome Food to Public

The fishery of the Mettur reservoir has developed considerably through the conservancy and cultural operations of the Madras Government Fisheries Department during the last three decades. The Department opened the reservoir for fishing in the year 1939 and for a period of ten years the exploitation of the fishery progressed on methodical lines through the agency of licensed fishermen and experimental deep-water fishing operations by the department. The results of the fishing experiments during this period enabled the Department to popularise Rangoon nets for surface fishing and Uduvalai for bottom fishing as the most effective tackle for exploiting the fishery of this reservoir of 40,000 acres and depth running to 120 feet. Rangoon nets hang more or less vertically from the surface of the water. Uduvalais on the other hand stand out vertically from the bottom. The Rangoon nets are useful in catching fish moving on the upper strata. The Uduvalais are useful for catching the bottom feeders. These Rangoon nets were introduced from Rajahmundry. They were probably introduced in Rajahmundry from Burma. The Rangoon nets were constructed with fine cotton yarn, treated with a special bark for preserving it. Later it was found that similar nets made of Nylon were more effective. The Nylon nets are practically invisible in the water. They do not need any special treatment for preservation. They have got only to be dried regularly in the shade after use, and their life nearly is three times that of the cotton nets. The perfection of these tackles using Nylon for the strands of the nets had revolutionised the fishing operations.

Relief to Agriculturists

More and more fishermen have taken to fishing attracted by the remunerative catches. Even agriculturists have lately taken to the fishing profession as rains have failed continuously for four years and cultivation of the land around the reservoir has become difficult.

The Fisheries Department has launched on a full fledged scheme of exploitation and marketing of the Mettur Reservoir Fisheries since 15th May 1951, after successfully working out a pilot scheme for one and a quarter years. Two hundred units of licensees and 40 units of departmental fishermen daily fish in the lake at different centres situated even up to 20 miles away from Mettur. The licensees are members of the Mettur Fishermen Co-operative Society which has been recently reorganised to include within its fold members from Omalur, Dharmapuri and Tiruchengode taluks. Prior to the commencement of the scheme the fishermen were indebted to fish merchants who were purchasing the catches at as low a rate of as two annas a lb. A good portion of the catches was disposed of locally at whatever price the fishermen could realise creating a local glut. The Department has constructed two mechanised motor-boats which not only do fishing but collect the catches of the licensees, from the fishing centres 20 miles away and transport to Mettur within two hours of the landing. The motor-boats are capable of good speed of eight knots

an hour and can easily carry 2 to 3 tons of fish. The catches of an individual unit on an average is 50 lb. daily and the maximum goes up to 500 lb. The two boats collect the catches of 30 to 80 units daily.

The catches of each unit are weighed before an officer of the Department and a representative of the society, and recorded. These are made up of a number of Catla each weighing from 20 to 30 lb. The introduction and establishment of this variety of fish in the Cauvery system is the result of continuous stocking by the Fisheries Department. The fish was brought from the Godavari. Besides Catla, the fresh-water shark Wallago, with its sharp teeth, set in rows in the jaws which speak of its highly predaceous habits, other cat-fishes and plenty of carps constitute the daily catches. The fish thus procured from the licensees who are members of the co-operative society and the catches of experimental units totalling to 5,000 lb. to 6,000 lb. a day are sorted, weighed, gutted, cleaned and packed in ice for despatch to different parts of the State. The co-operative society which has as its members fish merchants of standing purchase their daily requirements of fish. The fish parcels are transported to the local railway station at Erode by departmental vans, hired to the society at concessional rates. Part of the daily catches are salted and cured under the supervision of the Department as the cured product is relished much in the Ceded Districts, the estates on the Nilgiris, Pollachi, Tiruppur and various places in Chittoor and North Arcot districts.

Wholesome Food to People

The Mettur reservoir thus yields a substantial fishery throughout the year at a time of unprecedented food shortage in the country besides providing occupation for a large body of fisherfolk. The development of the fishery by cultural and conservancy operations, the devising of suitable tackle for fishing, the organization of a co-operative society which has as its members fishermen who carry on fishing under the system of license and the provision of quick transport facilities on land and water are all the efforts of the Fisheries Department to provide wholesome food to the public at large, and occupation to the fishermen whose economic status has been greatly improved through the co-operative society.

Marketing

For marketing, the members of the co-operative society pool all their catches with the help of the departmental mechanised boats and are getting 3 annas per lb. instead of 2 annas per pound which they were getting previously. In towns, fish is sold between 8 annas and 10 annas a lb. The Mettur Fishermen Co-operative Society could in course of time establish contacts with co-operative societies in outside stations instead of employing merchants who want profit at every stage and get a higher price of 4 annas to 5 annas. The consumer will also be able to get fish at cheaper rates between 6 annas and 8 annas.

Under the scheme a total of 181,834 lbs. of fish including 33,723 lb. of fish caught departmentally were taken out in June 1951 of which a quantity of 121,947 lb. was sold in fresh condition and 25,828 lb. were iced and supplied to outstations. A quantity of 27,410½ lb. of cured fish was also obtained and sent to outstations for sale.

Intensive seed collection and distribution

Considerable progress has been achieved in the field of collecting young fish of quick growing species like Chanos, Catla, Labeo and Cirrhina, etc. Within a period of about one year of the scheme, 3½ crores of fingerlings have been collected and put in inland waters. This should shortly increase our inland fish production by 30,000 tons of fish food.

During June 1951, 13.5 lakhs of fingerlings were collected and stocked in the departmental and private waters.

Quick Transport Facilities

During 1950-51, the Department has brought into the City 480 tons of fish in fish transport vans. A good portion of this quantity would have been lost but for the facility of the transport vans. The Pelicat van on many days brought 2 tons of prawns a day when no other fish was available.

During June 1951, the six transport vans working in the Madras area transported 106,520 lb. of fish to the various

fish markets realising a sum of Rs. 2,508-4-0 by way of hire charges, that is to say, about 48 tons of fish was saved during the month from spoilage.

Supply of yarn at subsidized rates

The Department supplied during the year 1950-51, 350 bales of yarn at a subsidized rate for the fishermen. Under this scheme apart from getting the yarn at reduced price, the fishermen get it in time to mend their nets. But for this amenity, many nets could not have been operated. During June 1951, 57 bales, 10 bundles and 39 skeins of yarn were distributed to the fishermen throughout the State.

Salt Subsidy Scheme

Under this scheme 8,760 maunds and 10 seers or 250 tons of fish was saved from spoilage.

Craft and Tackle Scheme

Of the six mechanised boats sanctioned in September 1950, two boats are working at the Mettur reservoir for collecting and transporting the daily catches from the various fishing centres to Mettur. The boats transported in June 1951, 33,459 lb. of fish. The boats are also used for fishing. About 30 lb. of fish are taken out every day on an average by the crew of the boats. The other four boats are on the West Coast for inshore fishing and they could not do much work owing to monsoon weather.

- I. REPORT ON AN ENQUIRY INTO THE CONDITIONS OF AGRICULTURAL WORKERS IN VILLAGE VANDALUR IN MADRAS STATE (Pages 73).
- II. REPORT ON AN ENQUIRY INTO THE CONDITIONS OF AGRICULTURAL WORKERS IN VILLAGE DORWAN IN BIHAR STATE (Pages 81).
- III. REPORT ON AN ENQUIRY INTO THE CONDITIONS OF AGRICULTURAL WORKERS IN VILLAGE ARCHIKARAHALLI IN MYSORE STATE (Pages 79).

ISSUED BY THE GOVERNMENT OF INDIA, MINISTRY OF LABOUR,
- NEW DELHI.

The reports deal with the conditions of agricultural workers in village Vandalur (Madras State), Dorwan (Bihar State) and Archikarahalli (Mysore State). These villages were surveyed during the course of the preliminary agricultural labour enquiry during the period June to November 1949. These are the first, second and third of a series of such type studies proposed to be published.

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Green Manuring Practices

The practice of green manuring broadly means ploughing under of green plants for the enrichment of soil fertility. This would mean turning under plant materials such as leaves, twigs, etc., gathered from outside as well as a green crop grown especially for such purpose. When such plant materials are ploughed in, the succulent green matter decomposes quickly and the plant food materials contained in the plants are released and are returned to the soil. These plant food elements are in a form fit for easy assimilation by plants. Moreover a large quantity of organic or vegetable matter is also added. This organic matter plays a great part in the fertility of soil.

The practice of green manuring is one of the oldest methods adopted for increasing the productivity of the soil. The Chinese have been practising green manuring for some four thousand years. This practice is also in vogue in many parts of the world for some centuries now. There is nothing new in this practice in our own country; application of green matter to our paddy fields has been the practice for ages.

Objects

The objects achieved by green manuring are of three kinds:

(a) The addition of vegetable or organic matter, which transforms itself into a substance known to scientists as 'Humus'. The organic matter alters both the heavy and loose nature of the soil to a condition best fitted for retaining greater amounts of moisture. Heavy clayey soils, through which air and water cannot penetrate are made porous and light, and sandy soils are enabled to hold water better. By altering the nature of the soil condition which is called the "Texture of the soil" both air and water needed by the roots of plants of all crops can get into the soil to make them grow best.

(b) There is a direct addition of plant food material to the soil. The green matter added to the soil is rapidly decomposed under favourable conditions and all the plant food materials contained in them, namely, nitrogen, phosphoric acid, potash and lime as well as smaller quantities of other elements become released and are available as nutrition for the next crop.

(c) Another important benefit that accrues by the addition of organic matter lies in that it increases the micro-organic population and activity considerably which helps in making the soil more fertile.

Two Systems

There are two systems of green manuring in vogue in our State, namely, the system known as green manuring and the system called green leaf manuring. By green manuring is meant raising a crop in the land itself and turning it under the soil where it grew. Green leaf manuring, on the other hand, means the practice of gathering green leaves obtained from outside of the field to which it is applied.

Of the above two systems, green manuring, i.e., actually raising a crop in the field itself, is largely to be recommended and should be adopted as an universal practice

wherever facilities for irrigation exist. The reason is not for to seek. Almost all green manure crops raised are leguminous, which means that not only do they provide humus or vegetable matter to the soil, but by their ability to abstract nitrogen of the air with the help of certain bacteria which live in their roots, augment the nitrogen supply of the soil when they decay. Further, when the growing plant is cut and turned in the field it means that the cost of transportation of bringing it from outside is avoided.

Benefit to Paddy

The benefit that the practice of green manuring bestows on raising paddy is reflected by the trials conducted for over a couple of decades in the various Agricultural Research Stations scattered all over the State of Madras. To cite only a few instances, in the case of paddy a thaladi crop gave 111 per cent increase by the application of 5,000 lb. of green manure; in Tirurukuppam (cl. 13) gave 128 per cent due to 10,000 lb. of green leaves and in Central Farm, Coimbatore, nearly double the normal yield (of 1,750 lb.) was obtained due to green manures alone. Though the above are rather in the nature of spectacular results, both green manure and green leaf manures could be largely used under wet land condition in all parts of the State; by which means the yield of paddy may be increased on an average of 30 per cent definitely.

Common Plants

There are some common and well tried green manure crops that may be easily raised to manure paddy crops. They are daincha, sesbania speciosa, pillipesara, sunhemp, cowpea and horsegram. All these plants give yields ranging from 20,000 to 30,000 lb. depending on the nature of the soil and availability of water.

Of the plants mentioned before, daincha is a hardy plant capable of growing under adverse conditions. It stands drought better. It is not also affected by slight saline or alkaline nature of the soil. It stands water stagnation too to a much better extent, than many other plants. But it runs to woodiness.

Sesbania speciosa has no common name. The unique advantage of this green manure plant lies in the fact that it can stand water logging as much as paddy plants. Hence, it is raised in nurseries at about the same time as paddy and transplanted with paddy near and along the bunds at 9 inches apart. The plant grows along with paddy until the preparation of land for the second crop when it is cut and ploughed in. Yield of 3 to 4,000 lb. of green matter can be expected. The paddy plants near the bunds are rarely normal and generally do not produce grains. Hence, the green manure planted in this location will not in any way diminish the yield of paddy.

Other Green Manure Crops

Sunhemp, cowpea, pillipesara and horsegram are also suitable green manure crops that may suit certain localities specifically. They serve a dual purpose in that they can be cut and fed to cattle once or twice before ploughing in as green manure. When raised for a green

manure crop they are ready to cut from 45 to 60 days. The best time or stage at which they could be turned into the soil is when they just begin to flower. The growing period could be protracted a little if the first flush of flowers appearing sporadically are plucked off. This would also induce more leafy growth. The yield from an acre of such a green manure crop would normally suffice for 5 to 6 acres. This would mean economy in the use of green manure seeds as well as organic matter supply.

When green leaf manures are sought, either leaves from plants specially raised for the purpose, or leaves obtained from trees on the roadside, or nearby forests, may serve the purpose. But too much reliance on nature's supply may not always be helpful. It is always best to remember that "Self help is the best help." Instead of depending on the random supply of green leaves from places remote, green leaf yielding trees may be raised on all waste lands around the village, along the bunds of canals and tanks and around wells and on the main bunds of the field itself.

A quick growing tree is glyricidia (*G. maculate*). This is raised either by seeds, seedlings or cuttings. The rapidity with which this tree grows is a boon to agriculturists as its leaves could be gathered from the second year onward and in three to four cuttings a year a tree would give about 100 lb. of leaves. Glyricidia is best planted on the bunds at a distance of five feet between plants. Only the main bunds are selected for this purpose which are massive enough to support the trees which grow to a fair size in four or five years. In spite of such heavy growth the roots have no harmful effect on the crop in the field, neither is there any shade effect. At least, 1,000 lb. of green matter can be obtained per cutting and glyricidia allows two pruning per year.

Other plants that come up on waste lands are calatropis, adathoda, etc. They also grow well and yield valuable green manure.

Of the green leaf manures that could be gathered from trees there need be no restriction on the choice of the leaves or trees. However, certain leaves are more suitable than others because of the very nature of the leaves and the ease with which they rot, known as decomposability. Leaves of pungam, poovarasu, margosa, avaram, nuna are all good for use in wet lands. But almost any kind of green leaves may be used.

When green manures, either grown on the field itself or brought from outside, are supplied to the soil under water-logged condition, they decompose or rot in two to three weeks. Softer the material, quicker is the decomposition. Woody matter resists decomposition for a long time. When decomposition is complete, paddy seedlings can be transplanted. These rooted green manure gives the plant food, largely nitrogen and in addition afford perfect soil condition due to the organic matter they provide. At this time superphosphate applied at one to two hundred weights per acre helps in balancing the manure and leads to better yield of crops.

A best plan to provide phosphoric acid to a crop of paddy is to apply superphosphate at 30 lb. of phosphoric acid per acre (or 1½ cwt. of super) to the leguminous green manure crop itself prior to planting. Such an application not only favours good growth of the green manure crop

but also induces the legume to abstract greater quantity of nitrogen from the air which is passed on to the soil when the plants are decomposed.

Obtaining Maximum Yield

To obtain maximum economic yield of paddy the application of green manure in conjunction with ammonium sulphate is recommended. About 1½ cwt. of ammonium sulphate with green leaves at four to six thousand pounds may be used for an acre. Superphosphate about 1½ cwt. may also be added. Sulphate of ammonia may be given one month after planting, the time when the crop needs nitrogen most for vigorous growth. Modification to suit local condition would certainly be necessary and the dosage may be increased or reduced depending upon the fertility status of the soil.

In conclusion, it may be mentioned that the choice of a green manure plant should be restricted to the following important characteristics, namely, (1) it should be capable of rapid growth; (2) it should be succulent and leafy; (3) it should put forth abundance of foliage; (4) it should grow even in poor soils; and (5) it should preferably be a leguminous crop.

Leguminous crops do very well when the seeds are treated with suitable bacterial cultures prior to sowing. The treatment is simple. Bacteria that are found in the root nodules are picked out in the laboratory by experts and are multiplied in quantities. These are mixed with the seeds over-night and air dried. When the treated seeds are sown the following morning, the bacteria are also under the soil and multiply in the soil around the seeds. When the seeds germinate the bacteria enter the roots and make their abode there. The plants supply sugar to the bacteria and these bacteria abstract nitrogen from the air and supplies it to the plants. Thus both are mutually benefited. Such supply of bacteria are available gratis with the Government Agricultural Chemist, Lawley Road, who will also provide more details regarding them.

Summing up, green manure or green leaf manure adds organic matter and, directly or indirectly, nitrogen to the soil the condition known as good tilth. (2) the moisture retentive capacity of the soil is increased, (3) the bacterial population and activity is increased and thereby the fertility status of the soil is improved.

At the present moment increased amount of food production is imperative. And it is the bounden duty of every cultivator to become green manure minded and grow more green manure to increase food production. Concerted effort in this direction will not only financially benefit them but also place our State beyond want. Remember that green manure is golden manure for paddy.

Artesian Wells in South Arcot

The Department of Industries has sunk a 6" artesian well by means of power drills at Valayamadevi village, Chidambaram taluk, to a depth of 380 feet below ground level. An artesian spring was tapped which rose to a height of 9 feet 2 inches above ground level. The artesian well yields 39,000 gallons per hour, and is expected to irrigate 105 acres of land. This is the 27th well so far dug under the 101 Artesian Well Scheme, in the South Arcot District.

Gruel Centres in Madras State

The gruel centres are intended only for those who are physically too famished to work, and for needy children, particularly orphans. These centres are never intended for those who are capable of working and thus earning a livelihood. This statement was made by Sri H. Sitarama Reddi, Minister for Land Revenue and Labour at his monthly Press Conference on Thursday, October 18, 1951.

The Minister made it clear that this was the policy of the Government in the matter of running gruel centres. In districts where the people are in distress due to adverse seasonal conditions, draught, etc., and have no means to buy rations, the Government started famine relief works like road building, minor irrigation works, deepening of wells, etc., and gave the people work so that they could have the necessary purchasing power. The Famine Code also had been amended towards this end. The Collectors were now authorized to start famine relief works wherever necessary. This was the Government's way of tackling distress conditions, and gruel centres were never intended as a substitute for this arrangement, said the Minister.

The account below will show in what all districts gruel centres are now functioning. Mostly in all these centres the initiative is in the hands of charity-minded non-officials and organizations, the Government rendering all the help possible. The account will also show that donations have been forthcoming from various individuals from far and wide motivated solely by the generous impulse to help fellowmen in distress. The amounts might be small, but the spirit behind it is of far greater proportions.

A sum of Rs. 2,25,000 has so far been received from the Hon'ble the Prime Minister as a donation from the Prime Minister's National Relief Fund for the purpose of distribution of food to the poorer section of the people in the areas affected by distress on account of the failure of rains and the consequent failure of crops. Besides this amount one Mr. Walker R. Gordon of New York sent a cheque for ten dollars and another sum of Rs. 11 has been received as a contribution by the Kalsa Middle School, Shogapora in Kashmir State. A sum of Rs. 35 was received from Sri Lachumandas Nanumal of Poona and another sum of Rs. 75 has been received from Srimathi Saradamma Nair of Johore. Of these amounts allotments have been made as shown below to the districts where distress prevails and where the purchasing power of the ryots has gone low due to the four consecutive years of adverse seasonal conditions.

	RS.
1 Coimbatore	50,000
2 Chittoor	21,000
3 North Arcot	18,000
4 Tirunelveli	12,000
5 Nellore	10,000
6 Chingleput	6,000
7 Salem	9,000
8 Visakhapatnam	6,000
9 Ramanathapuram	15,000
10 South Arcot	5,000
11 South Kanara	3,000
12 Cuddapah	3,000
13 Bellary	3,000
14 Kurnool	2,000
15 Anantapur	3,000

The Collectors of these districts have been asked to organize influential non-official committees to open and run gruel centres by means of non-official resources supported by Government aid mentioned above. The grain required for these gruel centres is supplied at controlled prices from Government stocks. The steps taken in the districts where allotments have been made are detailed below:—

Coimbatore district.—There are 25 gruel centres in the district—11 in Palladam taluk, 5 in Udumalpet taluk

and 9 in Dharapuram taluk. About 600 to 800 persons are fed every day in each centre in Palladam taluk and about 500 persons per day in each of the centres in Udumalpet and Dharapuram taluks. In Palladam taluk the district Famine Relief Committee supplies firewood, foodgrains, vessels, etc., for the gruel centres. All the five centres in Udumalpet taluk are financed by the District Famine Relief Committee and one by a private person. Milk powder is supplied by the UNICEA and distributed to 200 children and expectant mothers.

Chittoor district.—Twenty gruel centres are functioning in the district—9 in Chittoor taluk, 3 in Tiruthani taluk, 5 in Kalahasti taluk and 3 in Puttur taluk. Twenty-five more gruel centres have been ordered to be opened in 7 places in Chittoor taluk, 5 in Vayalpad taluk, 6 in Kalahasti taluk, 1 in each of Punganur and Puttur taluks and 4 in Palamaner taluk. Sri C. P. Sarathy, an influential citizen of Chittoor, has consented to open the gruel centre at Chittoor with his own funds. Out of the total allotment of Rs. 21,000 sanctioned, a sum of Rs. 15,750 has been spent on these centres and the balance will be spent immediately. The Collector's request for an additional allotment of Rs. 25,000 is under consideration.

North Arcot district.—Thirty-seven gruel centres are now functioning in the district. In addition to the allotment of Rs. 18,000 made by the Government, a sum of Rs. 18,037-9-6 was collected from the public by way of donations. A sum of Rs. 14,755-2-1 has been spent on running these centres up to the week ended 6th October 1951. About 250 persons are fed on an average per day in each of these centres.

Tirunelveli district.—Gruel centres have been opened in Vilathikulam, Thathaneri and Ramachandrapuram. About 1,000 to 1,400 persons are fed every week in these centres.

Ramanathapuram district.—Fourteen gruel centres have been opened in this district—5 in Sivakasi division, 4 in Devakottai division and 5 in Ramanathapuram division. In addition to the sum of Rs. 15,000 allotted by the Government, public donations up to a sum of Rs. 1,000 has been collected.

Nellore district.—Gruel centres have been opened in Nellore, Rapur, Kanigiri, Podili and Darsi. On an average

Food Offenders Fined and Imprisoned

During the fortnight ending 15th August 1951, 693 cases of prosecutions were disposed of in the Madras State except in the districts of Nellore and Srikakulam for food offences. The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines ranging from Re. 1 to Rs. 1,000 and sentences of imprisonment up to three months were imposed.

In Guntur district, Matalepata Venkateswara Rao, Tenali, was sentenced to suffer rigorous imprisonment for two months and to pay a fine of Rs. 200 for sale of 36 bags of rice in black-market. In the same district for bulking paddy without permits Avula Ranga Rao, driver, Machavaram, was fined Rs. 200 with a day's rigorous imprisonment and Dasari Radha Krishnamurthy, businessman, D. V. Subbiah, driver and D. S. Ramakrishnaiah, cultivator of Patchalatadiparru, were each fined Rs. 300 with a day's rigorous imprisonment.

E. Krishnan Moosad, Malabar, was sentenced to undergo rigorous imprisonment for three months and to pay a fine of Rs. 1,000 for illicit transport of paddy.

about 432 persons are fed per day in all the centres. So far Rs. 897-7-11 has been spent out of the total allotment of Rs. 10,000.

Salem district.—Gruel centres have been opened at Mathur, Kunnathur, Kallavi, Chinnargudi, Hanumantheertham, Singarpet and Samalpatti in Krishnagiri taluk. From 100 to 425 persons are being fed every day in these centres. Besides the allotment of Rs. 9,000 from the Prime Minister's National Relief Fund, a sum of Rs. 2,903-12-5 has been collected by way of public donation and a sum of Rs. 3,277-14-3 has been spent so far on running these centres.

Chingleput district.—Twelve gruel centres have been opened in the district—1 in Ponneri taluk, 3 in Madurantakam taluk, 1 in Tiruvallur taluk, 2 in Chingleput taluk, 3 in Kancheepuram taluk, 1 in Saidapet taluk and 1 in Sriperumbudur taluk. About 70 to 80 persons are fed in each centre per day. A sum of Rs. 250 has been collected by way of public donations. Besides this 2 bags of millets and 121 measures of rice have also been collected. An expenditure of Rs. 960 has been incurred so far in running these centres.

Visakhapatnam district.—Nine centres have so far been opened in the district and are functioning regularly with the co-operation of the non-officials supplemented by Government aid. An amount of Rs. 345-8-0 has been spent out of the allotment of Rs. 4,000 made to this district. Fifty to 200 persons are being fed each day at each centre.

South Arcot district.—Six centres have been opened in the district, 2 in each of the taluks of Gingee, Tirdivanam and Villupuram. A sum of Rs. 2,500 has been collected by way of donations in Villupuram taluk. About 1,125 persons are on the whole fed in these centres. Five more centres have since been ordered to be opened in the district.

Bellary district.—The Collector has since reported that he has arranged for the opening of a gruel centre at Rayadrag through a non-official committee. More centres will be opened if the food position demands it.

In the district of West Godavari, for illicit transport of rice from West Godavari to East Godavari, Y. V. Subbayya of Rajahmundry and Inukula Veeranna of Jalipalem were each fined Rs. 250 for milling paddy without licence. K. Suryanarayanamurthy of Kannayigudem was fined Rs. 200 for failure to maintain correct accounts for the dealings in foodgrains. Balasalu of Tadepalligudem and U. Venkataratnam were each fined Rs. 200.

Fines of Rs. 500 and Rs. 200 were imposed on P. Narasavathi and R. Adinarayanan of East Godavari district, respectively for unauthorized purchase of foodgrains.

During the same fortnight, other punishments, such as warnings, fines, forfeiture and enhancement of security deposits, cancellation of retail and wholesale licences, etc., were also awarded, departmentally to persons who were dealing in foodgrains in 128 cases.

Cuddapah, Anantapur, Kurnool and South Kanara districts.—Allotments to these districts from out of the grant from the Prime Minister's National Relief Fund, were made only recently. Details regarding the number of gruel centres opened, number of persons fed, etc., are awaited from the Collectors.

Bore-wells for Irrigation

A 6-inch bore-well has been completed in Thirukan-desvaram village in Cuddalore taluk, South Arcot district, to a depth of 125 feet at a cost of Rs. 943. Fresh water springs were tapped at 111 feet below ground level and the water rose to a height of 23 feet 6 inches below ground level. The bore-well yields 18,000 gallons of water per hour.

Another 6-inch bore-well has been put down at Thiruvamur village in Cuddalore taluk to a depth of 71 feet at a cost of Rs. 250. Fresh water springs were tapped between 13 feet to 18 feet below ground level and the water rose to a height of 13 feet below ground level. The bore-well yields 72,000 gallons per hour and about 10 acres of land can be cultivated.

Yet another 6-inch bore-well has been completed at Kolipakkam village in the same taluk at a cost of Rs. 540. Fresh water springs were tapped between 32 feet and 41 feet below ground level and water rose to a height of 32 feet below ground level. The well yields 27,000 gallons of water per hour.

At Sirunai village in Kancheepuram taluk, Chingleput district, a 6-inch bore-well has been sunk to a depth of 85 feet at a cost of Rs. 250. The bore-well yields 9,600 gallons of water per hour and about 5 acres of land can be cultivated.

Yet another 4-inch bore-well has been completed at Pudur village at Saidapet taluk to a depth of 55 feet at a cost of Rs. 200. The bore-well yields 12,000 gallons per hour and is expected to irrigate 5-acres of land.

Coringa Island Project

Another Step in Augmenting Food Production

The wisdom of the ancients was unerring when it came to assessing the potentialities of Nature. To them, rivers were sacred. They worshipped the rivers. The elemental fury of the surging muddy waters never frightened them. Through their insight they knew that the torrent which swept everything before it could also make the earth smile.

The sacred river Godavari with its origin at Nashik haloed by the memory of Rama is now slowly offering her bounties to her children. The science, technique and skill of irrigation is an irresistible form of worship. The mighty rivers of the sub-continent are slowly assuming their new roles—of the mothers with endless gifts to give.

The great anicut across the Godavari at Dowleswaram and the irrigation system which it commands has been one of the most valuable productive assets in the Madras State. The potentialities of this noble work of Sir Arthur Cotton are still found inexhaustible. As originally conceived by him, the Godavari anicut system was to irrigate roughly 6-12 lakhs of acres. Since then, with improvements carried out to the anicut and by running the canals to a greater depth and almost to the brim, it has been possible to increase the area under irrigation to about nine lakhs acres under first crop and about 3-4 lakhs acres under second crop.

The extension of the scheme

The benefits of this irrigation system did not originally reach two islands along the seaboard of the delta, one called Polavaram island, having an irrigable area of 17,500 acres and another called the Coringa island, with an irrigable area of 12,000 acres as they were surrounded on all sides by the different branches of the Godavari. After the installation of 3 feet falling shutters over the anicut

operated by a mechanical plough, it was found possible to force a more steady and larger volume of water in the canals. Along with this improvement to the anicut, a scheme for taking irrigation supplies to Polavaram island was sanctioned and the work completed in the year 1934. Even then, proposals for bringing the Coringa island under irrigation were under consideration. The problem was complicated as a portion of the area that was to be brought under the project lay in the French territory. Due to delay in coming to an agreement with the French authorities, the scheme for Coringa island was not pursued. Now, as a part of the Grow More Food drive, the scheme was again taken up for examination and simplified by omitting the area under the French territory. This modified scheme estimated to cost Rs. 16.93 lakhs including all charges has now been sanctioned by Government and taken up for execution. The commencement of the work was formally inaugurated on the October 7, 1951 by the Hon'ble Minister for Public Works, under the Presidentship of the Hon'ble Sri M. Thirumal Rao, Deputy Minister for Food, Government of India.

The present proposals contemplate:

- (i) Excavation of a new channel from above the Tallarevu tidal lock taken across the Coringa river from Tallarevu by means of a syphon, estimated to cost Rs. 4 lakhs;
- (ii) excavating channels and distributaries in the region for the immediate irrigation of 6,600 acres having an aggregate length of 7½ miles;
- (iii) providing a flood bank in the island to protect the irrigated area, and
- (iv) raising the Kakinada-Yanam road wherever necessary.

People assembled to listen to the speech of the Hon'ble the Minister for Public Works inaugurating the irrigation project.



Corruption among Government Servants— Punishments Awarded

During the month of March 1951, corruption among Government servants was brought to notice against 302 persons including those against whom proceedings were pending at the end of the previous month. Of these, 25 persons were let off as charges against them were not proved. Corruption was successfully detected in the case of 15 persons and they were suitably punished. Of these, 4 persons were awarded minor punishments. The names and designations of the 11 persons who were awarded severe punishments are as follows:—

T. D. Vijayaraghavalu Mudaliar, Sub-Registrar of Chetput, North Arcot district (compulsorily retired from service); T. Kameswara Rao, Deputy Inspector of Schools, Tiravur Range, J. Keshava, Prohibition Guard, South Kanara district, C. V. Audiseshan, Prohibition Petty Officer, Chingleput district (removed from service); Vallabharayudu, Head Constable, Ramanathapuram district; Rathnaswamy Nadar, H. Subbiah Doss, S. Palaniswamy and A. Veerabhadra Thevar, Constables, Tirunelveli district; D. Devadanam, Revenue Inspector, Sathamangalam Pirkai, Tirunelveli district (dismissed from service).

Proceedings against 282 persons were pending at the end of the month.

Electricity for Agriculture and Industries

Mettur Electricity System.—The Government have sanctioned the extension of supply of electricity to 26 agricultural pumpsets in Gramam Malayampatti village, Tirukolur taluk, South Arcot district, at an estimated cost of Rs. 75,700.

Papanasam Electricity System.—Extension of supply of electricity to Kochadai village in Madurai taluk, Madurai district, has been accorded to 8 agricultural pumpsets, two industrial loads, 33 domestic services and street lighting purposes at an estimated cost of Rs. 40,500.

The Government have sanctioned a further extension of supply of electricity from the above system to 36 agricultural pumpsets, three industrial services, 297 domestic services, one domestic pumpset and street lighting purposes at an estimated cost of Rs. 1,88,800.

Expansion of Hospital and Nurses' Quarters

The Government have sanctioned an expenditure of Rs. 4,500 on the expansion of the waiting room of the out-patient clinic of the Kasturba Gandhi Hospital for Women and Children, Madras. A further sum of Rs. 4,500 has been sanctioned for the extension of Nurses' quarters of the Headquarters Hospital, Bellary.

Improvement to Kodaikanal and Bapatla Hospitals

The Government have sanctioned Rs. 24,000 and Rs. 13,000 for the improvement of the Taluk Headquarters Hospital at Kodaikanal and Bapatla, respectively.

The scheme will ultimately irrigate 10,250 acres in the Union territory. The masonry works in the system are, however, designed for carrying extra supplies that may be required if the 1,400 acres in the French territory are also brought under irrigation later on.

While carrying out this scheme care is also being taken to see that the scheme yields benefits at every stage of execution. This is now an accepted principle guiding the irrigation policy of Government while the scheme may take some years for completion, the benefits of the plan are not held over till its completion. By careful and wise planning it is now possible to ensure that at every stage benefits are derived immediately and progressively. The completion of the first stage of the scheme will give an additional yield of 3,300 tons of rice. The work is expected to be completed in two seasons and the entire scheme is expected to be completed during the irrigation season of 1953.

Progress of Lower Bhavani Project

The Hon'ble Sri P. S. Kumaraswami Raja, Chief Minister, who paid a visit to the Lower Bhavani Project recently, was impressed by the progress made in the execution of the Lower Bhavani Project.

The excavation of the main canal has been completed in many portions, except for some gaps and embankments, for which earth has to be transported from the deep cuttings. The bridges have all been built, as also many of the drainage culverts. The bigger aqueducts were in progress. At the left flank of the dam, about 4 miles away along the dam line road, at the foot of earthen embankment, a portion of the dam has been completed for over a mile and a half.

The Hon'ble Chief Minister inspected the portion of the dam, where cut-off trench was being excavated and cut-off walls were being concreted, after grouting of rock.

The borrow area was next inspected, where the excavators and shovels were loading Euclids and the scrapers helped by pusher tractors, were loading materials on another side. Coming down to the masonry dam at the flank, the Chief Minister inspected the portion of the bulk head and the spillway. Crossing the river by the bridge, the Hon'ble Chief Minister inspected the sluices, intended for keeping up supplies to Tanjore delta, the penstocks and the canals sluices. After inspecting a reach of the canal newly dug, the party proceeded to the end of the earth dam, on the right flank.

The Chief Minister then visited the Workshops attached to the Project and was greatly interested in the large variety of work done there, including the manufacture of the shutters required for the sluices.

The Hon'ble Chief Minister concluded his inspection by driving through the Project colony, a town in itself, equipped with protected water-supply and independent sewerage system for all classes of houses, including those of labour employed on the dam site.

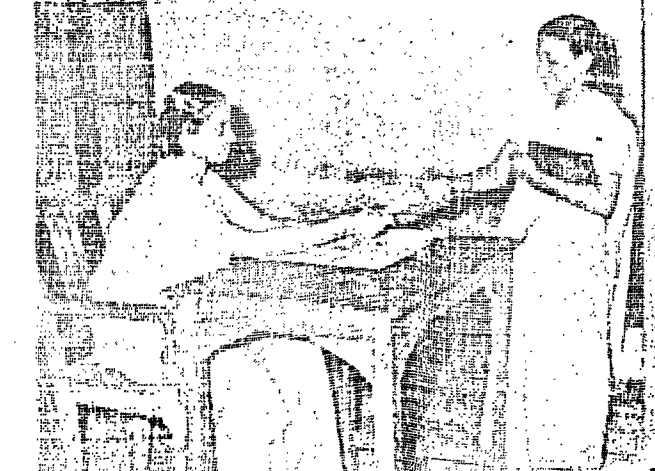
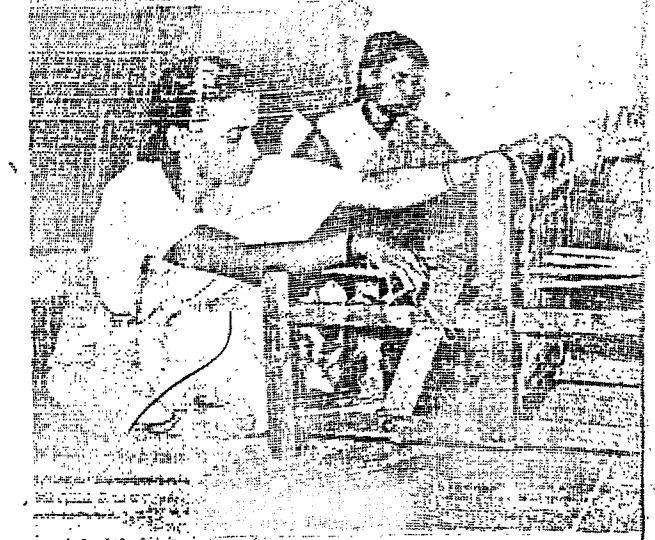
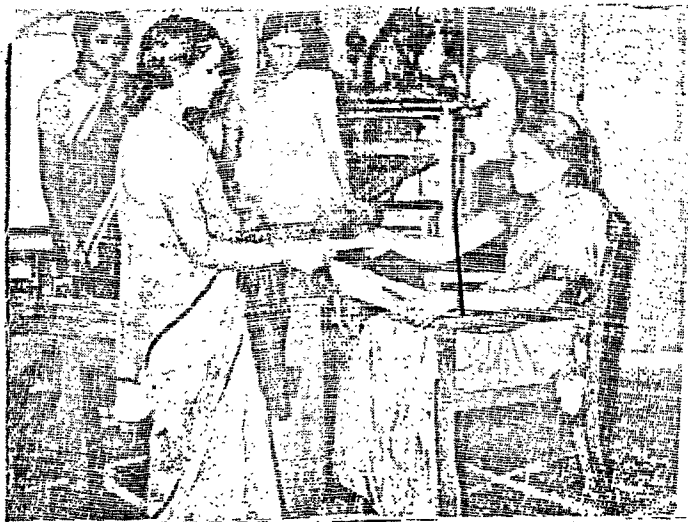
The whole dam is about 5½ miles long, and about two-thirds of the work on it has been completed, both in the earth and masonry sections.

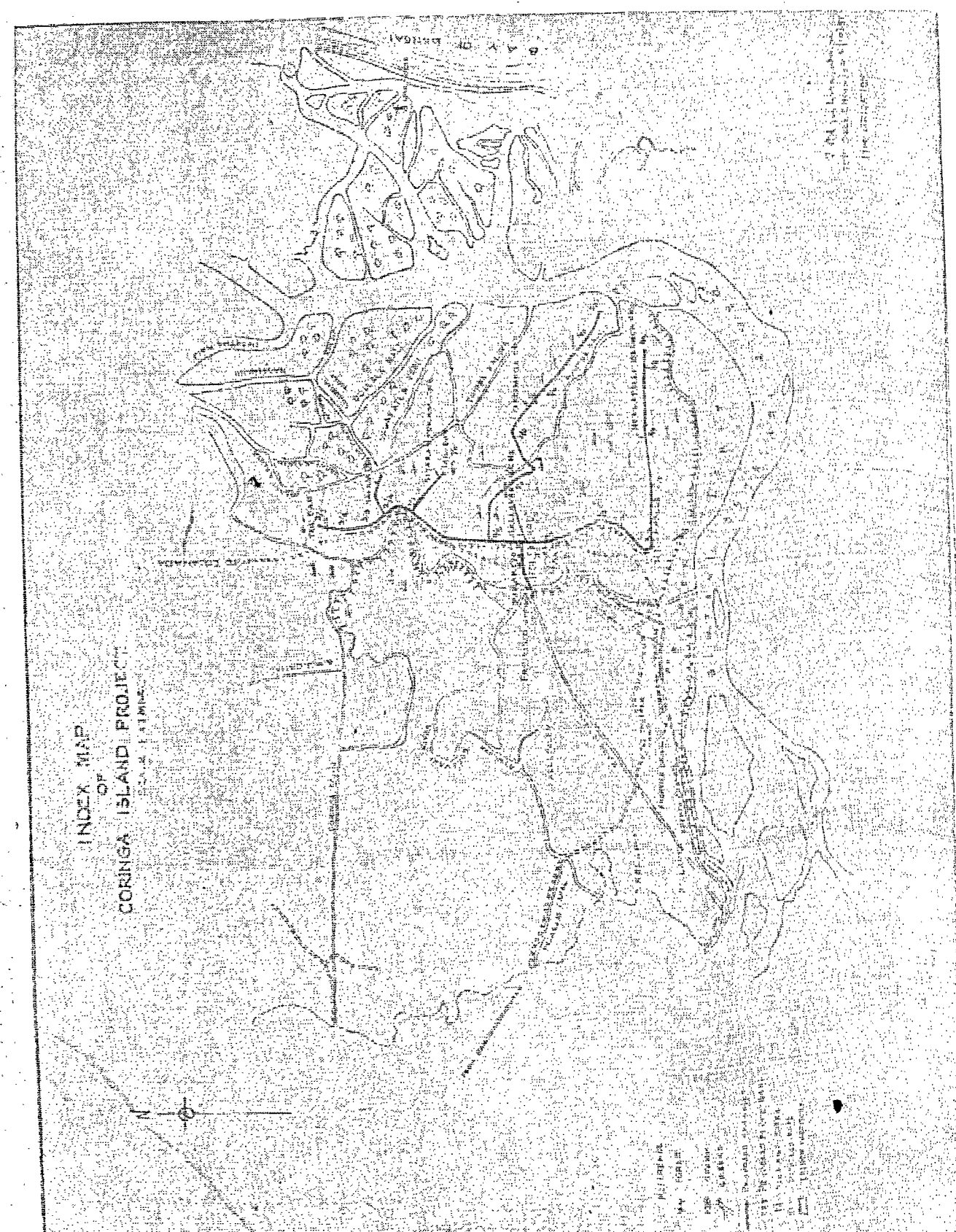
SOLACE AND SERVICE TO SUFFERING SISTERS

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The article "Revathi, the Reformer" published elsewhere in this issue gives the readers a glimpse of the various activities in which the Women's Welfare Department is engaged. The pictures in these pages illustrate how the enthusiastic and energetic young Revathi contacts the authorities of the Women's Welfare Department, gets trained to do social service, etc. During her training period she washes the vessels, works in the vegetable garden, teaches the

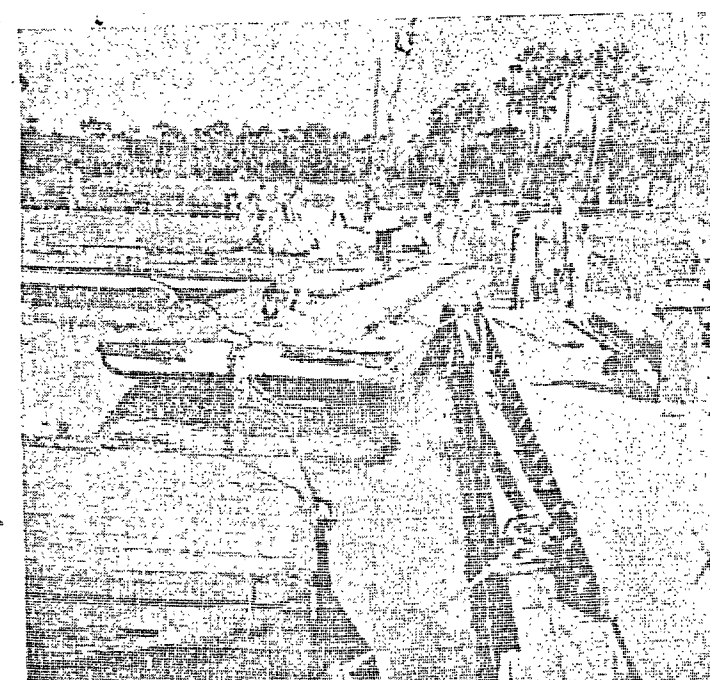
children, participates in group discussions, gives lessons in handicrafts to adult women, cares for the sick, settles domestic quarrels and brings peace and joy to the family. Not only that! Withering widow Gomathi is initiated into a new life of service and cheer by Revathi. Gomathi in her turn learns to read and write, acquires proficiency in a craft and becomes an independent worker for the welfare of her sex and society.





CORING PROJECT
INAUGURATION

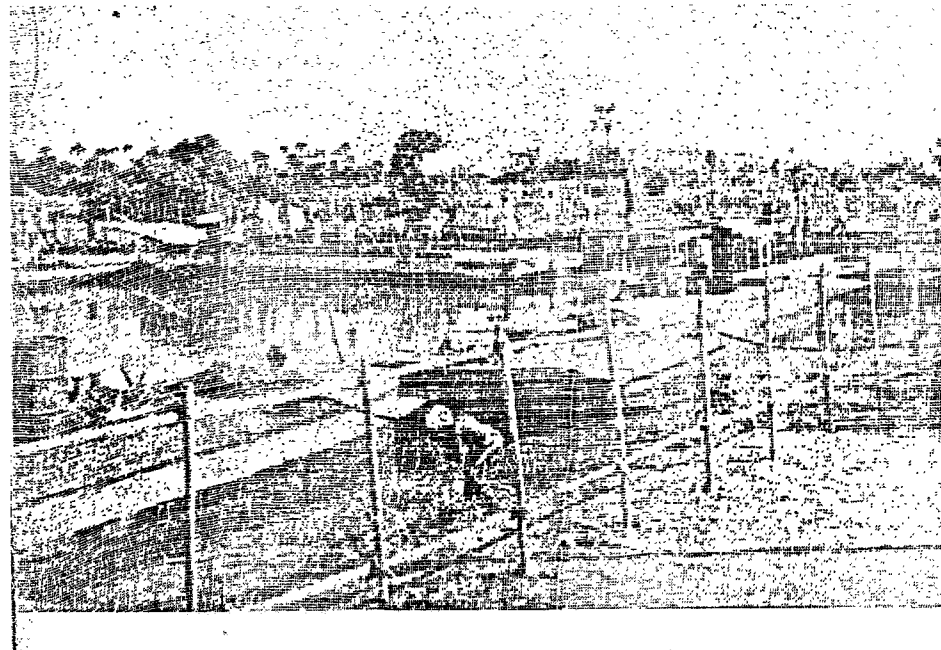
Hon'ble Sri M. Bakthavathsalam delivering a speech on the occasion of the inauguration of the Coringa Project. In the picture can also be seen Hon'ble Sri M. Thirumal Rao, Deputy Minister for Food, Government of India, and Hon'ble Sri Kala Venkatarao.



An active spot in the Coringa Project area

The details about the plan and the execution of the Project are explained to the Hon'ble Ministers.

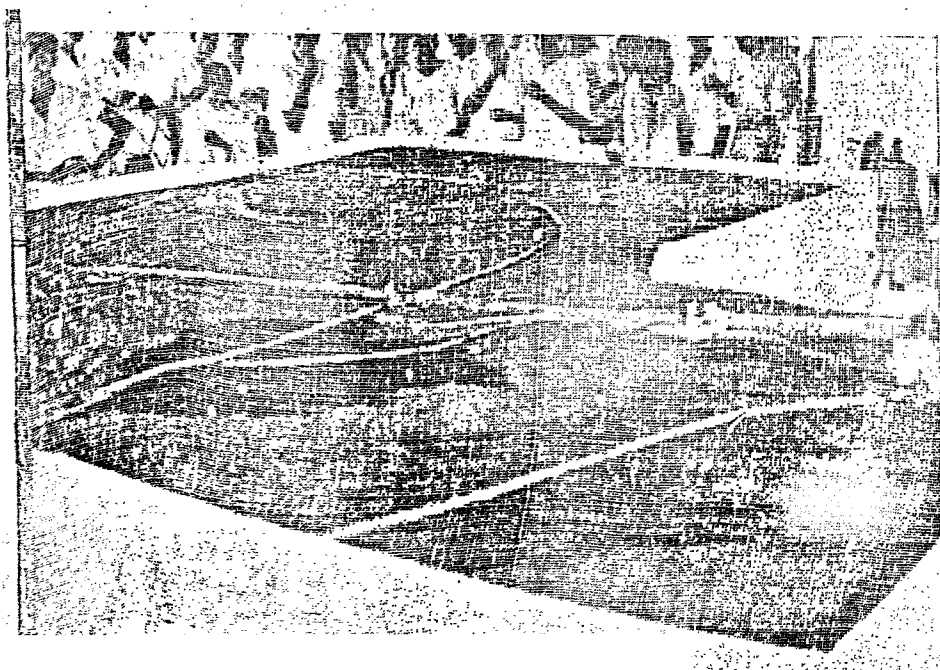




Hon'ble the Ministers and the authorities going round the various spots connected with the Coringa Project

Inauguration Tablet

THIS MEMORIAL COMMEMORATES
THE INAUGURATION OF THE
CORINGA ISLAND PROJECT
BY
HON'BLE SRI M. BHAKTAVATSALAM
MINISTER FOR PUBLIC WORKS
MADRAS STATE
ON
THE 7TH DAY OF OCTOBER 1951.



A model of the Coringa Project

WOMEN'S WELFARE

21

MADRAS INFORMATION

Revathi, the Reformer

"Service to Sisters" her motto



Revathi in serious discussion

The middle class anywhere, particularly in India, is the fountain source of idealism and that generous impulse which motivates all activities that take society forward. Revathi belonged to that class. After passing her S.S.L.C. the first thought that came to her mind was: "How could I be of some service to my community, my people?"

She had heard of some Women's Welfare activities in her village in Tanjore. The thought that came foremost in her mind was "Why can't I do my bit for the welfare of my sisters?" And so it happened; she applied to the Women's Welfare Officer. She was called for an interview. Something in Revathi struck the local officer in charge. Here was a young girl who had not thought of marriage—as many young girls of her age do, or at least their parents do for them—but had come with a keen desire for service. The trained eye of the officer found possibilities in the young aspirant. Anyway, she thought, "Let me try her". So she was put as a voluntary worker. Within a few days it was found that this new entrant had the right temperament and attitude and outlook so very essential for humanitarian work. She was promptly appointed as organiser temporarily. In a short time Revathi proved her mettle. They decided that her services should be utilized in a wider field with greater opportunities for serving the less privileged of society. She was then selected for training in Madras. She also gave the undertaking that she would serve the department for two more years after training.

Revathi came down to Madras, full of enthusiasm and zeal, for had she not now a greater opportunity for work and service! Here was a new atmosphere. She felt a new sense of exhilaration. The community life of the institute appealed to the true and genuine instincts of service and equality in her. Soon she was washing vessels, sweeping the floor, weeding and watering the vegetable garden, cooking, serving and eating—all in true fellowship irrespective of caste, creed or status. There were

no differences here: all became part and parcel of the fellowship of service which made no distinction between individual and individual.

Field work

Revathi attended her training classes punctually and diligently. She took part in discussions on the various problems that confronted the workers in the course of their field work. She learnt as many crafts and trades as possible to equip herself to be a guide and teacher to the more unfortunate and helpless sisters in villages. Revathi soon started on her job and began regular work in the village near the city. She took to her field work with utmost enthusiasm. Here was life in the raw which called for the healing touch of a social worker like Revathi. She met people who lived miserably, victims of irrational and unbalanced approach to life, inexorably marching towards unhappiness and final doom. A few kind words, a quiet and unostentatious chat on mutual adjustability, and an unselfish approach to others' problems as if they were her own, gave Revathi unique experience of bringing light and happiness where there was gloom and misery. Inexperienced in the world's ways as she was, here was something that confronted her and called for all her courage, imagination and above all human understanding. The wife who had a quarrel with her husband returned home a chastened and smiling woman, all because she had met Revathi, told her we and got in turn the right type of consoling words and advice. Here was a sick woman, with no one to attend on her and Revathi's healing presence got her out of her sick bed in a few days.

Soon she came to know the members of all the families in the village. She visited all the homes and soon knew the problems of almost every household. With the help of the midwife she gave advice to expectant mothers.

(Continued on page 24)



Women's Welfare centre in a village

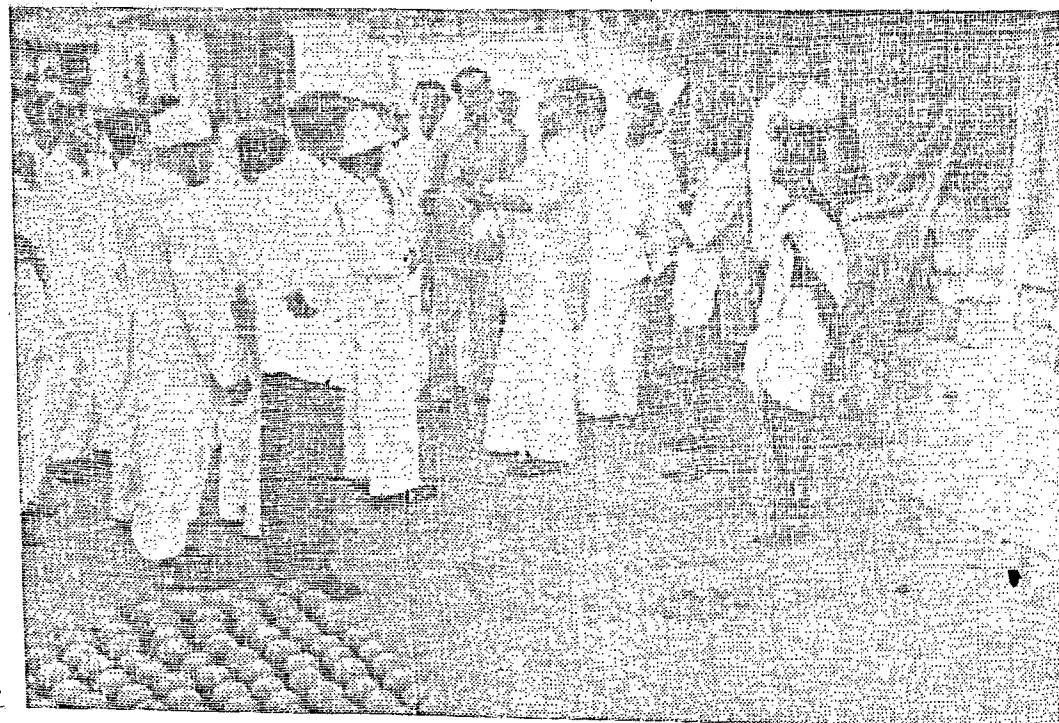
Progress of Rural Welfare Scheme

Houses for Harijans

The Government have decided as a matter of policy to encourage the construction of houses for Harijans, as far as possible, alongside the houses of caste Hindus. As a step in this direction, the Government have accorded sanction to the construction of a model Harijan colony with six sheds in the Tirumangalam firka of Madurai district at a cost of Rs. 3,699. The colony will be constructed alongside the caste Hindus' quarters in such a way that there will be a fusion of Harijan and Non-Harijan quarters thus paving the way for ending the segregation of Harijans in separate colonies.

Extension of Rural Reconstruction Work

To associate more and more institutions of standing, doing constructive work on Gandhian lines, with the rural welfare work of the Government, Government have decided to entrust four institutions in the State with development work in areas in which the institutions were already carrying out constructive work. The Gandhigram, Madurai district; Gandhi Asramam, Keelamangilady, South Arcot district; Komaravolu Asramam, Guduvada taluk, Krishna district; and Grama Seva Mandiram, Timmapuram, Anantapur district, have been selected for this purpose. These institutions have been asked to select an area not exceeding the size of a revenue firka for carrying out Rural Development Work. The actual work in this area will commence shortly. A fifth institution will shortly be selected from Malabar district.



Recently the representatives of the Madras Press visited certain centres of Rural Welfare Work in Tiruvallur firka. Here the Rural Welfare Officer is seen explaining to the Journalists the work done at a cottage industry centre.

Orders have also been issued to extend the benefits of the Rural Welfare Scheme to villagers in Major Panchayats in the selected firkas and centres where the Collectors consider that the villagers are predominantly rural in character and the Panchayat Boards under whose jurisdiction these areas are included are not able to provide amenities from their own funds. Thirty villages of the Kondrukota group lying on the right bank of the river Godavari in the West Godavari district have also been included in the Polavaram firka.

Growing More Vegetables

In order to induce the ryots to grow more vegetables as a subsidiary food, the Government have sanctioned a scheme for award of prizes to the villagers who take to intensive cultivation of vegetables in the selected firkas and centres. The scheme will be worked out in the following four firkas in the first instance: (1) Tirumangalam firka, Madurai district, (2) Dendulur firka, West Godavari district, (3) Proddatur firka, Cuddapah district and (4) Payyanur-cum-Nuteshwar centre, Malabar and South Kanara districts.

The villages situated within five miles radius of the firka headquarters will be included in the scheme and the ryot who cultivates the maximum area with vegetables as compared with the area cultivated by him in the previous year in the same growing season will be awarded the first prize.

of repairs and improvement to 22 irrigation works at an estimated cost of about Rs. 71,400.

Progress in other Spheres

The Government have sanctioned the formation of a road from Sorakalathur village to join Cuddalore-Chittoor road at an estimated cost of Rs. 15,000 in the Thuringapuram firka of North Arcot district. The villagers have offered to contribute one-third of the estimated cost of the work in addition to free gifts of land.

For the purpose of stocking and development of fisheries in the selected firkas and centres the Government have decided to take over nine tanks in the Tiruvallur firka and six tanks in the Kumbala firka for a period of five years. It has also been decided to take over the Chandan tank in the Payyanur firka for a period of three years for use as a fish demonstration farm.

For the supervision of multipurpose co-operative societies in the Dendulur (West Godavari) and Tirumangalam (Madurai) firkas, the Government have sanctioned the employment of seven Senior Inspectors of Co-operative Societies at the rate of one Senior Inspector for a group of ten multipurpose co-operative societies.

To facilitate the implementation of the five-year programme of agricultural development in the selected firkas in the Nilgiris district, the Government have sanctioned the opening of agricultural depots, one in each of the two new firkas of Gudalur and Pandalur, each in charge of a separate store clerk. The Government have also permitted the Collector to incur expenditure from his lump-sum grants towards the distribution of prizes for compost making, free distribution of green manure, etc.

In order to enable the Grama Sevaks to organize scouting in the selected firkas and centres, the Government have sanctioned a scheme to give the Grama Sevaks, cubmasters' training for one week along with their regular courses of training at the vidyalayams. The Rural Welfare Officers were already given a ten days' course of Scout Commissioners' Training.



A village artisan of Tiruvallur firka who has received Government's help by way of free supply of implements, etc.

Relief of Distress

In order to provide employment to the labourers distressed by adverse seasonal conditions in the Palladam firka of Coimbatore district, the Government have sanctioned under the Rural Welfare Programme the execution



GUARDS OF FOOD-CROPS: These Alsatian dogs are trained to guard the fields of paddy in the villages of South Kanara.

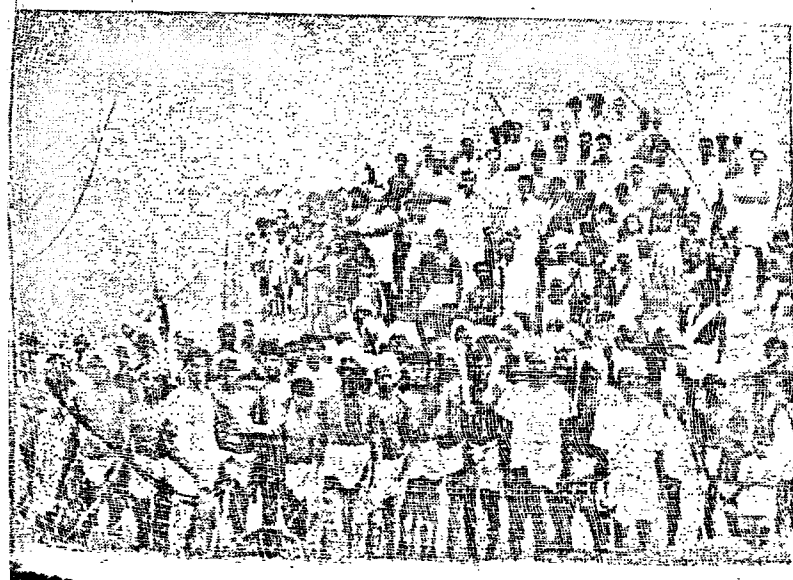
Village Self-Help Campaign

(Efforts of the villagers of Vidathakulam in improving a tank for food production.)

In the village at Vidathakulam there is a natural source of good spring which yields copious supply of water. A small oorani (tank) has been constructed in and around to the spring of dimensions 80 x 30 feet about 8 feet deep below ground level and the water is made use for irrigation purposes. A supply channel leading from the spring to the fields to a distance of more than four furlongs has also been constructed and the water therefrom is irrigating more than 50 acres. Recently, the tank got silted up and the supply of water became limited. The villagers made repeated representations to the authorities concerned about the necessity for repairing and deepening the tank. The Superintending Engineer, P.W.D., the Executive Engineer, P.W.D., Ramnathapuram, the Deputy Director of Agriculture and many other officers inspected the site and found that it would be worthwhile to repair the tank provided there is possibility of getting sufficient supply of water at all times in the year. Till this is assured, the P.W.D. authorities said that it is not worth while to invest any amount for repairs. They therefore advised the villagers to attend to that item of work and to make sure about the good condition of the spring. The villagers are poor labourers and found it impossible to do the work and left the tank in that condition for about a year which adversely affected the yield in the crops.

At a meeting of the Gramasevak constructive workers' day held in the village on 10th September 1951, the Rural Welfare Officer and his staff persuaded the villagers to join with them and to make a conjoint effort in removing the silt in the tank, and to deepen the oorani and improve the supply channel. In pursuance of the appeal made, more than 200 villagers gathered with implements and the work was carried out from morning 8 a.m. to evening 5 p.m. All the members of the staff also took part in the work. The silt and the mud in the oorani were removed and the tank was further deepened by 2 feet. The supply channel extending over 3,000 feet was also repaired. Now the tank is full with water. A group photo of the

The villagers of Vidathakulam who participated in repairing their village tank.



villagers who attended to this work was taken. It will be seen therefrom how the young and the old took a vital part in the common work.

If the tank is taken up by the Food Production Department or by any other agency, and further improvements, such as deepening, enlarging and strengthening the banks by constructing retaining walls, it would be a real asset to the villagers and help them considerably in producing more food crops.

(Continued from page 21)

With her advice, houses were kept clean and children were washed. In addition to all these, she had also to run her Welfare Centre. In the morning she conducted her pre-basic classes for children below five years of age. Revathi, who had been but a child long ago, had become the godmother and kindly angel for the little ones. The tiny tots played, sang and listened to stories. In the afternoon the women gathered at the centre for a programme of adult education and craft work. Some took to spinning, some to weaving, and others to various other little occupations and thus supplemented their income.

Gomathi

It was during one of her usual rounds that Revathi came across the young lonely widow Gomathi, who was leading a sad and unhappy life in the village. Gomathi poured out her tale of woe to Revathi. She thought her life was blasted for ever and she would become one of the millions of helpless creatures who had the blight of early widowhood visited on them. Revathi was moved. She was convinced that Gomathi deserved help. She told Gomathi her own experience. Would Gomathi take to service and lighten the burden of her widowhood? Gomathi's eyes shone with a new hope. Yes! She would do anything to alleviate the miseries of her sisters. Would they take her? Revathi saw to that; she got her admitted in the Service Home. Here Gomathi started a new life. Gomathi was like her ilk an unlettered unfortunate. Here she picked up quickly to read the letters of the alphabet. She also learnt all the crafts like spinning, weaving, cane-work, tailoring and embroidery. After on year's training, she was selected for specialisation in the second and third year. Gomathi was selected for house-keeping, as she showed a special aptitude in this art. She was given exhaustive training in drawing budgets, planning menus, keeping stores and so on.

Soon there was a vacancy of the post of a Matron in the Training Institute and Gomathi was appointed for the same.

Gomathi today is happy. She is no longer brooding in her village home. Today she is a respectable person earning her livelihood, confident of her place in Society, and happy in the thought that she is rendering some service to her fellow-beings.

Revathi and Gomathi are just two typical workers among the many whom the Women's Welfare Department has helped towards self-expression in Service. The Department today is just growing. It is confident of its great role in the days to come, the role earmarked for it in the scheme of reconstruction which benefits nearly a half of the population.

Law and Order Situation

Crime and detection.—Incidence of organized crime such as dacoity is not common in this State but whenever there is a case of the kind the Police have almost always risen equal to the occasion. In September, a criminal gang consisting of 18 persons committed a daring dacoity in Bhakaraput village, Cuddapah district, and removed gold and silver jewels and cash worth about Rs. 8,000 and notes to the value of Rs. 3,000. Brisk investigation has resulted in the arrest of nine members of this gang so far and properties worth Rs. 7,000 have been recovered. It is hoped that the strenuous efforts which the Police are making to apprehend the other members of the gang will yield quick results.

Work of the anti-blackmarketing staff.—Police measures against blackmarketing continue to be effective. An interesting case detected during September was the seizure by the anti-blackmarketing staff of Visakhapatnam South district of 283 bags of paddy transported from West Godavari district under permits issued by the District Agricultural Officer, Eluru, ostensibly for seed purposes but subsequently sold in blackmarket at exorbitant rates.

For the present, the temporary Police staff which has been sanctioned for anti-blackmarketing operations will continue up to the end of the year. The following table gives a bird's-eye view of the activities of the staff from May to August inclusive:—

	May-June.	July-August.
	NO.	NO.
1 Total number of cases charged under various control orders throughout the State.	410	429
2 Value of property concerned.	Rs. 2,27,750	Rs. 1,09,963
3 Number of cases pending in courts.	861	1,016
4 Amount of fine imposed	Rs. 15,904	Rs. 28,020
Amount of fine realised	Rs. 15,504	Rs. 28,020
5 Value of property confiscated to Government.	Rs. 44,188	Rs. 53,482

Fire Service.—During September there were two serious fires involving an estimated loss of Rs. 32,000. The Madras Fire Service saved property to the extent of Rs. 7,88,000.

Madras City.—The City Police recently organized a drive against house gambling and street betting and as many as 31 cases were registered within one week. The Station Vigilance Committees are rendering useful service in the detection of cases. Jeep patrols continue to be sent out to areas where grave crimes are usually reported.

There have been cases of 'Robbery' recently in the City but investigation revealed that some of these pseudo-robberies were really due to the activities of urchins (between the ages of 16 and 20) of Choolai area who under the stress of poverty and unemployment moved during night and committed casual offences. These urchins have

been rounded up and intensified preventive action has been ordered throughout the City.

Another piece of good work by the City Police was the detection of a gang of 3 ex-convicts who were responsible for 20 offences of burglaries and thefts, most of which had been committed in Tyagarayanagar.

In the interest of public safety and to avoid nuisance and danger to the public, lorry traffic has been prohibited in the residential areas with narrow roads such as Santhome High Road and McNichols Road, Chetput. Lorry traffic has also been prohibited on the Marina. The installation of automatic traffic controllers at important road junctions such as Fort Umbrella Point is under consideration.

Propaganda to educate the public in road sense is being continued. The Traffic Propaganda Van was put on extra duty from the beginning of the month until 12th October 1951 to advise the pedestrians to keep to the pavement on extreme sides of the road and the motorists to adhere to the rules of the road and to drive with extra caution as a safety measure during evening hours, when there was heavy pedestrian traffic both on account of the Dasara celebrations and the Mohurram which this year synchronized with the Dasara.

Law and Order situation.—It is gratifying to note that since the last Conference held on 15th of September 1951, the Law and Order situation throughout the State has been satisfactory. There have been no incidents in any of the Andhra districts, not even in Kurnool.

An ex-gratia grant of Rs. 500 was given, as a mark of Government's sympathy, to the father of one Sripathi Satyanarayana, a boy aged 12 years who was killed on 21st June 1950 at Krishnapuram village, Krishna district, when the Communists attacked the village and opened fire indiscriminately.

Communal.—A minor clash between Hindus and Muslims occurred in V. Kalathur village of Tiruchirappalli district on the 15th September over the question of the location of the District Board Girls' School, and about 26 persons of both the communities received minor injuries. The situation was immediately brought under control and the village is now quiet.

Detentions.—One hundred and twenty-four persons are under detention at present. Of these, 3 have been detained for hoarding and blackmarketing. Two persons who were under detention earlier for blackmarketing have since been released on the advice of the Advisory Board. Of the other detenus, 54 are already on parole and 12 more have been granted parole since the beginning of the week.

Bed-Strength of Hospital Increased

The Government have sanctioned the increase in the bed-strength of the Headquarters Hospital, Coimbatore from 354 to 366 beds.

Government's Khadi Scheme

The Government's Khadi Scheme is sometimes criticised as another vain attempt to put back the hands of the clock of progress by replacing mill-made cloth and mill-spun yarn by hand-woven cloth and hand-spun yarn. It is said to be on much the same footing as an attempt to replace railways and motor cars with country carts. It is such misleading analogies that confuse the public mind. Railways and motor cars solve the question of speed. Ten million carts cannot annihilate distance and cannot take one from Madras to Delhi in a hundredth-part of the time that the train can do.

But with mills the question is one of the quantity of cloth to be produced. Ten million charkas plying in the ten million village homes of our State, in the time which the rural folk now spend in enforced idleness, can produce all the cloth required by the population of the State. Our country's agricultural population which forms about 71 per cent of our total population have no gainful occupation for four to six months in the year. They must have a supplementary industry. Hand-spinning is the ideal employment for the millions. It is no progress to let this potential capacity of the villagers be wasted in enforced idleness and to seek to supply them mill cloth. Secondly, hand-spinning has another distinctive merit over other cottage industries. It supplies one of the basic needs of the village.

At the present day, when even our urban population having the money to buy cloth is unable to get its requirements, the difficulties of the villagers in the matter of clothing can easily be imagined. It was with a twofold object that the Government's Scheme was formulated; firstly, to restore to the agricultural population, their traditional supplementary industry and secondly, to make the villagers as far as possible self-sufficient in cloth.

Approved by Mahatmaji

The scheme was originally framed in 1946 and had the approval of Mahatmaji himself. It is in two parts, the Intensive and the Extensive. The Intensive part of the scheme was introduced and has been working in the following seven centres since 1947.

Name of the centre.

Kotauratla	} (In Andhra).
Yerragondapalem	
Santhanuthalapadu	
Avanashi	
Vellakoil	} (In Tamil Nad).
Chinnasalem	
Payyanur	(In Kerala).

Six out of the seven centres were originally taken over from the All-India Spinners' Association. The All-India Spinners' Association was supervising and guiding these centres even after they were taken over by the Government, till due to certain differences over the question of banning mill-cloth from the centres, it withdrew its workers from centres last year. As the scheme was an integral part of the Government's Rural Welfare Scheme, the Government could not abandon the centres. Notwithstanding the withdrawal of the All-India Spinners' Association, the Government have been able to make appreciable progress.

Self-sufficiency in Cloth

Some Khadi production was going on in these centres even prior to the introduction of the Government Scheme. The object of the scheme was to intensify the production, so as to make the areas as far as possible self-sufficient in cloth in terms of Khadi. Provision is made in the scheme for enlisting spinners from every family resident in the centre as far as possible, supplying charkas to them at cost price and to teach them spinning. The spinners are to be encouraged to grow their own cotton with a view to make them self-sufficient in respect of cotton also ultimately; but provision is made to procure cotton and supply it to spinners at cost price till such time as they are able to make their own arrangements.

Facilities are provided to get all the yarn spun in the centre to be woven into Khadi within the centre itself. The spinners can take for their own use all the Khadi produced out of their yarn. They can sell the surplus yarn to the Government. The Khadi produced from such yarn is available for sale to the local population in the respective centres and for supply to Government Departments and other institutions which require Khadi. Any further surpluses are released for sale to consumers outside the centres also.

Subsidy to Spinners

The scheme provides also for the payment of a subsidy to spinners to induce them to take the Khadi produced with their yarn for their own use. The rate of subsidy is six pies per hank in the Kotauratla and Yerragondapalem centres and nine pies per hank in the other centres, which work out to about two annas and three annas per yard respectively. The subsidy is intended to meet a part of the cost of weaving which is higher in the case of Khadi than in the case of cloth made of mill-yarn.

A Centre Khadi Committee for each centre and Village Khadi Committee for each village or group of villages have been formed. The main function of these Committees is to create the necessary enthusiasm for the scheme by house-to-house visits and to secure at least one spinner for every family. Though the goal of "one charka in every home" is still far off, the progress made within the last one year is encouraging. Taking all the centres, the total number of families resident in them comes to about 85,000. The number of spinners under the scheme rose from 26,426 on 31st March 1950 to 33,578 on 31st March 1951.

Production Being Stepped Up

The production of Khadi in these centres has averaged 6.3 lakhs of yards per annum. During 1950-51, it rose to 6.7 lakhs of yards. The production is being stepped up to cope with the increasing demand. The quantity produced during the first quarter of 1951-52 amounted to about 1.85 lakhs of yards. The target for this year is eight lakhs of yards. The quantity mentioned above does not include the quantity produced by self-spinners for their own use under the subsidy system mentioned above. The quantity of Khadi so produced has averaged 2.5 lakhs of yards per annum.

The balance of stock at the end of June 1951 was 2.02 lakhs of yards, the lowest since the inception of the scheme.

This represents less than four months' production and includes stocks under dyeing or other processing for which there were ready orders.

Gandhiji warned nearly 25 years ago that it was wrong for the handloom industry to rely upon an unfailing supply of mill-yarn. He said that handloom weaving and mill-weaving were not complementary propositions, but mutually antagonistic. "To make continuous improvements in their machinery and continuous encroachment on handicrafts is the objective of great industrialists. Indeed, it is the condition of their very existence." Time has proved the truth of this warning. In spite of a great increase in the number of spinning mills, the handloom weavers are today unable to get yarn for their work due to the fact that the mills have increased their weaving capacity also. The future of the handloom industry can be assured only by developing hand-spinning.

Opening of More Centres

In view of the distress caused to weavers by the shortage of mill-yarn, the Government have been examining the feasibility of organizing more centres for producing Khadi yarn. Preliminary investigation has shown that in the Koilkuntla area of Rayalaseema, the spinning tradition still exists in many villages. Most of the working class families own charkas, but they are not spinning because there is no organization to supply them cotton and take their yarn. This area contains also a large number of handloom weavers who are now suffering without employment. The Government have sanctioned the opening of an Intensive Khadi Centre in the area. It is likely to be opened within a month. It will provide facilities for about 5,000 families to engage themselves in spinning during their spare time, and will provide full-time employment for about 300 weavers' families.

The Extensive Khadi Scheme is intended for areas where Khadi has taken no root already. In such areas, it will be necessary to prepare the ground and introduce a sufficient number of charkas before an Intensive Khadi Centre can be started. Under this scheme, charkas are supplied to intending spinners at about half the cost price. Cotton as well as the implements necessary for carding, slivering, etc., are supplied to the spinners at cost price and a Khadi worker has been appointed to give the necessary training to beginners and also to arrange for the weaving of the yarn. A subsidy is given to spinners under this scheme also to encourage them to use the yarn for making their own Khadi. The subsidy amounts to 8 pies per hank or about 2½ annas per yard of cloth. The scheme was first introduced in 19 firkas in July 1949. It has been extended to 36 more firkas in March 1951. The total number of charkas introduced under this scheme up to 31st March 1951 is 5,218. The Intensive part of the scheme will be introduced gradually in those firkas in which the Extensive Khadi Scheme has made an appreciable headway.

Work for Leisure Hours

It may be asked whether it is worthwhile for the villagers to work at the charka for the few annas they can earn for spinning when they can get a much higher wage even in casual labour. The scheme does not aim at substituting spinning for more remunerative occupations. The virtue of spinning is that it is not a job one should go in search for. The charka waits to be taken up whenever a spinner

finds no other work or is incapable of other work. The percentage of the population that is unfit for manual work due either to old age or such causes as maternity and who at the same time are in need of some earning, cannot be ignored, and charka provides the means for such earning. Under the scheme, cotton lint is being supplied to the spinners at about Re. 1-5-0 per pound and the yarn they produce from this lint is being purchased at a price which leaves them a margin of about eight annas for eight hours work.

Last year, in one of the Centres, namely, Avanashi, cotton lint went out of stock for a short period. The spinners were so badly in need of some work that they were prepared to buy cotton at a higher price without demanding a correspondingly higher price for their yarn. Private merchants took advantage of this and began to supply them inferior cotton at rates going up to Rs. 1-12-0 per pound, which could not have afforded the spinners even a margin of five annas for eight hours work. But the spinners were prepared to buy even at that rate and work at the charka rather than leave off spinning. This shows how desperately the spinners in the villages are in need of even the few annas they can earn by spinning.

Costly but Economical

The market price of Khadi is of course higher than that of mill cloth but it cannot be considered uneconomical on that ground. The question of cheapness and dearness in terms of money is a matter of wider economics. Any hand-made product will certainly cost more than a machine-made one. It applies not only to Khadi, but also to all cottage industries. The question is whether they are to be abandoned on that ground. From the point of view of the national economy, it is much more uneconomical to let the rural population waste its potential spinning capacity in idleness than that the non-spinning consumer should have cheap cloth. For a villager who grows cotton and produces all the yarn required for his family, Khadi is no doubt the cheapest cloth, as all that he has to pay is the weaving wages. The Government Khadi Scheme aims at this ideal.

The total expenditure incurred on the scheme from its inception up to the end of 1950-51 amounted to Rs. 61.15 lakhs. The receipts up to that day by way of sale proceeds of Khadi, charkas, etc., amounted to Rs. 43.80 lakhs. The Government of India gave grants for the scheme during the years 1947-48 to 1949-50 amounting to Rs. 11.85 lakhs. Leaving out the amounts paid by way of subsidy and the expenditure on training workers, the bulk of the expenditure on the scheme is likely to be recovered by the sale of the Khadi produced. It should be remembered that the money spent on the scheme is spent in the villages and is paid directly to the primary producers, namely, the ryot who cultivates the cotton to the ginner, the carder, the spinner, the weaver, the village washerman, etc. Thus, in the Centres where the scheme is being worked, it has contributed appreciably to the bettering of the village economy.

Curbing Trade in Spurious Khadi

The present condition of the cloth market is such that black-market prices for mill cloth are higher than Khadi prices today. There is, therefore, a great demand for

(Continued on page 33)

Development of Rayalaseema

The Rayalaseema Development Board met for the fifth time on the 10th February 1951 in the Fort St. George, Madras, during the quarter. Several subjects relating to Agriculture, Industries, Electricity and Public Health which also included some of the proposals of Sri P. V. Subba Rao made in his report for the Economic Development of Rayalaseema were discussed. The several subjects considered by the Board are referred to below.

Agriculture

The Rayalaseema Development Board considered the Scheme submitted by the Director of Agriculture for the development of an extent of 16,956 acres of weed infested lands in the taluks of Siruguppa, Rayadrug, Alur and Adoni in Bellary district for increased production of cotton. The Scheme envisages the reclamation of these lands with a fleet of 20 high power tractors in about 8 months so that the land may be brought under cultivation from 1951-52 onwards. The non-recurring expenditure is estimated at Rs. 6,34,000 while the recurring expenditure at Rs. 2,45,000. The Director recommended that ploughing of the entire area may be done at Government cost and in addition, a cash subsidy of Rs. 5 an acre may be given to the ryots in the first season. The Rayalaseema Development Board accepted the proposal of the Director of Agriculture and resolved to recommend to Government to address Indian Central Cotton Committee for implementation.

Food and Agriculture Department have stated that this proposal was forwarded to the Indian Central Cotton Committee for meeting the entire expenditure of the Scheme. The I.C.C.C. has stated that as reclamation schemes are usually self-supporting, the Government may have a loan for this purpose and if this Government are agreeable, the Government of India are prepared to consider the granting of the loan from the cotton fund. However the scheme for the reclamation of the weed infested lands in Bellary district has since been included in the cotton extension plan for 1951-52 and forwarded to the Government of India who have been requested to sanction the entire expenditure on account of this scheme.

The Board also considered the proposal regarding the allotment of a larger quota of oil engines to Rayalaseema districts in view of the backwardness of the area. In view of the acute drought conditions prevailing in the area, the Board resolved to recommend to Government to allot a larger quota of oil engines to Rayalaseema districts and to address the Government of India for immediate sanction of import licences on a liberal scale to import the oil engines from abroad.

Industries

The Board considered the report prepared by Sri P. Gopal Rao for the starting of paints and lithopone factories in Rayalaseema, starting of a paints factory at Thimmanacherla in Anantapur district and a lithopone factory at Vempalli in Cuddapah district as State concerns, as recommended by the Director of Industries and Commerce.

In the welcome address presented to the Hon'ble Minister for Industries by Messrs. M. G. Brothers, automobile dealers, Bellary, on 28th November 1950 it was represented that it was difficult to secure the services of skilled workmen

and it was requested that an automobile engineering section may be opened in the Rayalaseema Polytechnic Institute, Bellary.

The Board considered this proposal and resolved to recommend to Government to open Electrical and Automobile Engineering sections in the Rayalaseema Polytechnic, Bellary.

Government have informed the Board that the introduction of a certificate course in Auto-servicing in the Rayalaseema Polytechnic, Bellary, has already been sanctioned and that the course will be introduced from the ensuing session. The question of introducing the electrical engineering course is under the consideration of the Government.

The Board considered proposal Nos. 73 to 76 referred to in paragraph 97 of Sri P. V. Subba Rao's report relating to the industrialization of Rayalaseema on a large scale. The Board recorded the proposals as it considered that no action was necessary. It however resolved to recommend to Government that State loan to the extent of Rs. 10 lakhs may be granted to the Provincial Handloom Weavers' Society on easy terms to enable it to take shares in the new textile mill to be installed at Guntakal.

Electricity

The Board considered the proposal regarding the feasibility of the advance construction of the following transmission lines for the supply of electricity under Tungabhadra Hydro-Electric Scheme.

1. Anantapur to Gooty.
2. Anantapur to Dharmavaram.
3. Adoni to Yemmiganur.
4. Cuddapah to Kodur via Rajampet.
5. Kottur to Harpanahalli.

The Board resolved to recommend to Government to take up the lines for advance construction for the supply of electricity as early as possible.

Public Health and Medical aid

The Board considered proposal No. 94 referred to in paragraph 116 of Sri P. V. Subba Rao's report, to enter into a standing agreement with Mysore State for the enforcement of Uniform plague regulations.

The Board resolved to take up the matter with the Mysore State and enter into an agreement as early as possible.

Rail Transport

The Board discussed proposal No. 91 referred to in paragraph 111 of Sri P. V. Subba Rao's report relating to the construction of four new railway lines in the Rayalaseema districts.

The Board resolved to recommend to Government the construction of the following new railway lines:—

- (1) Extension of the Hospet to Kottur line to Harihar via Harpanahalli.
- (2) Extension of the Bellary-Rayadrug line to Dharmavaram via Kalyandrug.
- (3) Construction of a line connecting Cuddapah with Nellore or Ongole serving Rayachoti and Rajampet taluks.

The Board also resolved to recommend the construction of a line from Yerragudipad to Nandyal instead of the line suggested in Sri P. V. Subba Rao's report.

Cottage Industries and The Village Artisan

For well over a quarter century, attempts have been made by the Madras Government, as well as by some public bodies to revive cottage industries. A real effort to revive and develop cottage industries and particularly those which would meet the basic needs of the villager was only made in 1946 when an elaborate scheme for the development of cottage industries in the selected firkas under the Rural Welfare Scheme was sanctioned. The primary object of the scheme was to train rapidly local workers in up-to-date methods of manufacture of articles of daily use.

The main features of the scheme were—

- (i) establishment of Demonstration-cum-Training units;
- (ii) reorganization of Industrial and Commercial Museums; and
- (iii) provision of financial assistance to cottage industrialists.

Experience of the working of the scheme for over one year revealed the need for laying greater emphasis on the production side of the utility articles of improved quality rather than on the mere training of artisans. The scheme was, therefore, revised during the middle of 1948. The modified scheme contemplated the starting of a number of production-cum-training units by private agencies, the Government fulfilling their legitimate role of encouraging and assisting production and marketing. The demonstration and training units formed under the scheme of 1946 were ordered to be transferred to non-official agencies, like co-operative societies, etc., for being run as production-cum-training centres.

The revised scheme of 1948 provided for the training of only four or five pupils in each production centre. It was later pointed out that certain village industries, like hand-pounding of rice, flour grinding, ghani oil pressing, which were indispensable for village economy, were decaying and that it was necessary to undertake their immediate revival. A scheme designed to ensure speedy revival of the dying village industries was, therefore, drawn up and put into execution in April 1950. This scheme aims at helping the villagers to produce their daily requirements for consumption in their own villages, thus making the villages self-sufficient economic units.

Tools and Implements

The scheme also provides for the free distribution of improved labour-saving tools and implements up to Rs. 6 lakhs in value to enterprising village artisans engaged in any of the village industries in the selected areas and for the imparting of instruction in their use. The scheme envisages supply to the artisans at cost price of raw materials at an estimated cost of Rs. 12 lakhs through co-operative agencies specially formed for the purpose. Under this scheme, tools and implements costing over Rs. 2 lakhs have been supplied free of cost to about 700 artisans and the artisans have been able to use them with greater advantage with the instructions given by the Village Industries Demonstrators in the use of those tools.

As a complement to the scheme, two Model Centres of Village Industries have been opened, one at the Tamilnad

Grama Sevak Vidyalayam, Kallupatti, and the other at the Andhra Grama Sevak Vidyalayam, Gopannapalem, where—

- (1) the results achieved by the scheme will be demonstrated;
- (2) courses of training in village industries could be organized; and
- (3) surveys and researches connected with the village industries could be carried on.

The Visweswarayya Scheme

Besides the abovementioned schemes, the Government have also sanctioned Sri M. Visweswarayya's Rural Industrialization Scheme which is expected to bring about intensive development of small-scale and rural industries in every village in the State. The scheme aims at the development of industries in every part of the State and increased production and income from them by encouraging growth of the spirit of self-help, initiative and ambition in the rural population by affording them an opportunity to acquire higher operative knowledge, skill and practice in industries. This scheme provides for the formation of Village Group Units for every 15 to 20 villages with a population ranging between 10,000 to 20,000 and the constitution of committees for these group units composed of the local competent businessmen and leaders.

Half of the working expenses not exceeding Rs. 1,500 for each committee per year will be met by Government and a contribution from the villagers will be collected to cover the other half. An expenditure of Rs. 1,10,266 has been sanctioned by the Government. This scheme is being implemented as an experimental measure in two taluks in each of the districts of Nellore and Tiruchirappalli. The scheme will be extended to the other taluks in the district gradually, the entire district being covered within a period of two to three years. This scheme will be complementary to the Village Industries Scheme.

Intensive Development

Besides, the abovementioned basic rural industries, certain cottage industries which have developed firm local traditions have been selected for intensive development and they are—

- (1) Match industry, (2) Palmyra fibre and leaf products, (3) Leather goods manufacture, (4) Woollen cumby and blanket weaving, (5) Pile carpets, (6) Handmade cotton lace, (7) Coir, and (8) Druggets.

To stimulate actively the development of these industries, special Advisory Boards have been constituted.

With a view to devise ways and means for the intensive development of cottage industries in the State, the Government have also constituted a State Cottage Industries Board for this State. At the instance of the State Cottage Industries Board, the Economic Adviser has prepared a comprehensive scheme of survey of cottage industries and it is under the active consideration of this Government.

The druggot industry is a dollar earning industry. With a view to reviving this industry, a Joint Drugget

Industry Board for Madras and Mysore has been constituted. The Board has met a number of times and fixed standards for druggets to be exported to U.S.A., so that the market for druggets in that country may not suffer. With a view to help the drugget manufacturers to secure tannery wool easily and at reasonable cost, the Government of India have, at the request of the Drugget Board, regulated the movement of tannery wool to places other than Wallajah, Salem and Bangalore. It is proposed to include Eluru also as a place where the tannery wool can be sent without a permit.

Training and Research

Training and research have always been considered as the chief necessity in the campaign for the development of cottage industries. This is achieved by arranging for training in the following institutions:—

- (1) Government Industrial Schools,
- (2) Private Aided Industrial Schools,
- (3) Institute of Leather Technology, Madras,
- (4) Coir Schools,
- (5) Government Textile Institute, Madras,
- (6) Kerala Soap Institute, Kozhikode,
- (7) Pottery Training Centre at Rajahmundry,
- (8) Glass Bangles and Beads Training Centres at Kalahasti and Kasaragod,
- (9) Two Model Centres of Village Industries attached to the Grama Sevak Vidyalayams, and
- (10) at the Industrial Training Centre for Women at Madras.

Besides organizing training in the abovementioned institutions in several cottage industries, arrangements have also been made to get some artisans or village workers trained outside the State. Three Rural Welfare Officers and six Grama Sevaks were trained in village industries at the All-India Village Industries Association, Wardha, and the experience gained by them at the All-India Village Industries Association is now being utilized at the Model Centres for training other artisans. Two carpenters from the Grama Sevak Vidyalayams have also undergone training at Wardha in the construction and working of Wardha type of Ghani and one of them was deputed to Hyderabad to study the cement ghanis installed there. Six technical subordinates of the Industries Department were deputed to undergo training in the operation of the Japanese Cottage Industry machinery set up at New Delhi by the Ministry of Rehabilitation. The Deputy Director of Industries and Commerce (Cottage Industries) was also deputed to study the working of these Japanese machines.

Teaching Leather Works

Four flaying and tanning demonstration parties have been sanctioned for (1) Circars, (2) Tamil districts, (3) Ceded Districts and (4) for centres not covered by items (1) to (3) above. They demonstrate to the village tanners the correct methods of flaying, tanning, curing and processing hides and skins and also impart instruction in the manufacture of leather goods.

The financial resources of almost every cottage industry being slender, the need for financial assistance being extended by Government to these establishments has long been realized in this State. Statutory provision has been made in the Madras State Aid to Industries Act.

The Director of Industries and Commerce has been empowered to grant a loan or subsidy not exceeding Rs. 500 to any cottage industrialist, who desires to start or carry on a cottage industry which has an important bearing on the development of the country. It has been pointed out that the Director of Industries and Commerce should be in a position to render greater financial assistance to the cottage industrialists as in the U.P. Government. The question is separately under consideration.

With a view to promote the popularization by display of the products of cottage industries, Industrial and Commercial Museums have also been started, with a Central Industrial Museum at Madras.

Groundnut Oil as Fuel in High Speed Diesel Oil Engines

In view of the possibility of the supply position of petroleum fuel oils becoming very critical consequent on the trouble in Iran late in July 1951, experiments were conducted to ascertain how far groundnut oil could be successfully used as fuel oil in high speed diesel engine powered tractors.

Considerable work had already been done with small powered stationary engines but the results obtained were not very conclusive. Moreover no work appears to have been done so far on mobile engines attached to tractors of recent design.

The machine used for the experiment was a T.D. 14-A. International Harvester Tractor type of 54 h. p. Refined groundnut oil was used and the following conclusions have been drawn:—

- (i) The use of groundnut oil did not result in any starting trouble.
- (ii) The running of the engine was quite as smooth and normal on groundnut oil as a high speed diesel oil.
- (iii) The exhaust was not noticeably smoky during the initial stages of the experiments but towards the end of the 50-hour test, smokiness was perceptible.
- (iv) The consumption of groundnut oil in the later stages of the experiments was slightly more than in the earlier stages both on no load and on load.
- (v) There was no noticeable decrease in power output as a result of the change over from diesel oil to groundnut oil.
- (vi) The performance with fifty-fifty mixture of groundnut oil and high speed diesel oil did not appear to be materially superior to that on pure groundnut oil but for the fact that the exhaust was very slightly less smoky.
- (vii) Examination of the cylinder head at the end of the test revealed no undue deposit of carbon and no evidence of burning, pitting or corrosion of valves and valves seats.

But for the prohibitive cost of groundnut oil, which is eight times higher than that of high speed diesel oil, it can be used as fuel for tractors without any pronounced adverse effects.

Progress of Co-operative Movement

Malabar District

One Rural Credit Society was organized in the Kottayam taluk during the month under report. Ten credit societies have been strengthened by the ameliorative staff by admitting 42 members and raising a share capital of Rs. 220. Three societies were revived during the month. Thrift days were celebrated in three credit societies and a sum of Rs. 12 was collected as savings through the hundi boxes.

Joint purchase and sale of handloom cloth worth Rs. 534-2-3 and of gingelly worth Rs. 133-3-2 were undertaken by 12 credit societies, thereby benefiting 192 and 10 members, respectively.

The Rural Welfare Officer, Kozhikode, attended the Harijan Day Celebration at Kunnamangalam and the Rural Welfare Officer, Tellicherry, attended the Rural Welfare Committee meeting at Kolayad. Cinema shows were exhibited in ten villages with the aid of the propaganda van.

Six thousand seven hundred and twenty-five maunds of coconut jaggery was produced during the month by the members of 29 jaggery production co-operative societies and the sale-proceeds amounted to Rs. 65,992.

Thrift deposits from the jaggery societies amounted to Rs. 3,356-1-2.

South Kanara District

A Students' Stationery Stores for the Ujre Karnataka Vidyalaya, two Jaggery Manufacturers' Societies at Charvaka and Nelyady, a Rural Housing Society at Ujre, a Tenants' Society at Kutrapady and a Rural Credit Society at Koila were organized during the month. Proposals to organize a Weavers' Society at Kumbala, an Irrigation Society at Shiriya and a Multi-purpose Co-operative Society at Shiribagilu are still under consideration. A Multi-purpose Co-operative Society in the Kumbala firka has since been organized at Muga.

During the month, a Students' Stationery Stores for the Sullia Board School was organized and registered. A Rural Credit Society organized at Koila was registered. Registration of other societies organized during the month will be taken up in the current month.

Belthangady Local Co-operative Union, Nellur Kemraje Multi purpose Rural Credit Society and the Ujre Jaggery Manufacturers' Co-operative Societies were started on work during the month.

Ulindakonda Multi-purpose Rural Co-operative Credit Society, Kurnool District

This society was organized and registered on 1st October 1949 under the Reorganization Scheme. It started on work on 7th November 1949. On 1st July 1950 it had on its rolls 28 members. The membership increased to 40 on 30th June 1951. To make an humble beginning the

maximum borrowing power of the society was fixed at Rs. 10,000. By borrowing from the Kurnool District Co-operative Central Bank a sum of Rs. 5,200 the society distributed loans to its members. The society collected the instalments due in all the loans before 30th June 1951 excepting in one loan, and repaid the instalment due by it to the Central Bank. Out of the amount of Rs. 1,050 outstanding on 30th June 1951 only a sum of Rs. 250 was overdue in one loan. The society owed to the Central Bank Rs. 900. It has since been sanctioned another short-term loan of Rs. 4,150 and the loan is pending disbursement.

At the instance of the Ameliorative staff the society has undertaken to implement its multi-purpose objects. During the month of July 1951 the society purchased 12 bags of good variety of seed paddy costing Rs. 240 from the Agricultural Department and distributed it to 12 members for purpose of sowing. Seven of the members of the society have also been encouraged to enter into the crop competition. The society has also placed an order for the supply of spraying machine for being hired to its members to save food crops from destruction on account of pests and other crop diseases. It has also undertaken to purchase and distribute agricultural implements required by its members and for this purpose arrangements are being made to get the stocks from the Strathie Engineering Workshop. The society has thus made a good beginning to serve its members by several other ways besides providing credit to them.

Salem District

The Nallampalli Co-operative Credit Society (Dharmapuri taluk, Salem district) was registered on 25th August 1938 and started on its work on 4th September 1938. The society has amended its by-laws converting itself into a Rural Multi-purpose Co-operative Credit Society to enable it to undertake various kinds of multi-purpose activities.

There are at present 135 members with a paid-up share capital of Rs. 588. The maximum credit limit of the society is Rs. 10,000, while that of the individual member is Rs. 250. The society has built up a reserve fund of Rs. 152-7-0. It has invested Rs. 50 in the shares of the Central Bank and Rs. 10 in the shares of the Dharmapuri Sale Society. No amount is due to the District Central Bank. Loans outstanding against members amounted to Rs. 742.

Under social and recreational activities, the society has been subscribing to the monthly journal, the *Madras Information*. Another important activity undertaken by the society is the encouragement of the local basket-making industry, by providing the required bamboos to the basket-makers through the society and recovering the cost of the raw materials out of the sale-proceeds of the baskets. One basket-maker was already a member and nine other basket-makers of the village have been got admitted as members and they have been sanctioned a special overdraft of Rs. 300 at the rate of Rs. 30 each for the joint purchase and supply of bamboos at reasonable price.

"Century of the Child"

By Dr. K. VASUDEVA RAO, Director of Medical Services.

"The Twentieth Century is the Century of the Child", it has been said. Health Services for the care of the mother and child should have the first place in any National Problem and it is truly said that the present century has seen a revolution in maternal and child health services in many countries. There is no shortage of new life in the country nor in this State where the birth-rate is still high, but the tragic waste of human life is appalling. Where better social conditions prevail, the loss of life is naturally reduced. On an average for the last 15 years, 16 lakhs of infants are born in a year, but not all of them complete the first year life. In 1944, for every 1,000 babies that were born, 192 babies died even before they were a year old and about 80 of them were stillborn. But during the last few years, however, there has been a proportionate decline in this number and at the end of last year, it was reduced to 130. This is a poor foundation on which to build a healthy and prosperous future.

The root cause of this sad state of affairs is to be found in the low level of education, especially in village population and in unhealthy conditions in the home and in the country, often but not always associated with low economic status. When, for instance, animals and human beings live under the same roof, flies swarm on food and on the children's faces, it is well-nigh impossible for such a house to be clean and healthy. Still greater hazards for the health of a community arise from inadequate and impure water, lack of facilities for nightsoil disposal, unprotected food and unswept streets. Much is being done and much more must be done to provide better sanitation and better health services. A great improvement can be brought about at reasonable cost within each community and within each family.

Care during Pregnancy

First, the health of the mother during pregnancy is decisive for the proper development of the child. Last year nearly 10,500 died of childbirth and diseases associated with pregnancy. Apart from this high death-rate among pregnant women, there is the poor state of health after childbirth resulting in much suffering. It is estimated that approximately 30 out of every 100 mothers suffer from some disability or other as a result of childbirth. This loss of life and ill-health caused during or after pregnancy react adversely on the home, leading to neglect of the household and lack of care of the surviving children.

To keep healthy at this time she must know certain rules about what to eat and how to look after herself. Prenatal clinics, where they exist, are of great help to her. Many lives, both of mothers and children, are lost owing to unskilled care at the time of birth. Increasing attention is now being paid to training midwives, educating mothers to make full use of their services, as well as establishing free maternity clinics. Maternity Assistants are trained in this State by payment of stipends by Government, by the Labour Department and also by local bodies. The Government also sanctioned the training of an additional 100 midwives on payment of stipends.

The place of a midwife in Maternity and Child Health is considered to be the most important in the field. Without her, an entry into the home would be almost impossible. One midwife is stationed in a suitable village or municipal area, and in the case of rural centres she attends to all labour cases in the villages that lie within a radius of three miles from the centre. She makes house-to-house visits registering all pregnant women, conducts the delivery, and looks after the mother and infant after delivery for ten days, while the infant is followed up from thence onwards till five years of age by the Health visitors. It will therefore be seen that as many pregnant women as possible are cared for, right from the very early stages of conception to the period of delivery and after delivery, so that any abnormality can be detected early and the necessary treatment given to them in time.

Individual in Community

Maternal and Child Health is an integral part of Public Health. The Public Health authority cares for the health of the individual in his setting in the community and no single Public Health measure undertaken by a Government can in such a context be planned without reference to Public Health as a whole. A preventive Health Service for Mother and Child is the right of every woman and infant and so far, Madras is the only State in India, which has a Public Health Act under which provision for Maternity and Child care exists. The state of "Maternity" must not merely be regarded as the ten months of pregnancy, the critical hours of labour and the six weeks after birth.

Whatever happens in life, has a bearing on the mother: healthy habits, attitude towards children and family, adjustments of parents to each other, and the economic background—all these will have to be taken into account when a baby is about to be born. The goal today therefore includes health education and health supervision for all young people, that they may be fitted for child bearing and child rearing when they reach the proper age. Medical research has shown that many of the infant deaths are largely due to lack of care of the pregnant mother and the resultant birth of a weak infant; while malnutrition, insanitary conditions, poor housing, ignorance and superstition, are all contributory factors that affect the young mother, particularly during pregnancy. "Maternity Care" therefore has a broad significance, including care of the expectant and nursing mother. "Child Welfare" includes physical and mental care of the child and the prevention of the diseases till school age. "Care of the Mother" is an essential prelude to the "care of the infant and child" both forming an integral part of a well-organized Public Health Programme.

Purpose of Programme

The purpose of a Maternity and Child Welfare programme is —

(a) To make the village or town a better place for mother and child, (b) to give adequate instruction to parents in taking care of infants and children, (c) to look

after the health of the mother and the child at every stage, (d) to advise on wise and planned parenthood, etc. Such constant care and supervision helps systematic health measures, such as vaccination and registration of births. Apart from this, a modern Public Health Department undertakes effective teaching of the principles and laws of health. The Maternity and Child Welfare Scheme that was initiated in 1931 from a group of 80 centres that were run by voluntary agencies then, has resulted today, in the establishing of 468 maternal and child health centres all functioning in the State, and these are meant to cater to the 28 million population (approximately) of women and children. Two hundred and ninety are located in rural areas, while 178 centres are placed in urban areas respectively.

Institutional care of pregnant mothers is also provided for, as a part of this scheme. Maternity beds are provided in many of the rural centres for emergency deliveries, while suitably designed maternity homes have been opened to provide for sanitary environment during the "delivery and after delivery" periods. Such maternity homes are intended mainly for normal deliveries, and when finances permit a free diet is provided. This hardly touches the fringe of the problem, but the Government are doing their best under the circumstances to encourage local authorities and voluntary agencies to expand their programmes from year to year. A proportionate expenditure incurred on maintaining these centres by local bodies is met by Government who also contribute 50 per cent towards building construction.

Health Rules for the Home

It cannot too often be repeated that most of the diseases from which babies and children suffer are preventable. It is disastrous to see how many children of school age have lost their sight due to sore eyes, trachoma, smallpox, food deficiency or congenital syphilis. B.C.G. vaccination is increasingly available to protect children against the risk of Tuberculosis. Cleanliness in the home, protection of food from flies and care in boiling milk and water will prevent most dysenteries and intestinal diseases as well as avoiding worms. Proper personal cleanliness will

protect scabies and other skin diseases. Here again, while much remains to be done by public health authorities, the main need is to teach parents the simple health rules to be observed in the home.

Sometimes children are badly fed because parents cannot give them enough to eat. Very often, however, children are ailing and unhealthy simply because they are getting the wrong kind of food. Young breast-fed babies are generally in excellent condition but mother's milk alone is not sufficient after six months of age. Weaning is often postponed until the second year of life, sometimes owing to the lack of the other food. Even if started at the proper time solid foods such as cereals are often given in indigestible form and vitamin deficiencies occur owing to insufficient fruit and vegetables. In recent years there have been increasing numbers of cases of nutritional oedema among children, i.e., they are admitted for swelling of the body due to protein deficiency in General Hospital, Madras. Apart from swelling, many of them have skin changes, manifestations of vitamin deficiency and diarrhoea. Last year there were 224 gross nutritional oedema out of 2,490 admissions in the Pediatric Department of General Hospital alone, forming nine per cent of admissions. Apart from these cases it is no exaggeration to say that over 80 per cent of the ward children today exhibit in some form or other manifestations of nutritional deficit.

Nutrition to the Rescue

Research on nutrition at the Nutritional Laboratory, Coonoor, has demonstrated that some of the nutritional diseases which did not respond to the older methods of treatment have very rapidly responded to newer modes of treatments for nutrition deficiencies and a large number of children are being restored to normal health as a result of these researches. The Government have sanctioned the deputation of three Civil Assistant Surgeons for training in Nutritional diseases at the Nutritional Research Laboratories at Coonoor for three months for being posted to the Government General Hospital, Government Hospital for Women and Children and the Kasturba Gandhi Hospital for Women and Children, Triplicane.

(By courtesy, A.I.R., Madras.)

(Continued from page 27)

Khadi. The Government have received representations from private Khadi producers as well as from the Coimbatore District Female Relief Organization for permission to undertake Khadi production. They have requested that the provisions of the Madras Khadi (Development) Order, should be relaxed, so that they may have free scope to produce and sell Khadi. It is a well-known fact that in the days before Khadi was brought under control, there was a flourishing trade in spurious Khadi. The All-India Spinners' Association had a certificate system to enable the public to distinguish between genuine and spurious Khadi but this was not effective in putting down unscrupulous producers. It was with a view to ensure the development of Khadi on sound lines that this Government

promulgated the Madras Khadi (Development) Order, 1949.

The Government of India have since enacted the Khadi (Protection of Name) Act, 1950, with a view to restrict the use of the name 'Khadi' to genuine hand-spun and hand-woven cloth and they have requested the State Government to pass supplementary legislation in order to ensure the genuineness of Khadi offered to the public. This Government cannot, therefore, agree to any general withdrawal of control on Khadi, but they have decided to issue licences to a limited number of private producers and institutions to produce and deal in Khadi in areas where neither the Government nor the All-India Spinners' Association are operating. Applications for licences will be dealt with by the Director of Rural Welfare on their merits.

Progress of Health Measures

Hospital Facilities

The aim of the administration is to ensure a healthy population. This can be secured primarily by each individual leading a healthy and hygienic life, and if he does fall ill by mischance, adequate facilities are made available for treatment. The former is dependent on the maintenance of proper and hygienic environments, a duty which is assigned to the Public Health Department. The latter is secured by providing medical institutions such as hospitals and dispensaries within a reasonable distance from the villages. This is the responsibility now of the Medical Department.

We have a Headquarters Hospital in each district headquarters and also a number of hospitals at the State headquarters. The hospitals in Madras and Visakhapatnam are as up to date as could be secured in the present circumstances. Some of the District Headquarters Hospitals, particularly the bigger ones, are in a position to undertake practically every kind of therapy or treatment or surgery that may be required for the well being of the sick and the ailing. The attached statement gives the number of hospitals and medical institutions and the number of persons treated at these institutions in the years 1947 to 1949, being the latest figures available.

It is not claimed that the conditions are ideal and that in every case medical relief is available within easy reach of every village. There are even now some villages which are at some considerable distance from the nearest doctor or dispensary. It is a question of time, availability of funds and the availability of personnel for manning the institutions. The problem is proposed to be met by opening primary centres under the post-war plan, but on account of the very severe cuts made by the Planning Commission in our plans it has become necessary to give a lower priority to primary centres and concentrate on medical education and training, as without properly trained personnel, there is no point in opening more and more institutions.

Preventive Steps

On the preventive side, i.e., to ensure that people lead a healthy and hygienic life and are not unnecessarily exposed to the risk of infection, the health worker has only three weapons at his disposal in the fight against disease. In the case of those diseases which are infectious or contagious, he can isolate the cases, minimising fresh transmission; in the case of those diseases which are water-borne, he can sterilize the sources of water-supply, e.g., by chlorination; in the case of those which are insect-borne, e.g., plague, the insects can be killed by D.D.T. spray or other insecticidal measures. These preventive measures have the effect of reducing direct transmission of disease from the sick person to the healthy person, and in the case of water-borne and insect-borne diseases, reduces the risk of further spread of the disease by attacking the vector species responsible for transmission.

The second weapon is to impose quarantine on the contacts, i.e., those who have come into contact with the case should be kept isolated till the period of incubation

is over within which time they will either show signs of disease or emerge without any symptom when they can freely go about their business. This is a measure that is adopted in Western countries in the case of diseases like smallpox, measles, etc. Under the conditions existing in our villages and towns to-day this is probably impossible of attainment. For one thing the Public Health staff do not receive timely intimation of the outbreak of such diseases and by the time they are on the scene, the infection might have spread and effective quarantine at that stage will be impossible.

The third measure is by immunization, viz., vaccination and inoculation. In this category would fall anti-cholera inoculations and also vaccination against smallpox.

But once an epidemic has broken out, the department has to take action to combat the spread of the epidemic. This is achieved by maintaining mobile units for epidemic control in areas which are frequently subject to plague, cholera and smallpox in epidemic forms. There are four mobile units now working in the State, each unit with a motor vehicle, ten Health Inspectors and other supplementary staff and appropriate equipment and medicines. They are moved to the scene of any epidemic as soon as intimation is received, as expeditiously as possible. In the absence of epidemics, these units are utilized in intensive Public Health work.

Maternity and Child Welfare

Healthy children form the sound basis of a healthy population and so one of the important items of work of the department is Maternity and Child Welfare. This State is probably among the foremost to start Maternity and Child Welfare work and the schemes have made considerable progress in recent years. There is an Assistant Directress of Public Health in direct charge of Maternity and Child Welfare Schemes. Where the scheme is well organized as in the Madras City and the Poonamallee Health Unit area, the maternal mortality rate has come down remarkably from 7 to 8 per thousand births to nearly two and infant mortality has also fallen appreciably. The Medical Officers in charge of Maternity and Child Welfare Schemes are required to undergo post-graduate course organized by the Public Health Department. It is proposed to expand the facilities for this training in due course.

There are in the State 446 Maternity and Child Welfare Centres both in the rural and urban areas, including a few Maternity Homes. Seventy-six Women Medical Officers are working in all the local bodies of the State excluding those of the Corporation of Madras, 120 Health Visitors in various local bodies excluding the Corporation of Madras. A total of 841 Maternity Assistants (Midwives) are now working in the local areas throughout the State. A sum of just over Rs. 2 crores was spent in the last year on Maternity and Child Welfare Centres, the Government's contribution being 25 per cent of the expenditure on the maintenance of Maternity and Child Welfare Schemes and 50 per cent towards construction of buildings.

(Continued on page 37)

Cinchona

The activities of this Department are confined to growing of Cinchona bark in the Government Cinchona Plantations, Nilgiris and Anamalais Hills of Coimbatore district and extraction of Cinchona alkaloids therefrom at the Government Quinine Factory, Naduvattam. On an average, a quantity of 20,000 lbs. of Quinine Sulphate is manufactured at this Factory. After the advent of the Popular Government, an additional area of 4,400 acres has been brought under Cinchona cultivation with a view to producing more Quinine at a cheap cost and place it within the easy reach of all people, especially the poor Malaria stricken population in the country. So the Department should be considered as working on humanitarian principles, though it is required to work to a financial result determined through accounts maintained on commercial principles.

The area under Cinchona cultivation in Government Cinchona plantations Nilgiris is about 2,380 acres and in the Government Cinchona plantations, Anamalais is about 7,050 acres. Thus there is a total area of about 9,430 acres, of which about an area of 3,500 acres has been planted under the Russian Method Scheme both on Government of Madras and Government of India account. Besides, there is an area of 200 acres planted solely on Government of India account in Kadamparai Estate under the jurisdiction of the Superintendent, Government Cinchona Plantations, Anamalais.

A Research Section, viz., Vegetative Propaganda Section is functioning since 1945. This section is doing research work with a view to find out ways and means to increase the bark yield both quantitatively and qualitatively with the ultimate object of bringing down the cost of quinine and placing it within the easy reach of all. The degree of success so far achieved in the field of research work has been quite fair and satisfactory.

After the outbreak of War, imports of Quinine into India stopped almost completely as a result of which, adequate quantity of the drug was not available for sale in the market thereby causing great hardship to the public. To meet the shortage of Quinine so caused by the War, increased production of the drug at the Government Quinine Factory, Naduvattam was ordered by Government and also control of its sale imposed in order to conserve the stock as far as possible. With the cessation of hostilities, there was no need for the continuance of control and hence control has since been removed and Government Quinine Products made available for sale to the public, etc., without any restriction whatever. After removal of control over the sale of Quinine products and publication of this fact in the important Daily Newspapers and Medical Journals in the months of June, October and December 1950 and also issue of notification, copies to several important Chemists and Druggists individually, sale of Quinine Products has increased considerably.

For instance, the sales made during the period of nine months from July 1950 to March 1951 amounted to Rupees 13,88,852 as against Rs. 5,38,324 which was the turn over for the whole year 1949-50. Besides, certain firms in the United Kingdom have made enquiries as to whether Quinine Sulphate and Cinchona Febrifuge could be exported from India. These factors positively prove that Quinine is the safest and surest drug for treating all types

of Malaria and will hold its own any day against any synthetic product such as Paludrine, etc. Hence it has been decided at the Quinine Conference held at Madras on 18th June 1951 that Quinine as a drug cannot be abandoned and it has always a definite market.

As a result of this decision, it has been ordered by Government that work connected with the construction of Modern Quinine Factory at Anamalais (which was stopped for some time) should be resumed and completed as early as possible. The construction of this Factory has been taken up with a view to increase the Quinine production in the country. Its capacity is about one lakh pounds of Quinine Sulphate and it is expected to function in about two years' time.

It has to be mentioned specially, in this connection, that the Quinine products manufactured at the Government Quinine Factory, Naduvattam are of the highest standard of purity and they conform to B.P. or other recognized standards in all respects and they compare very favourably with Quinine of Foreign Make.

A large labour force is employed by this Department for work in the plantations and in Quinine Factory, Naduvattam. To provide adequate medical aid to the staff and the labour force employed in Government Cinchona Plantations, Anamalais, an up-to-date Hospital has been constructed in the Government Cinchona Plantations, Anamalais at a cost of about 10 lakhs of rupees. Sanction has been accorded by Government to construct a hospital in Government Cinchona Plantations, Nilgiris and work connected with this Hospital will be taken up as soon as the scheme is finalised. But as an interim measure, to give suitable medical aid to the staff and mazdoors, a Civil Assistant Surgeon has been appointed and is now working there and rendering medical aid.

In consideration of the increased cost of living the rates of wages and dearness allowance of mazdoors employed in the Government Cinchona Plantations, Nilgiris and Anamalais and the Quinine Factory, Naduvattam have been increased suitably and on a par with those prevailing in the Tea and coffee estates. The rate of maternity benefit to the women workers employed in the Cinchona plantations and Factory has been increased to the maximum of Rs. 42 in all for a period of eight weeks as against a birth allowance of Rs. 5 only being paid previously. Canteens have also been opened on co-operative lines for the benefit of the labourers and the staff. They provide tea, tiffin and also meals at a very cheap rate and have thus become extremely popular among the labourers. Nine canteens are being run on the Government Cinchona Plantations, Anamalais and five on the Government Cinchona Plantations, Nilgiris. The enormous profit that was earned by middlemen previously has thus been eliminated and the labourers are getting the full value for the money spent on refreshments, etc.

In order to control Malaria in the Government Cinchona Plantations, Anamalais and safeguard the health of the staff and labour force in the plantations, a scheme of Anti-Malarial and General Health Measures was sanctioned by Government and it has been implemented during the year 1949-50. This scheme is in charge of a First Class Health Officer and much useful work is being done to improve the health and general living conditions of the staff and the mazdoors.

Labour Welfare in Cinchona Plantations

At the last Press Conference held on 9th August 1951, a general idea was given about the activities of the department and the requirements and demand of quinine in the country. I shall deal now with the labour employed in the Government Cinchona Plantations and the working and living conditions there. A total labour of 3,500 to 4,000 is employed in the Cinchona department in all its units on the Nilgiris and Anamalais. The labour is provided with free housing, free medical-aid, free educational facilities for their children of school-going age and creches for very young children, where they are taken care of, while their parents have gone out for work. Free feeding at Government cost is given to all the labour children in the creches in the labour schools. The Government have sanctioned an expenditure of 2 annas per day per child in the creches of which there are six in the Anamalais and three in the Nilgiris. The total number of children looked after in all the nine creches is approximately 350. The children are cared for by qualified creche attendants. For older children of school-going age, there are 8 elementary schools where the children are given free education and a free mid-day meal for which Government have sanctioned Re. 0-2-6 per day per child—five of these schools are in the Anamalais and three in the Nilgiris. The total number of children who benefit by these schools will be round about 600.

For giving medical-aid, a very large hospital costing about 10 lakhs of rupees and having 68 beds has been established in the Anamalais. Besides this, there are six dispensaries in the different plantation divisions in charge of compounders for rendering quick medical-aid on the spot. On the Nilgiris, a hospital has been proposed but not yet constructed and medical-aid is being given through well-equipped dispensaries through qualified compounders and a doctor. The total strength of the medical staff is two male doctors and a lady doctor, four staff nurses, 12 compounders, 4 midwives, 7 nursing orderlies and 6 maternity attendants, etc.

Anti-malarial Measures

For improving the general sanitary and Environmental conditions of the workers, a scheme of anti-malarial and general health measures has been working in the Anamalais with the following health staff:—

One First-class Health Officer; one entomological Assistant; four Health Inspectors; one Engineering Supervisor; one Laboratory Assistant; two Field Assistants; four Maistris with a large number of sweepers and scavengers. As a result of all the above, the incidence of malaria has been greatly reduced and the general living conditions improved considerably.

All staff and labour employed in the Government Cinchona Plantations and factory are given free housing. The construction of these residential quarters since 1942-43 alone, when large scale expansion of the plantation was commenced, has cost this department over Rs. 27½ lakhs.

Co-operative stores are run both at Anamalais and Nilgiris for the benefit of the staff and labourers, with

18 sub-stores located in each subdivision. All commodities including clothes are sold through these co-operative stores.

Canteens are run on co-operative lines attached to the above co-operative stores in all the different divisions for supplying tea, tiffin and meals at cheap rates. These canteens have become very popular and are doing very good service.

The all inclusive wage per man is about Re. 1-4-0, woman Re. 1 and for an adolescent about 11 annas. The women workers who are confined are paid a maternity benefit of Rs. 42 per child-birth.

The labour in general has seven paid holidays per year on festive occasions besides 10 days annual leave with pay granted in the factory and plantations under certain conditions. The workers have to work for eight hours a day or 48 hours a week.

Quinine Production

Sri J. M. Lobo Prabhu, I.C.S., Secretary to Government, Development Department, attended a Conference with the Health Ministry of the Government of India in New Delhi on 13th August 1951 and discussed certain matters relating to the production of quinine in the Madras State. The following subjects were discussed:—

(i) Export of accumulated quinine stocks lying undisposed of for a long time with this State;

(ii) selling quinine to the trade at the price obtaining in the market from time to time; and

(iii) continuance of the Government of India's subsidy towards the scheme of Vegetative Propagation of Cinchona undertaken by the Madras Government.

The Government of India have proposed to hold a Quinine Conference as early as possible to discuss matters relating to the Cinchona Plantations in the country and other allied matters. Pending consideration of the question of export by this Conference, the Government of India have agreed that the Madras Government should be allowed to export on an *ad hoc* basis 20,000 pounds of quinine sulphate, 20,000 pounds of cinchona febrifuge and 5,000 pounds of Totuquina.

As regards the selling price of quinine, the Government of India have stated that the Madras Government may continue to charge the price of their quinine at the existing rate until the whole matter of fixation of prices was reviewed by them. The question of fixing a uniform rate for quinine sold by the Governments of West Bengal and Madras is already under the consideration of the Government of India.

For the last six years, the Government of India have been meeting a share of the expenditure on the scheme of Vegetative Propagation of Cinchona undertaken by the Government. They have not so far agreed to sanction the continuance of their subsidy towards this scheme for a further period of three years. Development Secretary had pressed that the Central Government's contribution on the existing basis should be continued. Before deciding upon the continuance of their subsidy, the Government of India have proposed to consider the question of having the scheme reviewed by their Principal Quinine Officer.

Sales Tax Levy

Appellate Tribunal

The Government have constituted the Madras Sales Tax Appellate Tribunal. It consists of the following members:—

Sri Balachandra Koman, I.C.S. (Senior District and Sessions Judge), *Chairman*.

Sri S. P. Radhakrishna Naidu, B.A., B.L. (Formerly Deputy Commissioner of Commercial Taxes), *Member*.

Sri V. K. Upadrashta, B.A., LL.B., A.S.A.A., F.C.A. (Formerly Reader, Andhra University), *Member*.

The Tribunal is located in No. 20, Oliver Road, Mylapore, Madras. Its Headquarters will be Madras for the present. But the Tribunal can hold its sittings at other places also. The Regulations for regulating the procedure of the Tribunal and the disposal of its business will be published shortly, and the Tribunal will begin to function immediately thereafter, by about the middle of this month.

According to the latest figures, the Tribunal has to start with about 900 cases in all for disposal (685 cases transferred to it by the Board of Revenue, 140 cases directly taken by it on file since its constitution and 75 cases likely to be transferred to it by the Deputy Commissioner of Commercial Taxes).

Under the provisions of the Madras Sales Tax (Amendment) Act, 1951, which came into effect from 15th May 1951, assessee are given option to go to the departmental authorities or to the Appellate Tribunal for relief if they are aggrieved by the assessment orders. An assessee should first prefer an appeal to the Commercial Tax Officer or a Deputy Commercial Tax Officer, and if he is aggrieved by the Commercial Tax Officer's appellate order he has now option to go to the Tribunal in appeal instead of to the departmental authority. The appeal to the Tribunal should be filed within sixty days from the date on which the order is communicated to the assessee.

On the orders passed by the Tribunal in appeal, the aggrieved party can prefer a further petition before the Tribunal for the review of the original order. This review petition should be preferred *within one year* from the date on which the original order of the Tribunal was communicated to the appellant. On the orders of the Tribunal in appeal or in review, the aggrieved party can also prefer a petition to the High Court within sixty days from the date on which the order sought to be revised was communicated to him, on the ground that the Appellate Tribunal has erroneously decided or failed to decide, any question of law. A revision petition also lies to the High Court against its own order, *within one year* from the date of communication of the said order.

Exemptions from Sales Tax

In response to a number of representations received from the public, the Government have granted exemptions in a number of cases in the course of the current year. Some of the important ones are given below:—

(1) Sales by owners of single chekku, dealing exclusively in the produce of their own chekku have been exempted from sales tax up to 31st March 1952 (G.O. No. 789, Revenue, dated 30th March 1951).

(2) First sales of all tractors and their spare parts used for agricultural purposes have been exempted from the levy of additional tax under Section 3 (2) of the Sales Tax Act (G.O. Press No. 10, Revenue, dated 2nd January 1951).

(3) Sales by educational institutions which provide meals to inmates or boarders as charitable amenity on payment of fixed amounts without earning any profit have been exempted from sales tax (G.O. Press No. 1526, Revenue, dated 15th June 1951).

(4) The rate of tax on the sales of handloom cloth has been reduced from 3 pies to 1½ pies per rupee of turnover from 15th February 1951 (G.O. Press No. 300, Revenue, dated 8th February 1951).

(5) Sales of flowers, fish and meat by dealers whose turnover does not exceed Rs. 20,000 in a year are taxed at the following reduced rates with effect from 1st April 1951:—

If the turnover exceeds Rs. 10,000 but does not exceed Rs. 15,000—Rs. 96 per annum.

If the turnover exceeds Rs. 15,000 but does not exceed Rs. 20,000—Rs. 144 per annum.

(6) Sales by Co-operative Milk Societies and unions which have been formed on or after 1st July 1949 and which may hereafter be formed, are exempt for a period of three years commencing from the date of formation in each case (G.O. No. 2333, Revenue, dated 7th September 1951).

(Continued from page 34)

Admittedly viewed from the standpoint and standards of Western countries, this country has to go a long way in the matter of medical relief and preventive medicine. But subject to limitations of finance, everything that is possible is being done.

	Number of institutions.		
	1947.	1948.	1949.
Government institutions ..	216	227	261
Railway institutions ..	57	58	57
Local and municipal institutions.	489	497	507
Private aided ..	62	58	55
Private unaided ..	88	85	87
Rural dispensaries ..	299	291	264
Total ..	1,211	1,216	1,231

	In-patients.	Out-patients.	Total.
1947 ..	498,131	17,360,024	17,858,155
1948 ..	551,502	18,747,497	19,298,999
1949 ..	777,061	19,946,689	20,723,750

Expenditure incurred from Provincial funds.

	Rs.
1947 ..	1,88,50,554
1948 ..	2,32,64,268
1949 ..	2,55,81,124

Listening in Company

(A Survey of Community Receivers in Madras State)

By SRI S. V. RAGHAVAN, Publicity Assistant, A.I.R., Madras.

Broadcasting for its success depends upon the kind of response it evokes in the listener to each programme and the kind of partnership it establishes between the broadcaster and the listener. As much as what happens in the studio, what occurs at the listening end counts in making a programme achieve its objectives of entertainment, information or instruction. At the listening end may be the individual isolated listener, the family group gathered round the radio set or one of the listening communities in the village, school or factory. Nowhere is purposive listening in an organized manner in greater evidence than in any of these places, where listening is in groups or communities. The availability of electricity in the remoter areas would determine the extent of community listening, and it is therefore to be expected that Madras State, with the largest rural electrification system, should lead in the number of community receivers.

The individual listener is hard to define the harder to persuade; likes and dislikes vary enormously and only broad conclusions can be arrived at by any surveys, in regard to personal preferences and tastes. The over-riding consideration has also been the economic factor and in a country with a low national income, the number of radio homes should remain comparatively small for some time to come, at least until the listening habit spreads from the Community Centre to individuals and their families sufficiently to make them want a set for themselves at home. The Community listener on the other hand, taken collectively, assumes a definite personality and purpose; Community audiences are composed of people bound together by a homogeneous outlook, or interests

even if this is developed under the circumstances, for the moment, and are invariably assembled round a specified place at a specified hour to listen to programmes prepared and presented with particular reference to the needs of the specific audiences. Psychologically, the scepticism and apathy, which might accompany any kind of listening, are easily overcome by the Community listener through the favourable reactions of his fellow-listeners and the feeling of fellowship which listening in company breeds. It takes no time for him to get into the spirit of the hour and derive the full benefits of listening, a circumstance which is absent while listening in solitude, with the individual's predominant mood in accord or not with the broadcast.

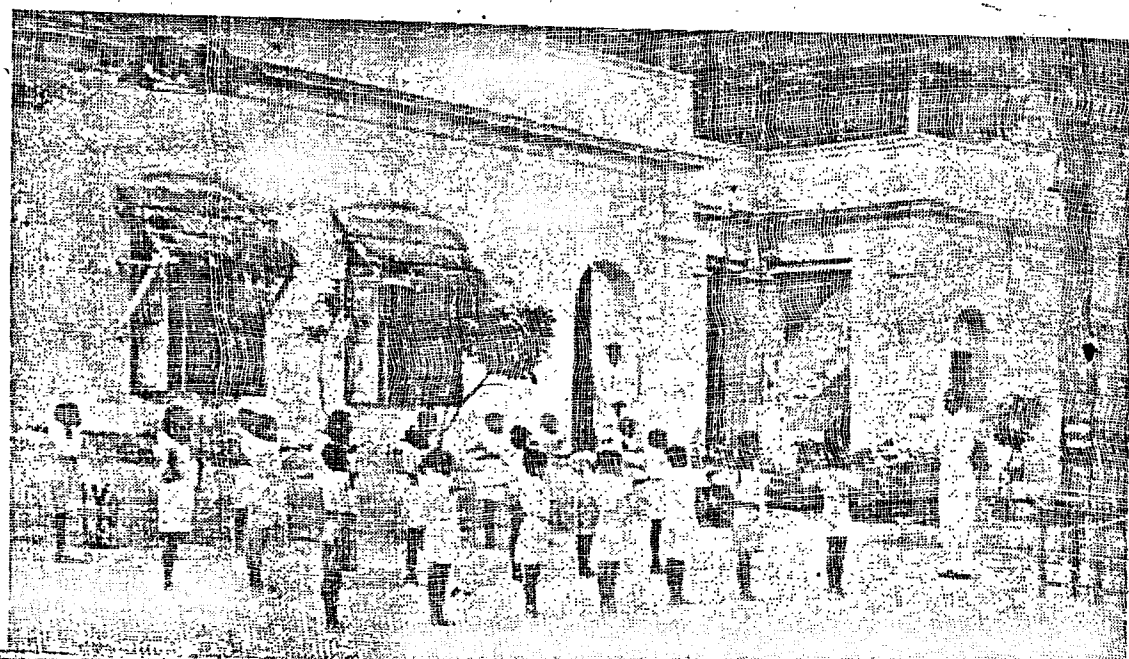
The Four Categories

Community listening may itself be divided into four broad categories: the urban, rural, industrial and educational. Urban listening is perhaps more casual, an ancillary to other pursuits in cities and towns. The listening points are usually public Parks or evening resorts of the town. Though no special service could be devised for such an urban audience, news remains the main item of interest with not too heavy music on agreeable background to an atmosphere of relaxation and rest. There were on 30th June 1951, 282 sets in operation in the principal urban localities of the Madras State, of which 34 were in the Madras City.

Among organized listening groups, rural listening has been the oldest and most sustained one in the Madras State. When Rural Broadcasting from Madras was

MUSIC AND MOVEMENT

Physical exercises taught to the accompaniment of music in the Educational Broadcasts followed by students on their school playground with physical movements.



inaugurated in November 1938, the Government of Madras had in operation only 65 community sets, 37 in Tamil districts and 28 in Telugu districts. On 1st July 1951, the total number of Panchayat sets was 1,250 (706 in Telugu, 564 in Tamil, 42 in Malayalam and 38 in Kannada areas) installed and maintained by the State Broadcasting Department of the Government of Madras. Districtwise, the distribution of these sets was as follows:—

Srikakulam ..	17	Chingleput ..	27
Visakhapatnam ..	22	North Arcot ..	49
East Godavari ..	95	South Arcot ..	48
West Godavari ..	83	Salem ..	58
Krishna ..	68	Tanjore ..	53
Guntur ..	121	Tirunelveli ..	46
Nellore ..	49	Madurai ..	85
Chittoor ..	28	Ramanathapuram ..	55
Cuddapah ..	18	Tiruchirappalli ..	61
Kurnool ..	32	Coimbatore ..	71
Bellary ..	36	Nilgiris ..	11
Anantapur ..	38	Malabar ..	42
South Kanara and Coorg ..	38		

It should be heartening news for everyone interested in cultural advancement, that the one item even the remotest village audience demands, is the facility to listen to the classical Indian Music concert that Madras broadcasts on three days in the week. The common complaint that light music from the Radio would debase public taste and lower musical standards, does not appear to be borne out by this, and on the other hand musical taste and judgement could be perhaps formed by others than the privileged few, if purely doctrinaire considerations do not prevail.

Listening in Schools

Next among the community audience come the schools. There were on 30th June 1951, 400 schools in the Madras State, with a total student strength exceeding one and half lakhs who give time for their students to listen to Educational Broadcasts from Madras, Tiruchirappalli and Vijayavada. When this service for schools was started in 1933, there were only 27 schools provided with listening facilities. "Youth Forum" and "Quiz Time" in English, though of later origin and designed for Colleges, also command educated influential audiences in College Hostels and resident quarters attached to Colleges. Radio Clubs, organizing systematic listening to these programmes, have become a regular feature in many Colleges.

The listening schools distributed in the districts of the Madras State are as follows:—

Visakhapatnam ..	3	Chingleput ..	16
East Godavari ..	6	North Arcot ..	34
West Godavari ..	5	South Arcot ..	8
Krishna ..	8	Salem ..	20
Guntur ..	14	Tanjore ..	31
Nellore ..	3	Tirunelveli ..	35
Chittoor ..	8	Madurai ..	15
Cuddapah ..	4	Ramanathapuram ..	32
Kurnool ..	7	Tiruchirappalli ..	21
Bellary ..	6	Coimbatore ..	31
Anantapur ..	7	Nilgiris ..	1
South Kanara and Coorg ..	4	Malabar ..	31
		Madras City ..	50

The factory is the third place where listening in company is seen. The programme for the industrial

workers attracts large audiences in the Canteen or Rest Houses attached to the industrial establishments. The programmes are designed to meet the specific objectives of recreation and information for the workers. Labour problems of common interest to all factories are discussed on the air by workers and their leaders themselves; the fact that the humblest could articulate their deeply felt convictions has contributed not a little to the self-esteem of the factory worker as a citizen, and a service specially designed for him and his fellow workers has been a moderating and constructive influence in all spoken word. A sample survey conducted among the factories at the time when the programme was started in November 1949, revealed that there were 40 factories with a total manpower of 20,000 workers which had radio sets. A subsequent survey held in July 1951, had added fifteen more factories to this list with an additional strength of 5,000 workers. Both the surveys have further shown that listening among industrial communities is concentrated in Tamil districts as given below:—

Chingleput ..	3	Madurai ..	1
North Arcot ..	2	Ramanathapuram ..	1
Salem ..	5	Tiruchirappalli ..	5
Tanjore ..	1	Coimbatore ..	24
Tirunelveli ..	2	Madras City ..	5

Even in the Radio Home, the habit of listening in company is worthy of note in the case of programmes for children. The young are gregarious by nature and quickly establish rapport with a Studio audience enjoying itself in an item within their easy comprehension—separately presented for two age groups (Balanandam and Papa Malar for the tiny tots, and Alavidupu and Siruvar Nigazhehi for the grown up children, in Telugu and Tamil). The Madras Children's Broadcasts have always been star items, which have perhaps contributed most to the rapid increase in the number of radio homes.

Designed for these specific audiences, the timing, frequency and duration of the programmes have been determined by the requirements and conveniences of each of the listening groups, for example, a daily programme of one hour's duration, half-hour after sunset that is at 6-30 p.m., was decided upon for the rural programme; as this hour appeared to be the time when the villagers having come from their fields, washed and eaten, were most likely to be free. Similarly the workers' programme has been fixed between 12-00 noon and 12-30 p.m. to synchronise with the lunch interval followed by the majority of the listening factories. The school programmes have been organized at different parts of the school hours to suit each group of the listening students. Entertainment programmes for children are in the mornings and early afternoons during the week-end holidays. The rural programmes are given on all days of the week, while the industrial workers and educational broadcasts are given on the working days, from Monday to Friday. In fixing these timings and programme content, representatives of the audiences or their employers or their associations have worked in close association with A.I.R., Madras.

Rural Listening

The agriculturist, who might at first have approached the radio with reserve and doubt has now come to depend on it not only as a seasonal and daily calendar built round his work-a-day life but also as the main source of entertainment and recreation in the village. Listening to the radio has now become a well-established habit with the

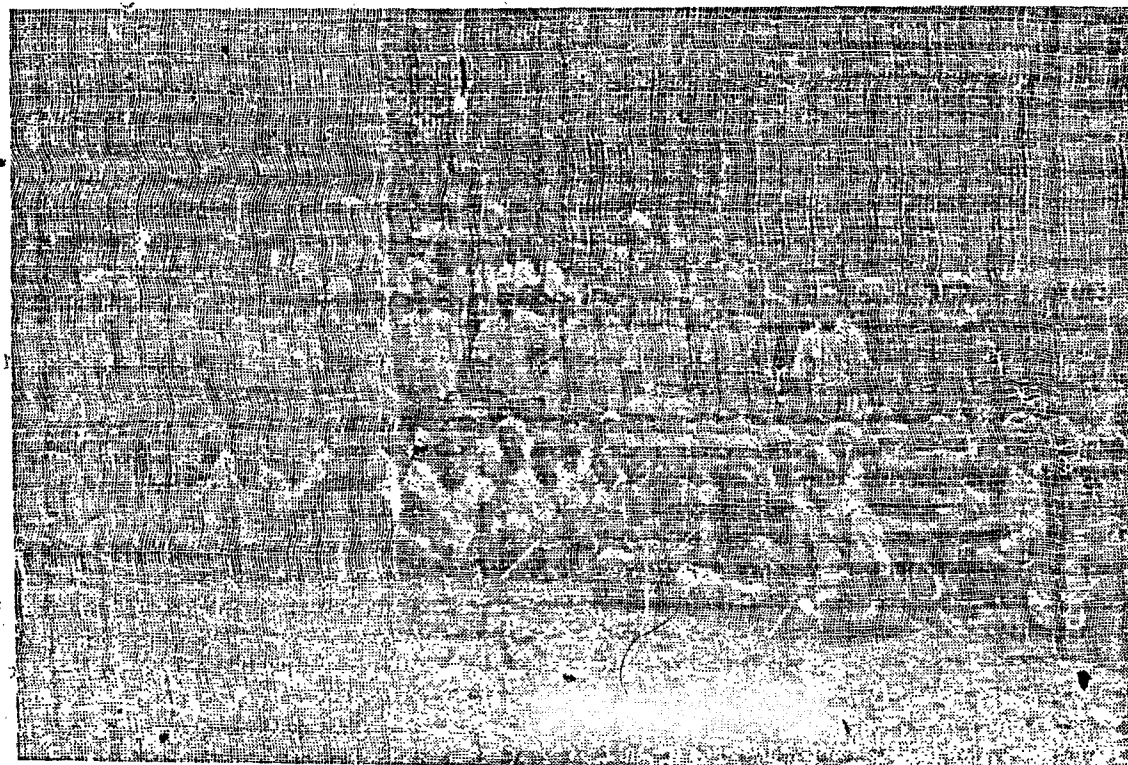
rural families, due to comparative isolation of the rural communities and the fewer distractions outside the village. It is to meet this the scope has been widened to accommodate a variety of entertainment items. The war had stimulated a lively public interest in everything that was topical, everything that was news, and in all the current affairs of the world. The advent of independence and the consequent changes which affected every citizen of the country have given additional impetus to listening. The food problem created situations of production and distribution of foodstuffs in which the rural very often was in need of expert guidance. The Farm Forum, started in 1948, has now become the natural platform for the villagers to come and discuss problems and difficulties in their occupation and receive and give advice. In the meetings of the Forum, the listeners themselves come to the microphone and there is no dressy uniformity of ideas or views.

The very complexion of these listening groups is interesting. What type of people gather round the set for the common purpose of listening? Most of the people round the rural sets are drawn to the sets voluntarily. There is no external compulsion or influence which makes them listen in. They are simply attracted by the variety of items which the radio brings to them every day. The rural audiences are also a mixed gathering of men, women and

children, whose age-level is uncertain. The school listening, on the other hand, is more or less definite. The interests and pursuits are identical and the audience is under discipline. Listening, again, is on a pattern under the supervision of the teacher and the preliminary and the follow-up work, for which the teacher is responsible, is peculiar to Educational Broadcasts and has afforded scope for the complete utilization of the Broadcasts. There is a deliberate purpose among the school audiences. The Industrial Community listening combines the features of the rural and the school audiences. While it is a voluntary gathering assembled during the lunch hour in the Canteens or Rest-houses, still it is under obligations of order and discipline, for the listening is within the factory precincts and under general supervision and guidance of the Labour Welfare or Personnel Officer.

Broadcasting as a public service could not have better served a community poor in resources than when it directed itself to specific audience listening in company. This has not only created a growing awareness of the world among the individuals who constitute the group audiences, but has promoted the fellow-feeling that has had far-reaching consequences of co-operation and common endeavour, among the groups themselves.

Shikar of the Man-eater



The above is a photograph of a Shikar Party organized at Hebri of Karkal Taluk, South Kanara District, to hunt a Man-eater who has so far carried away 7 human beings (Sri H. Narashima, Revenue Divisional Officer, Coondapur, is seen in the centre).

RADIO CONSCIOUSNESS DEVELOPES IN OUR PEOPLE

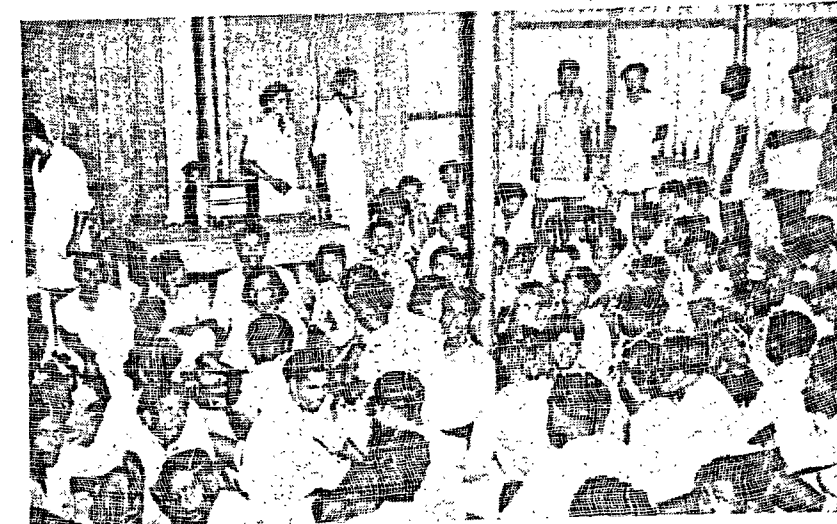
EDUCATIONAL BROADCASTS

Students of a Middle school class listening to an Educational Broadcast from Madras in their own class room, at an extension loud-speaker.



PROGRAMMES FOR FACTORIES:

Workers gathered round the radio set installed in their factory to listen to the Workers Programme broadcast from Madras.



URBAN LISTENING: Crowds gather round the loud-speaker at the Madras Marina to listen to programmes broadcast from Madras during evening.



POLLING PROCESS

The photos in this page show the several processes that a voter has to undergo in order to cast his vote to the candidate of his choice.

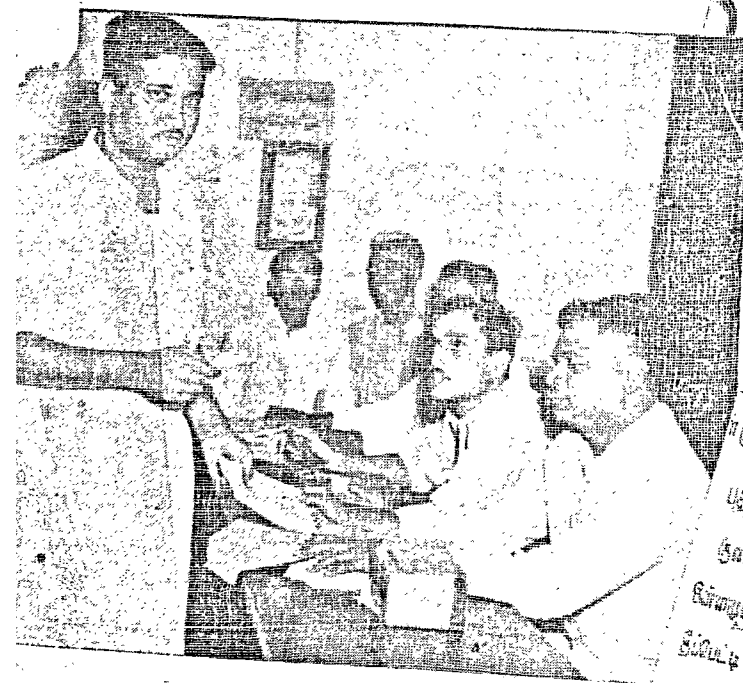
On entering the polling station, the voter is being accosted by the Assistant Presiding Officer to establish his identity, etc.



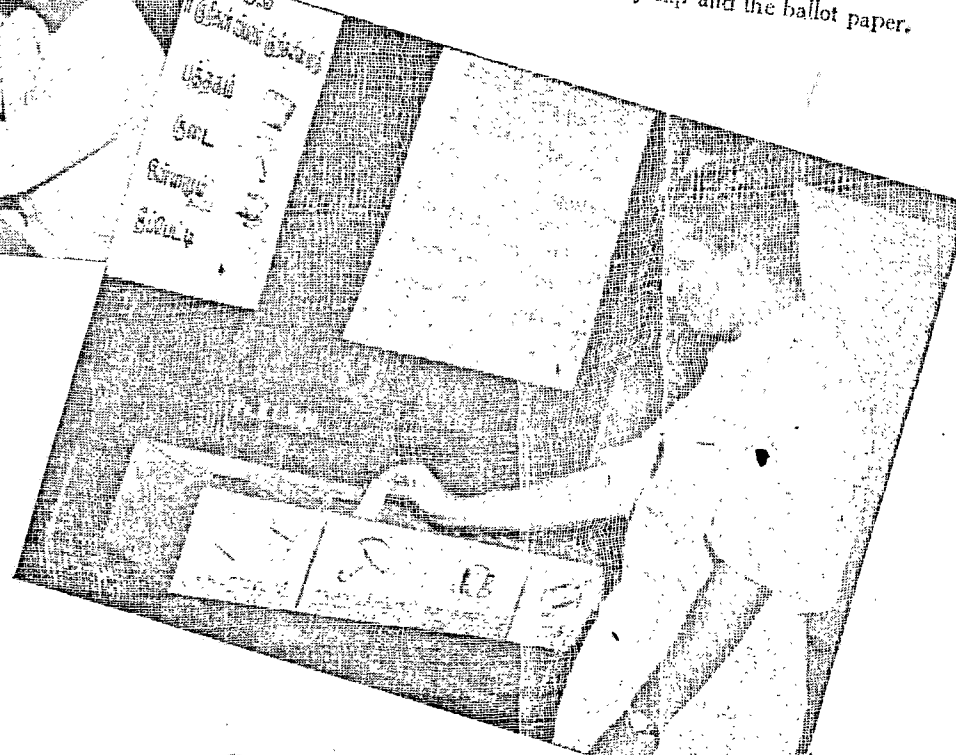
The indelible ink is being applied to the left forefinger of the voter.



The voter receives his identity slip and the ballot paper.



The voter puts his vote into the ballot box that bears the emblem of the candidate of his choice.



Madras Information

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December 1951

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General Elections, A Test for All of Us

People's Co-operation Essential for Success

SRI JAWAHARLAL NEHRU



elections will not take place simultaneously all over India, part of the staff required will do duty in more than one place. A rough estimate of the specialised staff required is:

Presiding Officers	..	..	56,000
Clerks	..	..	280,000
Policemen	..	..	224,000

To these have to be added vast numbers of Government servants and voluntary workers. Indeed the whole machinery of the State will be geared up for these elections.

Cost Rs. 10 crores

The estimated cost of these elections, both for the Central Government and the State Governments, is approximately 10 crores or 100 million rupees.

I have referred to the official staff. But you will remember that every candidate will have an election agent, as well as other agents and assistants.

You will thus see that the number of people engaged in these elections, apart from the voters, is very great. Indeed the entire organization is on a colossal scale. It is a test for all of us. This organization for the actual business of polling has been preceded by a tremendous amount of labour of large numbers of persons all over India. First, there was the preparation of electoral rolls. You can calculate the amount of paper required for these rolls and the vast amount of printing which had to be done.

Unfortunately, many of our voters are not literate and we have therefore to provide coloured boxes with emblems for different parties and candidates. This introduces a fresh burden and complication.

People's Co-operation Essential

The Governments at the Centre and in the States have to shoulder all this heavy burden and have to build up a huge staff for the purpose, which functions under the Central Election Commission. But no amount of Governmental organization will make these elections a success unless our people co-operate. It is, therefore, of the utmost importance for our people to understand all these processes, which lead us to their vote, and to give their intelligent co-operation to them.

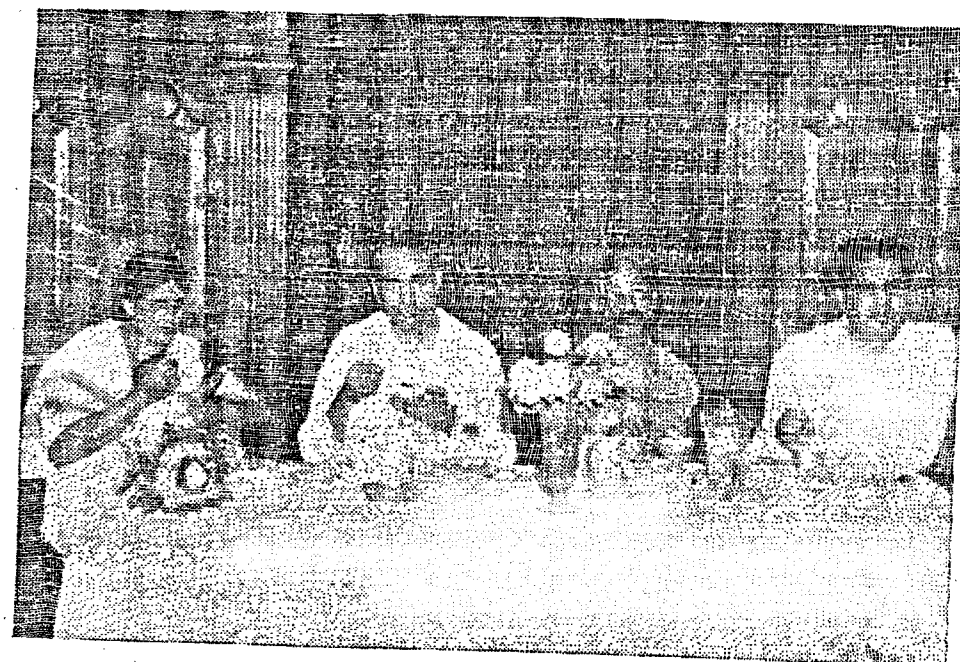
There are many organized parties running candidates for these elections. There are also likely to be many independent candidates. Every party and every candidate must be given a fair and equal chance in these elections. The fact that one party happens to be in charge of Government does not entitle it to any special privileges during the elections. Officers of Government have to function impartially. Strict instructions have been issued to all of them, both by the Central and the State Governments, so that they might carry out their duties with strict neutrality and independence. The law has laid down penalties for any improper conduct on the part of a public servant. The Election Commission has also issued warnings on several

Magnitude of the Task

Let us first have some idea of the extent of these General Elections. There are altogether 3,293 constituencies all over India. These include constituencies for Parliament, that is for the House of the People and the Council of States, and for the Legislative Assemblies and Councils in the States. Altogether 4,412 representatives will be chosen for these various legislatures.

The number of voters on our electoral rolls are about 17 crores 66 lakhs or 176 millions 600 thousands. The number of polling booths will be approximately 224,000.

Each polling booth will have to be manned by one Presiding Officer, five clerks and four policemen. As



Hon'ble Sri B. Gopal Reddy was 'At Home' recently to Sri J. Sivasubramanyam Pillai, Speaker of the Assembly. Here can be seen Sri Mathi Amman Raja, Deputy Speaker, Hon. Sri P. S. Kumaramani Raja, Chief Minister, Sri Sivasubramanyam Pillai and Hon. Sri Gopal Reddy.



The Export Advisory Council met at the Secretariat of the Madras Government during the first week of November 1951. Hon'ble Sri Harikrishna Mahab, Minister for Commerce and Industry, Government of India, is seen addressing the members of the Council.

The workers of the Government Press, Madras, celebrated Gandhi Jayanti in a grand manner. Hon'ble Sri Gopal Reddy presided over the function. He is seen addressing the workers.



occasions in regard to any improper conduct and it is proposed to take suitable action if such improper or illegal conduct occurs.

Candidates and their agents have to remember their duties and obligations and must be well acquainted with the rather complicated law and rules on the subject. Any error or lapse may disqualify them.

Ministers of Government, many of whom will themselves be standing as candidates for election, have a difficult task before them. They must not utilise their official position in any way to further their own election prospects. They must try to separate, as far as possible, their official duties from their electoral or private work. Detailed instructions to this effect have been issued.

It should always be remembered that the National Flag must not be used or exploited for party purposes. Indeed, there are rules strictly laying down on what occasions the National Flag can be used for official purposes. It must not be used for any election purpose.

Object

The whole object of democratic elections is to ascertain the views of the electorate on major problems and to enable the electorate to select their representatives. Parties place their programmes before the public and carry on intensive propaganda to convince the electorate of the virtues of each individual programme as well as of the demerits of other programmes. These conflicting approaches are supposed to educate and enlighten the electorate and enable it to choose rightly.

For some odd reason, elections lead to a great deal of excitement and sometimes even passion. Unfortunately, this excitement may also lead to improper behaviour and to a lowering of normal standards. We have to be on our guard against this. *It is of the utmost importance that all of us, to whatever party we might belong, should maintain a high level of propriety and decorous behaviour. Our propaganda by speech or in writing should not be personal but should deal with policies and programmes. It should on no account be allowed to degenerate into personal criticism and abuse.* This is our first general election on adult franchise. The standard we set up now will act as a precedent and govern future elections.

The elections have already begun and polling has taken place in some of the remote valleys of Himachal Pradesh. This had to be done now because in the depth of winter the mountain passes are closed and travelling becomes very difficult. For the same reason, a few constituencies in the mountain parts of Uttar Pradesh will poll in February next. But apart from these exceptional cases, polling will take place all over the length and breadth of India in January next on various dates which have been announced.

Great Adventure

I have given you a simple and rather bald account of these elections. I should like you, however, to try to visualise the inner significance of this great adventure of the Indian people. Imagine hundreds of millions of people on the move all over India to determine the future government of this country. They do so or should do so peacefully and will put their voting papers in tens of thousands of ballot boxes indicating their choice. Out of

those voting papers, will emerge the Members of the Parliament of India and of the State Assemblies; and we shall accept the result of this election, whoever wins or loses.

That is the essence of democracy. All of us naturally want the cause we represent to triumph and we strive hardest to that end. *In a democracy, we have to know how to win and how also to lose with grace.* Those who win should not allow this to go to their heads, those who lose should not feel dejected.

Naturally, we want the person or the group that we consider right to win and we work to that end. But the manner of winning or losing is more important even than the result. *It is better to lose in the right way than to win in the wrong way.* Indeed, if success comes through misconceived effort or wrong means, then the value of that success itself fades away.

Means and Ends

There has been a long argument especially in India about means and ends. Do wrong means justify right ends? So far as we are concerned in India, we decided long ago that *there can be no right end if the means employed were wrong.* If we apply that to this business of elections, we come to the conclusion that it is even better for the wrong person to be elected than for the right person to win by dubious methods. If such dubious methods are employed, then the rightness of the right person itself fades away.

I lay stress upon this because it is important and because there is a tendency, during election time, to forget normal standards of behaviour. *I earnestly hope that every candidate and those who support him will remember that to some extent he has the honour of India in his keeping and will conduct himself accordingly.*

For the 4,412 seats, to be filled, there are innumerable applicants. Out of these, a limited number are chosen and out of these again, only some will win and others will lose. So there will be a very large number of those who are not chosen as candidates and of those who, being chosen, do not succeed. I hope that those who fall out in the first or the second round will not take this to heart too much.

There is a mistaken impression that the service of India largely consists of going to the legislatures. That is a bad and a wrong impression. No doubt people can serve in the legislatures, but people can serve better outside them also. In any event, elections come from time to time and it is not necessary to get too excited about them. Let us face them calmly and take them in our stride.

I should like to add, what I have often said before, that we owe a special duty to our minority communities and to those who unfortunately are backward, economically or educationally, and who form the largest part of the population of India. We are all clamouring for our rights and privileges. It is more important to remember our duties and responsibilities.

Let us then face this great adventure of our general elections with good heart and spirit and try to avoid ill-will even in regard to those who oppose us. Thus we shall lay the firm foundations of the democratic structure of this great Republic.

General Elections

SRI S. VENKATESWARAN, I.C.S., Chief Electoral Officer, Madras.

The forthcoming General Elections in India will constitute a great landmark in the history of our country, because they are the first General Elections under our New Constitution in Independent India. *They will also be a landmark in world history, because our aggregate electorate on the basis of adult franchise is larger than that in any single country which has gone to the polls so far, under a scheme of democratic elections.*

We have taken a sudden plunge in regard to adult franchise; and our electorate is nearly half the population consisting of almost equal numbers of men and women. In our own State of Madras, the number of voters will be over 27 million, i.e., nearly 3½ times the electorate which returned members to our Legislative Assembly under the old Constitution. Our Constituent Assembly and Parliament have decided not only in favour of adult franchise, but also in favour of the latest refinements in conducting democratic elections. Some of our own leaders have doubted the wisdom of this sudden and large plunge, but having taken the plunge, it is up to all of us to conduct our elections in a manner which would redound to the credit of all of us, and thus stand the first and most vital test of our fitness for the ambitious democratic constitution which we have given ourselves.

Importance of Elections

These periodical elections are of fundamental importance in a democratic regime. If the scheme of representative Government envisaged by our Constitution is to be worked successfully, it is of paramount importance that the opinion of the general body of voters should be tested directly through these elections, so that the party in power may be the one whose policies and programmes appeal most to the people, and which thus most enjoys the confidence of the electorate. *Unless we are prepared to be indifferent to our own welfare and the welfare of our country we cannot afford to be indifferent to these elections, through which we exercise our fundamental right to determine the Governments to whom the destinies of our State and Country should be entrusted for the next five years.* We really cannot afford to be fatalistic and indulge in the cynical slogan "What does it matter to me whether Rama rules or Ravana rules?" We must, therefore, be absolutely clear in our minds that these elections are of vital importance, that we ought to take an intelligent interest in them and do our duty as enlightened citizens of the country.

The first test of a good citizen is that he should regard his right to vote as one of his fundamental rights, and exercise that right, according to his best judgment after careful consideration of the policies and programmes commended to him by the rival parties and candidates. Our elections, which are based on adult franchise, would be really unsatisfactory, unless our women, who constitute nearly half of our electorate, take the same interest in the elections and exercise their rights as voters with as much keenness and intelligent appreciation of what is good for the country as the men voters. Shrewd commonsense is good enough equipment for a voter and our women have that in abundance. All that is required is that they should not let their shyness stand between them and the

polling booth. As I shall explain presently, special arrangements will be made to enable our sisters to vote conveniently.

Electoral Laws and Rules

Election law is necessarily laid down in rigid and mandatory terms, and cannot be relaxed except to the extent actually authorized by that law by any authority whatsoever. It is therefore important that we must, all of us, make ourselves familiar with the statutory provisions with which we are directly concerned, whether as officials on election duty, or as candidates and their agents or as voters. No one can exercise his discretion in regard to the application of the election law. One of the rigid provisions in our Election Law is that no person can vote at an election unless he has been registered as a voter for that particular election, that is, in the relevant electoral roll. I cannot claim that our electoral rolls are perfect, but we have been working at them since June 1948 and the official machinery has done its very best to rectify mistakes and omissions and on the whole, we have every reason to be satisfied with our electoral rolls, considering that these are our first rolls for this enormous electorate under our New Constitution, and there is still a lot of apathy and indifference to overcome in regard to such matters. The forthcoming elections will bring home to everyone the value of his registration in the electoral roll and we shall undoubtedly steadily improve on the existing rolls at every annual revision in future.

The statutory provisions governing the conduct of elections to the State Legislatures and Parliament are contained in our new Constitution, that is, the Constitution of India, the Representation of the People Act, 1951 recently enacted by our Parliament and the statutory rules issued under that Act by the Central Government.

Procedure

Our State Legislature under the New Constitution will also consist of our Legislative Assembly and Legislative Council while our new Parliament will consist of the House of the People and the Council of States. Our State Assembly will have 375 seats filled by direct elections by the people on the basis of adult franchise and similarly the 75 seats allotted to this State in the House of the People. The 27 seats allotted to the Council of States will be filled by indirect election by the elected members of our new State Assembly while out of the 72 seats in our Legislative Council 24 seats will be filled by indirect election by members of our new Assembly. The remaining seats in our Legislative Council will be accounted for by 12 seats to be filled by nomination by the Governor, 24 seats by the Local Authorities' Constituencies, 6 seats from the Graduates' Constituencies and 6 seats from the Teachers' Constituencies.

All our elections with the exception of those to the State Assembly and House of the People will be in accordance with the system of proportional representation by means of the single transferable vote. Under this system, the voter has to indicate his order of preference between the rival candidates by marking 1, 2, 3, etc., on the ballot

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MADRAS INFORMATION

paper. The method of counting of votes and declaration of results under this system is a complicated one and has been fully described in the statutory rules which I have already referred to.

Administrative Set-up

The administrative set up in connection with the elections will consist of the Election Commission at Delhi with powers of supervision, direction and control over all elections to the Legislatures throughout India, and in each State, the Chief Electoral Officer, Returning Officers, Presiding Officers and Polling Officers. The Chief Electoral Officer is an officer of the State Government who has not many or important statutory functions, but who is the executive authority for planning the arrangements for the elections throughout the State and for co-ordinating the work of the District Officers to ensure that everything goes on smoothly, with absolute impartiality, and in accordance with the election law.

The Returning Officers will be generally the Revenue Divisional Officers in respect of the State Assembly Constituencies and the Collectors in respect of the Parliamentary Constituencies. In a few cases, other gazetted officers of the Revenue Department, mostly Personal Assistants to Collectors, will be the Returning Officers in order to avoid saddling any Revenue Divisional Officer or Collector with the work of the Returning Officer in respect of too many Constituencies. In Madras City, as the widespread and effective executive staff is under the Commissioner, Corporation of Madras, that officer will be the Returning

Officer in respect of one Parliamentary Constituency, and for 4 out of the 7 Assembly Constituencies, while the Personal Assistant to the Collector of Madras will be the Returning Officer in respect of the remaining 3 Assembly Constituencies. The Returning Officer is the person statutorily responsible for the proper conduct of elections in his constituency and he will appoint the Presiding and Polling Officers. He will be responsible for all the arrangements in connection with the elections from the date of receipt of the nominations to the counting of votes and declaration of the results. Lists of these Returning Officers have been notified already.

Polling Station

Every Polling Station will serve a specified polling area and to each booth there will be allotted specified voters from specified local areas like villages, or wards of towns or defined portions thereof. On an average, not more than 750 voters will be allotted to a booth, and normally no voter will have to walk more than three miles to go to his or her polling station. Only when there are unavoidable practical difficulties, this distance limit will be relaxed upto 5 miles, and only in very hilly areas like the Agency tracts where the population is very small and very scattered, any further relaxation of the distance limit will be allowed.

Special Arrangements for Women Voters

As a general rule, at every polling station, there will be separate booths for men and women voters and it is only in special tracts like the Agency areas, where the number of



It will cost India over Rs. 10,000,000 to guard the secrecy of the ballot in the first General Elections after the attainment of Independence. 2,299,478 small, light, steel boxes will hold the ballot papers cast within screened polling compartments where the law allows neither prying eyes nor any sort of interference. The average price of each box is between Rs. 4 and 5. Samples of Ballot boxes which will be used during the General Elections.—PIB.

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MADRAS INFORMATION

voters is very small, that combined booths, will be allowed. Where there are combined booths, the women voters and men voters will be allowed into the booths in alternate batches. Everywhere, the Police officers on duty at the polling station will strictly enforce the queue system in order to ensure smooth and orderly voting, and not more than three voters will be allowed into the booth at a time. In areas where there are appreciable numbers of gosha women voters, the booth allotted to them will be manned entirely by women staff, and only women voters—gosha and non-gosha—will be permitted to vote at these booths. Special arrangements will also be made at the entrances to and exits from such booths so that the gosha women voters may have as much privacy and seclusion as possible.

Presiding Officer's Powers

The Presiding Officer is responsible for general supervision of the arrangements and proceedings at his polling station, and it is his duty to see that the polling proceeds smoothly and fairly throughout. Each booth will be in charge of an Assistant Presiding Officer who can exercise all the powers of a Presiding Officer under the Election Law. Any person who misconducts himself at a polling station or fails to obey the lawful directions of the Presiding or Assistant Presiding Officer may be removed from the polling station by the Presiding Officer or by any police officer on duty or by any person authorized by the Presiding Officer. If a person who has been so removed from the polling station re-enters it without the permission of the Presiding Officer, he can be arrested by the Police on the spot and prosecuted. The Presiding and Assistant Presiding Officers will thus have ample powers to deal with persons who commit any electoral offence or try to create any trouble or disorder at the polling station.

Reservation of Seats

Out of the 375 seats in Our State Assembly, 62 have been reserved for the Scheduled Castes and four for the Scheduled Tribes, while, out of our 75 seats in the House of the People, 12 have been reserved for the Scheduled Castes

and one for the Scheduled Tribes. Only persons who are otherwise qualified to stand as candidates and who belong to the one or other of the Scheduled Castes or Scheduled Tribes, as the case may be, notified by the President under the Constitution, can be elected to a reserved seat.

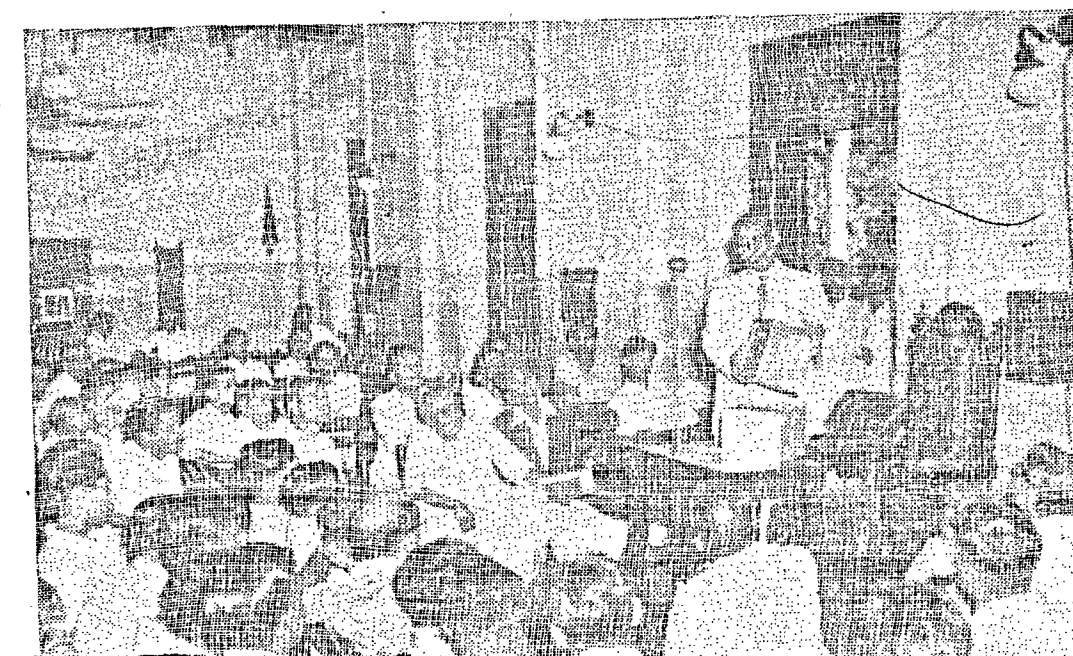
All other seats are general seats and are open to all qualified candidates irrespective of their caste. Subject to this reservation of seats for the Scheduled Castes and Scheduled Tribes, our Constitution prohibits any discrimination of candidates on the ground of caste, creed, religion or race. Another fundamental provision of our Constitution is that, even in constituencies where there are reserved seats, the election for all the seats including the reserved seats will be by the joint electorate consisting of all voters, irrespective of their caste, creed, religion or race. *It may be specially noted that our qualified women may not only vote but also stand as candidates, on exactly the same terms as men, and we do want them to fully exercise these rights.*

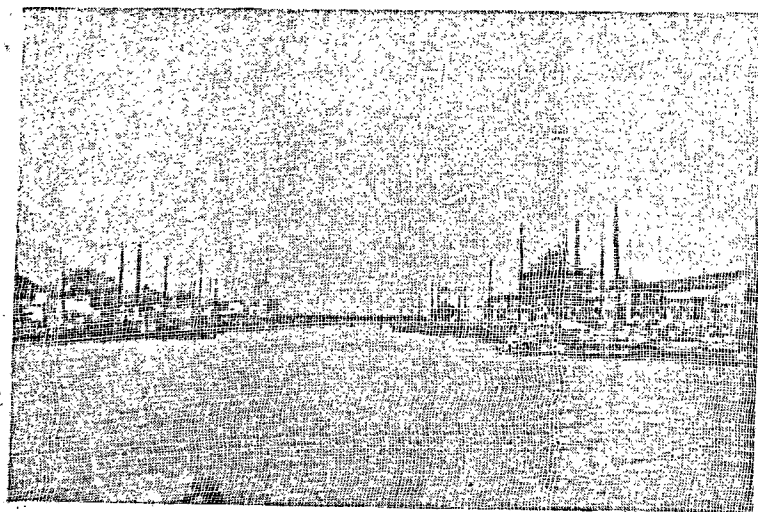
All our constituencies for the State Assembly and House of the People are single-member constituencies except for the two-member constituencies created in order to provide for the reserved seats. In each two-member constituency, there is one general seat and one reserved seat. Reservation of seats for Scheduled Castes and Scheduled Tribes have been made in different constituencies. For our State Assembly, there are thus 243 single member constituencies and 66 two-member constituencies. Our 75 seats in the House of the People have been distributed between 49 single-member constituencies and 13 two-member constituencies.

Our State

It will be noticed that the total number of seats in our State Assembly is exactly five times the number of our seats in the House of the People. This has been deliberately done, so that, every Parliamentary constituency may cover the same area as five adjoining assembly constituencies or 10 Assembly constituencies according as it is a single-member or two-member constituency of the House of the People. The forthcoming elections being general elections polling will be held simultaneously in each Parliamentary

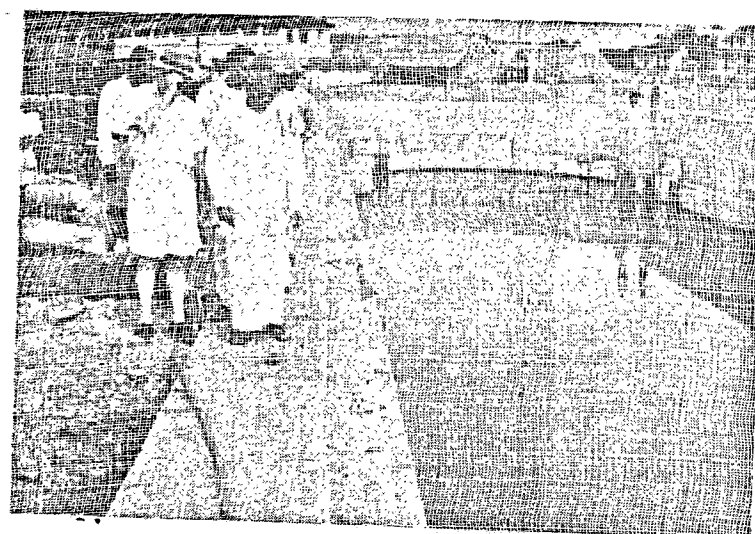
A training class for officers concerned with the polling work, etc., was conducted in Madras City. Details about the ballot box are being explained to the officers.



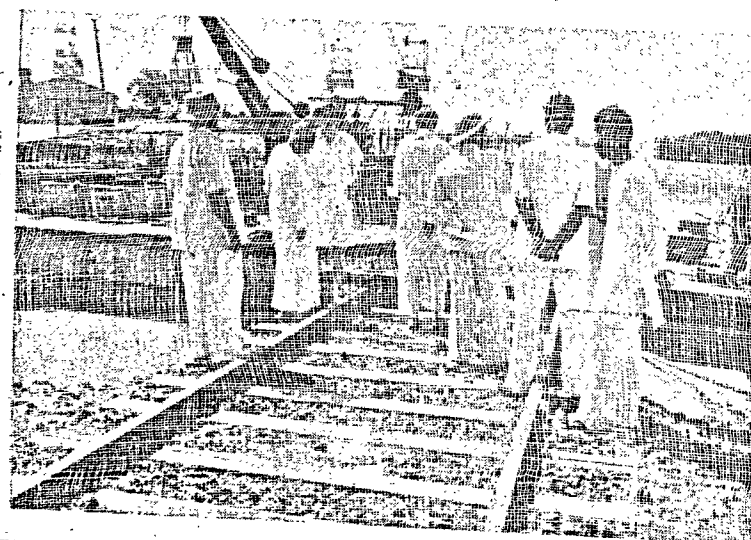


KAKINADA PORT

Hon'ble Sri M. Bakhavathsalam, Minister for Public Works, recently visited the Kakinada Port. A beautiful view of the Kakinada Port.



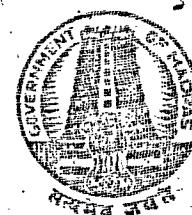
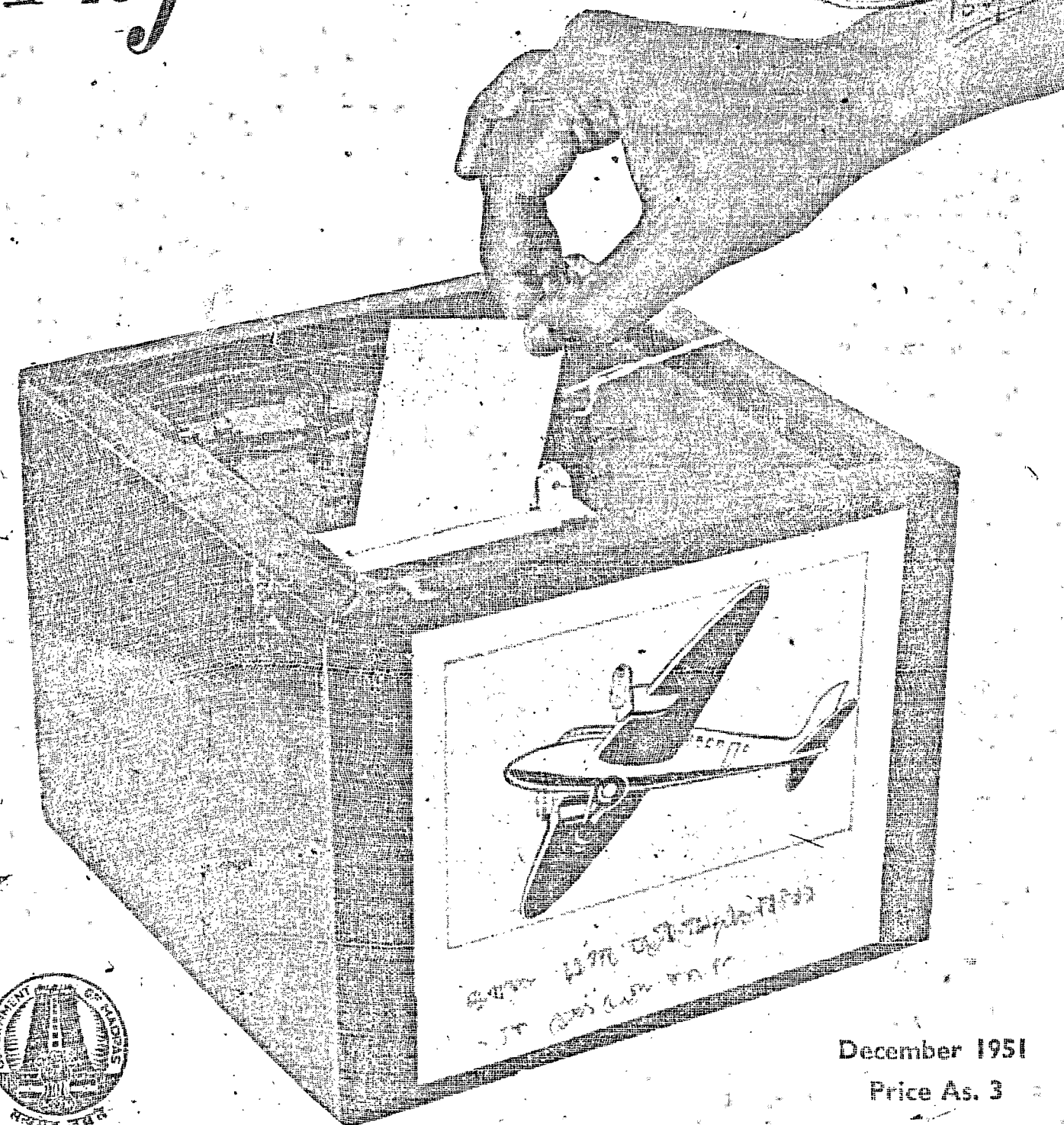
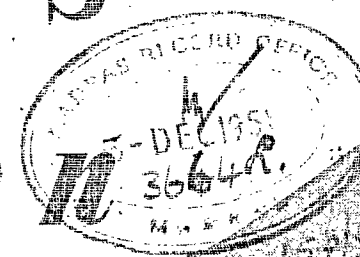
Hon'ble the Minister is seen inspecting a quay.



Hon'ble Sri M. Bakhavathsalam minutely observes the railway track in the port area.

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Constituency and in its component Assembly constituencies. We have arranged to complete the polling in each Parliamentary constituency and in its component Assembly constituencies on a single day.

Candidates and their Qualifications

Qualifications

The election law naturally lays down in strict terms the qualifications and disqualifications for candidates standing for elections. The candidate must possess all the qualifications required and must not suffer from any disqualification on the date on which his nomination is actually filed.

He should be a citizen of India; not less than 25 years of age if he is standing for election to the State Legislative Assembly or House of the People, and not less than 30 years of age if he is standing for election to the State Legislative Council or the Council of States; must possess the other qualifications to which I shall refer presently, and lastly, he must not be disqualified under Article 102 or 191 of the Constitution, as the case may be, or under any other provision of the Representation of the People Act, 1951.

Disqualifications

Under the Articles which I have just referred to, the candidate will be disqualified if he holds any office of profit under



Polling rehearsals have been held in some parts of the country to educate the voter on the do's and don'ts for elections. Picture shows checking up of the identification slips of rural voters in Delhi during the mock elections.—PIB.

Wherever a poll has to be held, it will take place in January next. According to the time table prepared by the Government, the polling will be spread over 9 days during the period from 2nd January to the 25th January.

the Government of India or the Government of any State other than an office declared by the appropriate Legislature by law not to disqualify its holder; if he is of unsound mind and stands so declared by a competent court; if he is an undischarged insolvent; or if he is not a citizen of India or has voluntarily acquired the citizenship of a foreign State, or is under any acknowledgment of allegiance or adherence to a foreign State.

State and Union Ministers have been excluded from the operation of the disqualification in respect of holders of offices of profit under the Government. Parliamentary Secretaries in this State have been similarly excluded; but there are no holders of these offices in this State now. Other holders of offices of profit under the Government, for example, Government servants including Village Officers, Government Pleaders and Public Prosecutors stand disqualified. The nomination of such a person will not therefore be valid unless, before the date of the filing of his nomination, he has resigned his office, his resignation has been accepted and he has been relieved of his post.

The other statutory provisions relating to disqualifications are sections 7 to 9 and section 139 of the Representation of the People Act, 1951. Disqualification may arise under section 139 (1) (a) in respect of subsisting convictions for bribery, undue influence and personation at elections adjudged on or after the commencement of that Act, namely, 17th July 1951. Sections 7 to 9 to which I have referred are very important and their effect may be summarised thus:—

(i) A candidate will be disqualified if he has been convicted for any offence and sentenced to transportation or imprisonment for not less than two years unless a period of 5 years, or such lesser period as the Election Commission may have allowed in his case, has elapsed.

(ii) If, whether by himself or by any person or body of persons in trust for him or for his benefit or on his account, he has any share or interest in a contract for the supply of goods to, or for the execution of any works or the performance of any services undertaken by the appropriate Government.

(iii) If, he is a director or managing agent of, or holds any office of profit under, any corporation in which the appropriate Government has any share or financial interest.

(iv) If, having held any office under the Government of India or the Government of any State including an Indian State, he has been dismissed for corruption or disloyalty to the State unless a period of five years has elapsed since his dismissal.

With reference to the last mentioned disqualification, if a candidate obtains a certificate from the Election Commission

to the effect that his dismissal was not for corruption or disloyalty to the State, such certificate will be binding on all concerned. As far as the forthcoming General Elections are concerned, this disqualification even if it exists, can be removed by the Election Commission for reasons to be recorded by the Commission in writing.

The 'appropriate Government' to which I have referred is the State Government concerned in respect of elections to the State Legislature, and the Central Government in respect of elections to Parliament. The position of the candidate in relation to local bodies is therefore irrelevant. Similarly, his position in relation to the Central Government, if he is only standing for election to the State Legislature, and likewise, his relation to the State Government if he is only standing for election to Parliament.

Contracts

As regards contracts, there will be no disqualification unless there is a subsisting contract for the supply of goods to or for the execution of any works or for the performance of any services undertaken by the appropriate Government. There will also be no disqualification if the contract is between a public company of which the candidate is only a shareholder but is neither a director holding an office of profit under the company, nor a managing agent. If the contract has been entered into by or on behalf of a Hindu undivided family, every member of that family will be disqualified, but where the contract has been entered into by a member of such a family carrying on a separate business in course of such business, any other member of the family having no share or interest in that business will not be disqualified. The disqualification will not also operate against a candidate on whom the share or interest in the contract has devolved by inheritance, succession or as a legatee, executor or administrator, until after the expiry of 6 months after it has so devolved on him, or such longer period as the Election Commission may have allowed in his case.

As regards corporations in which the appropriate Government has any share or financial interest, the candidate will not be disqualified by reason of his being a director, unless the office of such director has been declared by Parliament by Law to so disqualify its holder. No such law has yet been enacted by Parliament, and even after such a law has come into force, it will not operate against the successful candidate until after the expiry of six months after the date of commencement of the law or of such longer period as the Election Commission may allow in his case.

There are also certain additional qualifications required for candidates, and these are:—

Council of States.—The candidate must be a voter for a Parliamentary Constituency in the Madras State.

House of the People.—He must be a voter for any Parliamentary Constituency anywhere in India, subject to the proviso that, in the case of seats reserved for Scheduled Castes or Scheduled Tribes, he must be a member of one of those castes or tribes, as the case may be, whether of this State or any other State, notified by the President under the Constitution.

Madras Legislative Assembly.—He must be a voter for an Assembly Constituency in Madras State, subject to the proviso, that in the case of seats reserved for the Scheduled Castes or Scheduled Tribes, he must also be a member of any of the Scheduled Castes or Scheduled Tribes, as the case may be, which the President has notified for this State.

Madras Legislative Council.—He must be a voter for an Assembly Constituency in Madras State. Any such voter can therefore stand for election, whether from a Local Authorities' Constituency or from a Graduates' Constituency or from a Teacher's Constituency, or by indirect election, by the State Legislative Assembly to one of the 24 seats earmarked for such election, irrespective of whether or not he is a member of a Local Authority or a Graduate or a teacher, as the case may be.

Forfeiture of deposits.—An unsuccessful candidate will forfeit his deposit if he has not secured more than 1/6th of the total number of valid votes polled. In two member constituencies he must secure more than one-twelfth of the total number of valid votes polled. If he stood for election in more than one constituency, only one of his deposits will be returned to him, and the others will be forfeited to the appropriate Government.

Symbols.—There will be no coloured boxes hereafter, and each candidate's box will bear the symbol allotted to him; one copy on the front side of the box and one inside. In his nomination paper, a candidate can specify three symbols in the order of his preference. These symbols must be from among those notified by the Election Commission. An official candidate set up by an All-India Political party should specify in his nomination paper only the symbol allotted to that party by the Election Commission, while an official candidate set up by a political party functioning only in this State and recognised as such by the Chief Electoral Officer, should specify only the symbol allotted to that party by that officer. Party candidates who are qualified to fill reserved seats will be distinguished by a thick black circle all round the party symbol. All other candidates will fall under the category of independent candidates, and they may specify in their order of preference, any three symbols out of the six, namely, bow and arrow, boat, flower, pitcher, camel and a twig with two leaves, left after allotment to the All-India political Parties and State Political Parties. All symbols will be printed in black against a white background and the name of the candidate will be written in bold letters below the symbol in the regional language or languages. The symbols for independent candidates will be allotted by the Returning Officer after the time allowed for withdrawals has expired. He will try and allot to each such candidate the symbol he prefers, and decide by lot where there is competition for the same symbol.

Withdrawal of candidatures.—Withdrawals must be in writing in the form prescribed, and will not be acted upon unless they are delivered to the Returning Officer before 3 p.m. on the 1st December 1951. If the notice of withdrawal is not delivered by the candidate in person, it must be accompanied by a letter from the candidate to the Returning Officer authorizing his proposer or seconder or election agent who delivers the notice, to present it. If a valid withdrawal has not been made, the candidate concerned will be treated as one of the contesting candidates, whether or not he proposes to take any further interest as a candidate.

The Law and Elections

Paid Staff

The number of persons employed by a candidate for payment should not exceed one election agent, one counting agent, one clerk and one messenger. In respect of elections to the Assembly and to the House of the People, the number of clerks and messengers may, however, be at the rate of one clerk and one messenger for every 75,000 voters or fraction of that number. There MAY ALSO BE ONE POLLING AGENT, TWO RELIEF AGENTS AND ONE MESSENGER for each booth, but a candidate can have only one polling agent inside a booth at a time. The candidate, his election agent and his polling agent will be entitled to sit inside the booth at the place set apart for the candidates and their agents. Appointments of polling and relief agents should be made in writing, in duplicate, in the prescribed form, and at least three days before the commencement of the poll. One copy should be sent to the Returning Officer and the other copy handed over to the agent himself for presentation to the Assistant Presiding Officer at the polling station. The polling agent will not be admitted into the booth unless he presents his copy to the Assistant Presiding Officer on the day of the poll. Changes or death of polling and relief agents should be intimated forthwith to the Returning Officer and fresh appointments made in the same prescribed form.

Corrupt Practices

It is important that candidates should study and note carefully the provisions relating to corrupt and illegal practices specified in election law. The relevant provisions in this connection are sections 123 to 125 of the Representation of the People Act, 1951. They include all the items treated as corrupt practices under the Old Constitution such as bribery, undue influence and false personation, but also some important additional items. These are:—

- (1) The removal of a ballot paper from the polling station during polling hours;
- (2) The hiring or procuring, whether on payment or without payment of any vehicle or vessel for the conveyance of voters (other than the candidate himself, the members of his family or his agent) to or from the polling station. Voters may, however, join together, and at their joint cost, hire a vehicle or vessel for the journey to and from the polling station, and this would not amount to a corrupt practice provided the vehicle or vessel so hired is not propelled by mechanical power, as for example, a motor car or bus;
- (3) Obtaining or procuring or abetting or attempting to obtain or procure, any assistance for the furtherance of the prospects of the candidate's election, from any person serving under the Government of India or under a State Government other than the giving of his vote by the Government servant. Even village servants and village officers are Government servants for the purpose of this provision;
- (4) The systematic appeal to vote or refrain from voting on grounds of caste, race, community or religion or the use of, or appeal to, religious and national symbols,

such as the national flag and the national emblem, in connection with the candidate's election campaign.

Communal Coercion, an Offence

These provisions relating to corrupt and illegal practices should be read carefully with section 100 which specifies the grounds on which an election may be declared to be void by the Election Tribunal. One important new provision that section 100 contains is that the Election Tribunal must declare the election to be wholly void if it has come to the conclusion that the election has not been a free election by reason that coercion or intimidation has been exercised or resorted to by any particular community, group or section, on another community, group or section, to vote or not to vote in any particular way at the election, that is, the election has not been a free election by reason that communal coercion or intimidation has been exercised.

An act referred to as a corrupt practice will be treated as such if it is done by the candidate himself or by his agent or by any other person with the connivance of the candidate or his agent. In this connection, it should be noted that, for purposes of corrupt and illegal practices and electoral offences and disqualifications, the term 'agent' will include the election agent, the polling agent, the counting agent as well as any person, who, at the trial of the election petition, or of an electoral offence, is held to have acted as an agent in connection with the election, with the knowledge or consent of the candidate.

Under sub-section (2) of section 100 of the Act, the election of a candidate must be declared void if the Election Tribunal is of the opinion that the election of a successful candidate has been procured or induced or the result of the election has been materially affected by any corrupt or illegal practice. In respect of the major corrupt practices specified in section 123, proof that even a single instance of any such corrupt practice has been committed by the successful candidate or his agent or by any other person with the connivance of the candidate or his agent, is sufficient for setting aside the election. These provisions have, of course, been designed to ensure the purity of our election.

Election Expenses

Candidates should see that their election agents maintain a true and complete account of all receipts and expenses in connection with the election campaign. The accounts should be a detailed one maintained daily in order that a candidate may be in a position to submit the return of election expenses in the prescribed form. Under receipts should be included all moneys, securities and equivalents of money received from any person including the candidate himself, club or society or association in respect of any expenses whether paid or remaining unpaid incurred in connection with the election. Expenses should include all payments made by a candidate or by his election agent or by any person on behalf of or in the interests of the candidate, in respect of any expenses incurred, as well as

all unpaid claims in respect of any such expenses of which the candidate or his election agent is aware.

In respect of Assembly Constituencies the candidate's election expenditure should not exceed Rs. 8,000 for a single-member constituency and Rs. 12,000 for a two-member constituency. In respect of constituencies of the House of the People, the expenditure should not exceed Rs. 25,000 for a single-member constituency and Rs. 35,000 for a two-member constituency. The maximum for elections in a Local Authorities' or Graduates' or Teachers' Constituency of the Madras Legislative Council is Rs. 3,000. The return of election expenses in the prescribed form should be lodged in respect of all elections with the Returning Officer within 45 days from the date of publication of the result of the election in the Fort St. George Gazette in respect of elections to the State Legislature and in the Gazette of India in respect of elections to Parliament. It is important that the return should be filed in time as, otherwise, the candidate and his election agent will run the risk of being disqualified both for voting and for membership of any Legislature for a period of five years.

Election Offences

Electoral offences have been specified in sections 126 to 138 of the Representation of the People Act, 1951, and they supplement the provisions in the Indian Penal Code relating to election offences. Public meetings in a constituency on the polling day are prohibited, but such meetings may be held even on the day preceding the date of the poll. Any public meeting of a political character held in a constituency between the 7th of this month and the polling day will be treated as an election meeting and disturbances at such meetings will be put down by the police under section 127. Those who cause the disturbances at such meetings are liable for punishment or prosecution. If any police officer reasonably suspects any person of committing such an offence, he may, if so requested by the Chairman of the meeting, ask the offender to declare to him immediately his name and address, and if he refuses or fails to do so, or if the police officer reasonably suspects him of giving a false name or address, he may arrest the offender on the spot without warrant.

Canvassing for votes, persuading electors to vote or not to vote for any particular candidate or not to vote at all, and advertisements, are prohibited in the polling station as well as in any public or private place within a distance of 100 yards from there. It will be an offence for any person who shouts or otherwise acts in a disorderly manner or uses or operates, at the entrance to the polling station or in its neighbourhood, any apparatus like a megaphone or a loud-speaker. Any such offender may, under the directions of the Presiding Officer, be arrested by the police on the spot and the police may use such force as may reasonably be necessary for stopping the nuisance and may also seize the megaphone or loud-speaker.

Counting of Votes

Counting of votes will be taken up in each constituency, as soon as the Returning Officer can manage it after the polling in the constituency is over. He will give notice in writing to each candidate and his counting agent of the date, time and place of the counting. Each candidate can appoint only one counting agent and the appointment should be made in writing in duplicate in the

prescribed form by the candidate or his election agent before the commencement of the counting. One of the copies of the appointment order should be sent to the Returning Officer, while the other copy must be produced by the counting agent at the time of the counting, and unless he does so, he will not be admitted into the room where the counting is done. Each candidate, his election agent and his counting agent will be entitled to be present at the time of the counting. Each of these persons can see the ballot boxes to satisfy himself that they are in order and have not been tampered with, and can also see the ballot papers which, in the opinion of the Returning Officer, are liable to be rejected. Where there is an equality of votes between any candidates, the Returning Officer will forthwith decide between those candidates by lot.

Re-counts

A candidate or his election agent or counting agent may ask the Returning Officer for a total or partial re-count before that officer declares the result of the election. But the Returning Officer may reject any such application if he considers it frivolous or unreasonable, in which case, he will record at once the grounds of his rejection of the application.

After the counting is completed, the Returning Officer will declare the result of the election. In a single-member constituency the candidate who has secured the largest number of votes will be declared to be duly elected, while in a two-member constituency, the result of the election will first be declared in respect of the reserved seat, that is, the candidates who are qualified to fill the reserved seat by virtue of their membership of a Scheduled Caste or Scheduled Tribe, as the case may be, will be considered and the person among them who has secured the largest number of votes will be declared to be duly elected to that seat. Thereafter, all the remaining candidates including those who were unsuccessful in connection with the election to the reserved seat should be considered together, and the person who has secured the largest number of votes among all of them will be declared to be elected to the non-reserved seat.

(By courtesy of A.I.R., Madras.)

Cattle Breeding

Key Farm Centres

Seven Key Farm Centres, which will be entrusted with the work connected with intensive cattle breeding in villages within a radius of five miles of the centre, have been opened at Lam in Guntur district, Kurukuppi in Bellary district, Hosur in Salem district, Pudukkottai in Tiruchirappalli district, Tiruvazhankunnu in Malabar district and Koila in South Kanara district.

Cattle Farm at Ooty

An artificial insemination centre has been opened at the Veterinary Hospital, Ootacamund.

Touring Billets for Bellary and Anantapur

Two touring billets (mobile dispensaries) for treatment of cattle have been opened, one at Kudugi in Bellary district and the other in Penugonda in Anantapur district.

You and Your Vote.

What to do and What not to do

In the battle of the ballot box, the voter would not be a mere pawn, if he realises his rights and responsibilities. In a democratic election, the real winner is not the candidate or a party but the collective majority of the voters who choose their representatives.

The voter need not have recourse to any stratagem to win his battle. His strategy should aim at electing the best candidate while his tactics should be fair, legal and correct.

The do's and don'ts listed below are intended to make democracy successful and lead the country to prosperity. They do not form a set of commandments imposed by some outside authority but are merely regulations which Parliament or the collective sense of the people has drawn up for itself in order that elections might be free and fair.

The Do's

Topmost among the list of Do's should be put the citizen's duty to get his franchise right. Our constitution is built on the edifice of universal adult suffrage, the citizen voter standing at its base. Every voter must therefore verify if he or she is registered correctly in the electoral rolls. Errors can be corrected on the final electoral rolls by applying preferably within 15 days of its publication.

Picture shows women voters of a village near Delhi getting ballot papers during the mock elections.



to the Electoral Registration Officer of a constituency. If the voter does not find his name at all in the electoral rolls, he can get his name included by sending an application to the Election Commission along with a treasury receipt for Rs. 50, any time before the elections.

Qualifications for a Voter

The general qualifications for a voter are that he should be a citizen of India, of sound mind and 21 years of age and should not have been convicted of any illegal or corrupt practices or other electoral offences. He would be registered in any constituency if he is ordinarily resident therein, that is to say, if he ordinarily resides in that constituency or owns or is in possession of a dwelling house therein.

For elections to the Legislative Council, a voter should be a graduate of a University ordinarily resident in the State for which the Legislative Council is to be formed or a teacher in a school not lower than the secondary school or a member of local self-Government institutions such as Municipalities, District Boards, Cantonment Boards, Notified Area Committees, etc.

During the election period, all candidates and their supporters would canvass for the vote of the elector. *Each elector is perfectly free to choose his own candidate. If a voter intelligently chooses his candidate, it would lead to the good of the country.*

There is no compulsion on any voter to exercise his right of franchise. *But it is the moral duty of every voter to do so in the interest of the general weal.* Apathy or cynicism would not get the Parliament or Legislature the voter wants. His vote is the only means by which he can express his approval or condemnation, acceptance or rejection of policies and systems.

Voting

Polling day in every place would be a holiday. The voter would have the entire day to discharge his right of franchise. But it would be better if he goes early to the polling station, using his own conveyance, or walking. At the polling station he would be given an identity slip showing the serial number of the entry relating to his name in the electoral roll and the number of the page where the entry is to be found. He can see the symbol of his favourite candidate outside the polling booth. He will have to take his turn with the other voters in entering the polling booth. Inside the booth, the Polling Officers would check up his identity and mark his left fore-finger with indelible ink before giving him the ballot paper or papers for election to the Assembly. He has to hand over his identity slip to the peon near the Assembly enclosure in which the boxes of all the candidates will be kept screened. For each candidate, there will be a ballot box with his symbol pasted outside. The voter has to choose the box of his favourite candidate and drop the ballot paper without folding or crumpling it into the slit on the top of the ballot box.

After coming out of the Assembly enclosure, he will be given the ballot paper for the Parliamentary election. He must again cast his vote for the candidate he favours for the Parliamentary seat.

After he has polled in both the enclosures, the voter has merely to walk back home and relax. With this, he has done his duty and the results will be known later.

Plural Member Constituencies

There is a special procedure which the voter must know if he is in a constituency which has to elect more than one member for the Assembly or the Parliament. Seats have been reserved in certain constituencies for scheduled castes or scheduled tribes. In these constituencies, the voter will receive two ballot papers instead of one. He has to drop each of these ballot papers into a different box and cannot cast both his votes in favour of the same candidate. If he puts both the ballot papers into the same box, one of the votes would be declared invalid.

The Don'ts

The Don'ts for the voter are many but quite simple to observe.

He should not get enrolled in more than one place.

If he is a supporter of any particular candidate, he can attend political meetings but should not create any disturbance in the meetings held in support of other candidates. Throughout the election period, the Police have been given powers to prosecute anyone who disturbs a political meeting and the law prescribes severe penalties for such offences.

The voter should not spend anything for his candidate without being authorized in writing by the candidate himself.

Under no circumstances should the voter barter away his vote for any consideration. It is not only immoral but also a punishable offence to sell his vote. Similarly, it is also an offence to intimidate or use undue influence

like threats of social boycott or divine displeasure on another voter to induce him to vote in a particular way.

On the polling day, no public meeting or canvassing is authorized by law. No one should canvass or solicit for a person's vote or ask a voter not to vote at all or not to vote for a particular candidate or hold a meeting for such purpose even in a private place within 100 yards of the polling station. No one should exhibit any sign or notice relating to the election near the polling station. Anyone, who contravenes these provisions, can be arrested without warrant and fined up to Rs. 250.

Ban on Conveyance

It would be an offence if a voter goes to the polling station in conveyance provided by the candidate or his party or by any other person.

At the polling station, a voter should not impersonate another or try to vote twice. Impersonation is a criminal offence and severe penalties are provided.

Secrecy of the Ballot

No one should violate the secrecy of the ballot.

A penalty of three months' imprisonment with or without fine is prescribed against the offence of violation of the secrecy of the ballot.

Inside the polling enclosure, a voter should not take a long time. The Polling Officers will look into the enclosure if they have reason to suspect any mischief. The voter should not tamper with any ballot box or the symbols pasted on them. The arrangement of the boxes should not be disturbed. No one should remove a ballot paper from the polling booth or tamper with it in any manner. This is a cognizable offence and carries a penalty of one year's imprisonment or a fine of Rs. 500. Aiding or abetting the removal of any ballot papers is equally a crime.

A person who is found guilty of any of these offences will not only be liable to the penalties prescribed but also lose his right to vote in future elections as his name will be struck off the electoral rolls.

Putting the ballot paper into the box



butter?" Asked if she knew who had sent the gifts, this child of an agricultural labourer said they had come from "across the seas", but she was not sure whether it was America or England.

Earn Your Feed

The Famine Relief Committee rightly discourages the able-bodied from flocking to its gruel kitchens, for indiscriminate charity not only demoralizes the recipients, but it is also a drain on the community. Those who are fit to work have therefore to earn their gruel, by putting in some light work, which will benefit the village as a whole.

According to the Secretary of the Committee, who is also Secretary of the District Congress Committee, the Famine Relief Committee will shortly open a few spinning

Food Offenders Fined and Imprisoned

During the fortnight ending 30th September 1951, 742 cases of prosecution of food offences were disposed of in the Madras State, except in the districts of South Kanara and Tiruchirappalli and in the Madras City. The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines, ranging from Re. 1 to Rs. 500 and sentences of imprisonment up to six months were imposed. Kalasami Nadar of Tirunelveli district was fined Rs. 500 with six months' rigorous imprisonment by the Subdivisional Magistrate, Kolpatti, for failure to bring to account 186 bags of paddy and failure to send returns to the Taluk Supply Officer.

A fine of Rs. 400 was imposed on Anne Nagabushanam, owner of Sri Venkata Satyanarayana Hulling Rice Mill, Kesarapalli of Krishna district, for hulling paddy without production of permits and without entering the transaction in the account. In West Godavari district, for attempt to smuggle rice from West Godavari to East Godavari, P. Satyanarayana of Rajahmundry was fined Rs. 200 with a day's imprisonment; for selling two visses of jaggery at a rate higher than the ceiling rate fixed, Sheik Marina Sahib of Gopalapuram and Uppala China Seetharamiah of Kovvur were each fined Rs. 400; for hulling paddy without permits, K. Viswanadharaju and Ch. Prasadarao of Bhimavaram were each fined Rs. 200 and

centres in the district, which produces probably the largest quantity of home-spun in the whole of India.

The Organisers of the Relief Committee are up against dwindling food stocks and paucity of funds, but the work will have to continue in most centres for about six weeks more. This means an expense of over Rs. 56,000 which is about four times the existing balance! Another fear, still unexpressed, will soon become a reality. As the fever of the not-too-distant general elections, sweeps through village after village, workers of the different political parties will drop out one by one. Who will then supervise the work in the relief centres? Despite these obstacles, the organisers seem confident of keeping the centres running. This was confirmed by the District Collector, who said: "The Committee has done a splendid job and it will continue to do so."

K. Narayanaraju and another belonging to Gummalur were each fined Rs. 500; for illicit sale of rice, Ch. Somaraju of Palacole was fined Rs. 200; for incorrect maintenance of accounts and hulling paddy without permits, B. Akkayya of Pennumanehili was fined Rs. 200 on each count and for illicit transport of paddy, P. Sreeramulu of Bhimadole, was fined Rs. 500.

Palaniandi Mudali and another of South Arcot district were each fined Rs. 200 with rigorous imprisonment for six months for illicit possession of 2,280 Madras measures of paddy. For unauthorized storage of foodgrains, M. Venkanna of East Godavari district was fined Rs. 500 with rigorous imprisonment for six months. In Visakhapatnam district, for illicit possession of rice in a rationed area, Letagula Ayyanna and Desamsetti Tattamma were each fined Rs. 200; Baddi Somaraju was fined Rs. 215, Mulla Venkayya and Karnam Appanna were each fined Rs. 250; Naramala Venku Naidu was fined Rs. 260, Sasipilli Chandraiah was fined Rs. 300; and Annam Apparao was fined Rs. 380.

During the same fortnight, other departmental punishments, such as warnings, fines, forfeiture and enhancement of security deposits, cancellation or suspension of retail and wholesale licences, etc., were also awarded in 205 cases to persons, who were dealing in foodgrains.



While some children are taking milk and gruel, others are waiting for their turn at the feeding centre.

Aid to Agriculture Survey of Government's Measures

Underground Water

The measures taken by the Agricultural Department to help farmers to tap sub-soil water and use power lifts for irrigation to even out any deficiencies in natural rainfall have given gratifying results and this programme is being pushed on vigorously. The supply of oil engines and electric motors on hire or hire-purchase system is going on steadily. Four hundred and twenty-three oil engines were supplied on hire up to the end of March 1951 and 195 more were supplied from April to August 1951, the total on hire being 618. The number of oil engines sold on the hire-purchase system were 983 up to the end of March 1951 and 403 more from April to August 1951, the total being 1,386. Electric motors arranged by the Department for installation were 8,155 at the end of March 1951, 779 more from April to up to date, the total being 8,934. The number of tractors and bull-dozers on hire were similarly 241 at the end of March, 27 more from April to August and the total being 268. Six tractors were also issued on the hire-purchase system. 1,528 lakhs of acres were cultivated by tractors and bull-dozers up to the end of March 1951 and about 37,950 acres from April to September 1951.

The last date for completion of well works under the Well Subsidy Scheme expired by 30th June 1951. On representations from the Districts, the Government extended the time till 30th June 1952. The last date for commencing well works has however been extended up to 31st December 1951 only. Under the scheme for sinking 101 artesian wells, 49 have so far been completed in the South Arcot District where the scheme has been very successful and popular. Lack of pipes is delaying the completion of the programme. The river pumping installations set up in Chingleput District have been working satisfactorily and prove to be a profitable means of utilizing the springs in the Palar.

Fertilizers and Manures

The supply of ammonium sulphate and other artificial fertilizers is being proceeded with. Against a target of 1.16 lakhs tons for distribution of ammonium sulphate in 1951-52 a quantity of 18,215 tons was distributed from April to August 1951. As regards phosphatic fertilizers the figures are 28,000 and 5,293 tons respectively.

Improved Seeds

The compost production and distribution are proceeding. The targets for rural and urban compost for 1951-52 are 1.04 lakhs and 2.32 lakhs tons respectively. The quantities distributed from April to August 1951 are 36,927 and 34,503 tons respectively. An intensive campaign was organized during the "Compost Week" from the 2nd to 8th October 1951. Leaflets on compost-making and conservation of cattle urine were widely distributed and a sound film on compost specially made by the Food Production Branch with the assistance of the Central Polytechnic, Madras, was shown in several places. His Excellency the Governor of Madras and several Hon'ble Ministers took part in the "Compost Week" to create increased enthusiasm among the ryots.

There is a great demand for improved seed. Out of a target of 14,572 tons for improved paddy seeds for 1951-52 about 9,500 tons have already been distributed from April to the end of August 1951. The figures for millet and green manure seeds are 2,030 and 269 and 3,214 and 427 respectively.

Loan Facilities

The distribution of Grow More Food loans also deserves to be mentioned. Over Rs. 27 lakhs were distributed as interest free loans during August 1951 for purchase of manure, implements and fertilizers. The Government have recently sanctioned a special scheme for the grant of interest free loans to selected ryots engaged in the production of improved paddy and millet seeds with a view to induce them to produce large quantities of improved seeds and make their entire surplus available to the Agricultural Department for distribution for sowing. A sum of Rs. 11 lakhs has been sanctioned for disbursement during 1951-52. The scheme will be applicable only to the following districts: East Godavari, Krishna, Tanjore including Pattukkottai area, Pennar Delta in Nellore District, Periyar system in Madurai District and Tambiraparani in Tirunelveli District in respect of paddy seeds and Visakhapatnam and Coimbatore Districts in respect of millet seeds. The loans will be granted only to owner cultivators who are in need of financial assistance and not to all as a matter of course. The loans will be granted at the following rates:

1. Paddy seeds at Rs. 100 per acre up to a maximum of Rs. 12,000 per ryot.
 2. Irrigated millet seeds at Rs. 50 per acre up to a maximum of Rs. 3,000 per ryot.
 3. Rainfed millet seeds at Rs. 30 per acre up to a maximum of Rs. 2,000 per ryot.
- The additional yield on account of the scheme which will be noticeable only in 1952-53, is estimated to be 22,500 tons of rice and 885 tons of millets.

Relief to Flood-Affected Areas

With a view to enable the Agricultural Department to procure and supply sufficient quantities of paddy seeds to ryots in the flood-affected areas of West Godavari District for purposes of re-sowing, the Government have ordered that the existing rates of seed farm premium allowed to the seed farm ryots, may be extended to purchases of seeds from non-seed farm ryots also, provided the quality of the seeds is good. The concession has been restricted to purchases made up to 15th October 1951. The Government have also ordered that paddy seeds should be sold to the needy ryots in the flood-affected areas at 50 per cent of the procurement prices. The ryots who are well off and who can afford to pay full price will not be eligible for this concession.

Crop Competition

The crop competitions which evoked very satisfactory response last year have been ordered to be continued.

Date of Elections in Madras State

Dates for polling in the 62 Parliamentary Constituencies in the State have been fixed. They are January 2, 5, 8, 9, 11, 12, 16, 21 and 25.

The President's writ calling upon the Parliamentary Constituencies in Madras to elect members to the House of the People before February 11, 1952, was issued.

The following are the dates of polling for the constituencies:—

January 2: Rajahmundry, Ongole, Bellary, Vellore, Cuddalore, Madurai, South Kanara (North) and Ponnani.

January 5: Narasaraopet, Nellore, Kurnool, Wandiwash, Tindivanam and Srivilliputtur.

January 8: Visakhapatnam, Gunur, Chingleput, Kancheepuram, Krishnagiri, Coimbatore, Aruppukottai, Ramanathapuram, South Kanara (South) and Malappuram.

January 9: Anantapur and Mayuram.

January 11: Tenali, Tiruvallur and Dharmapuri.

January 12: Vizianagaram, Kakinada, Penukonda, Pollachi, Tanjore, Srivaikuntam, Dindigul and Kozhikode.

January 16: Srikakulam, Gudivada, Vijayavada, Nandyal, Madras, Salem, Tirupur, Pudukkottai, Kumbakonam, Tirunelveli, Periyakulam and Tellicherry.

January 21: Parvathipuram, Eluru, Cuddapah, Tirupati, Tiruchengode, Tiruchirappalli, Sankaranayinar-kovil and Cannanore.

January 25: Pathapatnam, Masulipatnam, Chittoor, Erode and Perambalur.

Polling for Assembly Constituencies

Dates for various stages of the first general elections to the Madras Legislative Assembly under the New Constitution have been notified.

Polling will take place in the various constituencies between January 2 and 25, 1952.

The following are the dates for polling, in the constituencies:

January 2: Bhadrachalam, Peddapuram, Burugupudi, Rajahmundry, Pamaru, Amalapuram, Razole, Ongole, Kovur, Atmakur, Kavali, Udayagiri, Kanigiri, Kandukur, Darsi, Bellary, Rayadurg, Hospet, Kudligi, Harpanahalli, Gudiyattam, Tirupattur (North Arcot district), Vaniyambadi, Vellore, Ranipet, Tiruvannamalai, Chengam, Talavasal, Kallakurichi, Vriddhachalam, Cuddalore, Bhuvanagiri, Chidambaram, Vadamadurai, Melur, Madurai (North), Madurai (South), Nilakkottai, Thirumangalam, Manamadurai, Sivaganga, Coondapur, Brahmawar, Udipi, Karkal, Mulky, Nattika, Ponnani, Tirur, Trithala, Pattambi, Ottapalam, Palghat and Alathur.

January 5: Vinukonda, Palnad, Bellamkonda, Narsaraopet, Chilakaluripet, Gudur, Venkatagiri, Rapur, Nellore, Kurnool, Adoni, Sruguppa, Wandiwash, Kalasapakkam, Polur, Arni, Melmalayanur, Gingee, Tindivanam, Vikravandi, Villupuram, Tirukkoyilur, Ulundurpet, Panruti, Srivilliputtur, Edirkottai, Sattur and Virudhunagar.

January 8: Chodavaram, Madugula, Visakhapatnam, Paravada, Anakapalli, Yellamanchili, Payakaraopeta, Golugonda, Tuni, Sattenapalle, Guntur, Prathipadu, Ponnur, Chirala, Tirupporur, Chingleput, Madurantakam, Uthiramerur, Kancheepuram, Arkonam, Sholinghur, Arcot, Cheyyar, Harur, Krishnagiri, Uddanapalli, Hosur, Mettupalaiyam, Tondamuttur, Coimbatore, Nilgiris, Aruppukottai, Mudukulathur, Kovilpatti, Kadambur, Paravakudi, Tirupattur (Ramanathapuram district), Karaikudi, Tiruvadanai, Ramanathapuram, Puttur (South Kanara district), Mangalore, Panemangalore, Kasargod, Perintalamanna, Manuarghat, Malappuram and Kottakkal.

January 9: Dhone, Kalyandurg, Tadpatri, Anantapur, Mayuram, Seerkali, Nannilam, Mannargudi, Nidumangalam, and Nagapattinam.

January 11: Duggirala, Tenali, Amartalur, Repalle, Bapatla, Washermanpet, Choolai, Perambur, Ponneri, Tiruvallur, Saidapet, Sriperumbudur, Edappadi, Omalur, Mecheri, Dharmapuri and Pennagaram.

January 12: Vizianagaram, Bhimuniapatnam, Alamanda, Srungavarapukota, Pithapuram, Kakinada, Ramachandrapuram, Anaparti, Penukonda, Hindupur, Madakasira, Kadiri, Dharmavaram, Madukkarai, Pollachi, Kovilpalaiyam, Udampet, Arantangi, Adirampattinam, Pattukkottai, Tanjore, Tuticorin, Tiruchendur, Sattan-kulam, Vilathikulam, Palani, Ottanchatram, Authoor, Dindigul, Vedaandur, Kozhikode, Chevayur, Wynad and Quilandy.

January 16: Srikakulam, Honjaram, Palakonda, Narasannapeta, Kankipadu, Nuzvid, Gudivada, Kaikalur, Jaggaipet, Vijayavada, Kanchikacherla, Tiruvur, Mangalagiri, Markapur, Cumbum (Kurnool district), Nandyal, Koilkuntla, Nandikotkur; Harbour, Thousand Lights, Triplicane and Mylapore (Madras City); Rasipuram, Attur, Salem town, Salem rural, Valappadi, Kollegal, Nambiyur, Tiruppur, Papanasam, Saliyamangalam, Kumbakonam, Aduthurai, Pudukkottai, Thirumayam, Manapparai, Tiruchirappalli (South), Ariyalur, Palavoor, Nanguneri, Chennamahadevi, Tirunelveli, Periyakulam, Uthamapalayam, Cumbum (Madurai district), Sedapatti, Perambra, Badagara, Nadapuram, Tellicherry and Kuthuparamba.

January 21: Salur, Cheepurupalli, Bobbili, Parvathipuram, Chintalapudi, Eluru, Tadepalligudem, Aimpuram, Narasapur, Tanuku, Penukonda, Kovur, Cuddapah, Badvel, Proddatur, Kamalapuram, Jammalamadugu, Tiruttani, Puttur (Chittoor district), Kalahasti, Chandragiri, Namakkal, Paramathi, Tiruchengode, Tiruchirappalli (North), Srirangam, Musiri, Manachanallur, Lalgudi, Ambasamudram, Alangulam, Tenkasi, Sankaranayinar-kovil, Hosdrug, Mattanur, Cannanore, Taliparamba and Payyanur.

January 25: Pathapatnam, Tekkali, Sompeta, Telpuram, Undi, Bhimavaram, Divi, Bandar, Rajampet, Rayachoti, Ghattu, Madanapalle, Punganur, Pilern, Palmaner, Chittoor, Bhavani, Gobichettipalayam, Dhara-puram, Kangayam, Kodumudi, Erode, Uthukuli, Arava-kurichi, Karur, Thuraiyur, Perambalur and Jayankondan.

Fighting Food Distress in Coimbatore

Public Organisation Feeds 16,000 Persons a Day

Kethanur is a small village of some 2,500 inhabitants, 32 miles from Coimbatore, where are concentrated the great cotton mills of South India. The blue hills which can be seen in the distance, have been deforested during the past centuries, but the land is still fertile and prosperous tillable plots grow food and cash crops, when the monsoon is timely and regular.

In 1950 the peasants of Kethanur peered at the sky each morning during the monsoon months, to see if there were clouds. It was a tantalising period for them, and as time crawled slowly on, doubts assailed them about the monsoon. Would it come in time? Would it come at all? Then one evening the clouds came, the air grew sticky, and the rain seemed about to fall. But the wind turned into a gale and there was no rain. The clouds sailed away, and the sun came out again. For weeks it went on like this; the wells dried up, the fields were parched from lack of moisture, and the standing crops shrivelled into a brown growth. The monsoon had failed over the whole district for the fourth year in succession, and even for drinking purposes water had often to be got from long distances. The able-bodied labourers, men and women, moved out of the villages to more promising areas, leaving the old, the infirm, and young children to fend for themselves. This happened not only in Kethanur, but in village after village, Olapalayam and Senjari, Muthur, Ponneri and a score of others.

Famine Relief Committee

Scarcity conditions which affected the Coimbatore villages were a challenge to the public spirit and philanthropy of the leaders of the district. The challenge was met; a District Famine Relief Committee was set up to organize gruel kitchens in the most severely affected villages. It consisted of representatives of various political organizations, women's associations, millowners' associations and other bodies. It worked in close co-operation with the District Branch of the Indian Red-Cross Society, whose President is the wife of the District Collector. The Collector himself was closely associated with the food administration in Bengal, during the years following the tragic famine of 1943. Official experience and guidance has thus helped to canalize the enthusiasm of the non-officials into constructive effort.



Feeding at a relief centre. The vast majority are young children and women.

Foodgrains were collected, and money raised to feed the poorest and the most helpless with gruel once a day. More than 16,000 persons, scattered over 35 villages, the vast majority of whom are women and children, are fed everyday on wheat or milo gruel, which is often supplemented with other food. This work has been carried on from mid-April to date by people of goodwill, politicians, social workers, women volunteers, Congressmen, Socialists and Independents, all inspired by but one aim—the alleviation of suffering of the desperately needy and the most helpless.

Care's Care

In addition to donations of money from local institutions and individuals and a sum of over Rs. 20,000 received from the Prime Minister's Famine Relief Fund, gifts of food have come from embassies in India, and CARE, whose care for the distressed is by now, well-known in most parts of the world. This Organisation recently sent 80 food packages containing milk powder, beans and butter, which are being distributed to the landless labourers, women and children in the gruel centres of Coimbatore.

Milk, Beans and Milo Gruel

Patiently, the little children some of whom are little more than toddlers, squat in orderly lines under a village tree or in the open grounds of a village school. They wait with their earthen pots for their turn of milk, the cooked beans and the thick milo gruel. After each child has drained its pot of milk, it is given gruel, a handful of beans, and before it goes home it collects a lump of Arabian dates. To the sophisticated, the fare seems tasteless and meagre, but as Mrs. Rajan, President of the Indian Red-Cross Society pointed out "the children who six months ago were on the verge of collapse, have not only been saved, but now look better than many of their city brothers and sisters." They look cheerful, and in the eyes of the older children, gleams real affection for the gentle, generous workers who distribute food to them.

Typical of the reaction of the village children to the help they are receiving, is what an 11-year old girl Karupal said: "We like the milk and the gruel and also the beans, but couldn't we have more rice or even milo instead of the

Unlike last year the competition has been extended to all varieties of paddy grown under any system of cultivation. The competition will be conducted from Firka level upwards and it will be the basis for deciding the winners for the Taluk, District, Regional and State prizes. The prizes for firka and taluk are Rs. 25 and Rs. 50 respectively in kind. The District Prize is Rs. 100 and the Regional and State Prizes are Rs. 200 and Rs. 500 respectively in cash plus medals worth Rs. 50 and Rs. 100 respectively.

Assessment of Results

The acreage covered under Grow More Food works scheme up to the end of August 1951 from April 1951 is 44,127 acres against a target of 806,834 acres and that under the Supplies Schemes, 213,849 acres against a target of 4,958,341 acres.

Research and Crop Improvement

Research is very important for scientific crop improvement. Given below are a few items of such work recently sanctioned or undertaken.

Cotton Seed Multiplication Scheme.—In order to step up cotton production in this State, the Government have sanctioned a scheme for the multiplication of 881 F. Cotton in 600 acres in Panyam area in Kurnool district during 1951-52. It is expected to procure 600 bags of cotton seeds in this scheme for further multiplication in 1952-53. 881 F. is a superior strain, intended to replace the short-stapled Mungari cotton grown in some of the Ceded Districts. It has a staple of $\frac{3}{4}$ " length with a spinning value of 27 to 30 counts.

N. 14 Cotton Certification Scheme.—The Government have sanctioned a scheme for the certification of N. 14 cotton, a superior strain evolved by the Agricultural Department in Kurnool district. The scheme was in operation from 28th April to 15th August 1951. Seven ginning and two pressing factories were licensed for processing N. 14 cotton. Supervision was carefully exercised over the kapas brought for ginning and over the ginning and pressing operations. Cotton so supervised was sealed with special seals and given certificates. The quantity so dealt with was 2,856 bales of 392 lb. each. Before certification, the growers got Rs. 650 per Kantiam (1,680 lb.) of kapas and Rs. 885 per candy (784 lb.) of lint but after the introduction of the certification scheme, they are getting Rs. 700 and Rs. 985 respectively. The increased income to the cultivators of N. 14 cotton due to the certification is estimated at Rs. 1.42 lakhs for which an expenditure of only Rs. 1,279 was incurred in the operation of the scheme.

Control of Pests on Cotton

It is estimated that about 20 per cent of the total area of irrigated Cambodia cotton in the State is subject to attacks and damage by pests. The average reduction in the yield of cotton due to the pests attack is about 30 per cent of the normal yield. To combat this, the Government have recently sanctioned a scheme for the control of pests on cotton during 1951-52 under the Cotton Extension Plan for that year. This scheme envisages the distribution of pesticides to cotton cultivators at subsidized rates during 1951-52.

Aids to Sugarcane Cultivators

With the help of funds placed at the disposal of this Government from out of the share that accrued from the decontrol of sugar in 1947, this Government have sanctioned, as the first instalment, the purchase of 4 multi-purpose tractor units at a cost of Rs. 88,000 which will be supplied on hire basis principally to sugarcane growers in and around factory areas at Vuyyur, Hospet and Nellikuppam. The rules in regard to the hiring of the departmental tractors under land reclamation scheme will apply to the hiring of these tractors also. The hire-charges for the unit will be collected as follows:—

Ploughing by all type of tractors—Rs. 10 per acre single ploughing.

Harrowing (shallow ploughing)—Rs. 5 per acre single ploughing.

The purchase of more tractors from the balance left out of the share of this State will be considered in due course in the light of the experience gained in working the four tractors now sanctioned.

Areca nut Research Station

Areca nut is an important economic crop in the West Coast which has been affected by what is called the stem-breaking disease. With the assistance of the Indian Central Areca nut Committee, a scheme for the investigation of the stem-breaking disease of areca nut palm and for the establishment of a Research Station in the West Coast at a total cost not exceeding Rs. 2,12,764 (recurring) and Rs. 1,01,500 (non-recurring) for a period of ten years has been sanctioned.

Apiculture

The urgent need for opening bee-research stations in the Indian Union has been felt by the Government of India in view of the fact that the Central Bee-keeping Research Station at Lyallpur run by the Indian Council of Agricultural Research went over to Pakistan when India was partitioned. The Indian Council of Agricultural Research has now sanctioned the setting up of two Regional Bee Research Stations one at Katrain (Punjab) and the other at Coimbatore in our State. The important items in the programme of work in the scheme in this State are the breeding of pedigree bee-queens, study of the influence of weather conditions on the activities of bees, study and careful description of the various races of the bees, with reference to the different regions, preparation of standards of good honey and devising methods of controlling the bee enemies. The scheme at Coimbatore extends over a period of three years. The expenditure on the scheme will be borne partly by this Government and partly by the Indian Council of Agricultural Research.

Extension and Propaganda

For instructing the personnel of the Agriculture, Food Production, etc., Departments in the latest methods and technique in the preparation of propaganda films for extension works, this Government have decided to obtain the services, for a period of four weeks, of a group of American experts under the Point IV arrangements. Two experts of the U.S.I.S. who were in Madras recently were informed of the requirements of the various departments concerned.

Development of Electricity

Review of Schemes under Construction

The following account is a review of the activities of the Electricity Department for the month of September 1951:—

Machkund Hydro-Electric Scheme

Position under land acquisition continued to be the same as in last month and lands were yet to be handed over on the Orissa side. Survey for Jalaput Dam submergible area was completed and survey work on low-saddle position was in progress. Metalling for a length of 17 miles on Lamptaput-Machkund road and work on 50 culverts and 16 bridges were completed. Work on Diversion Dam, Flume Channel excavation and Excavation for foundation for Tunnel Pond Dam were under progress. In flume tunnel 4,153 feet of tunnelling was done and in Pressure tunnel 1,042 feet of concrete lining was done so far.

Construction of temporary buildings at Jalaput and permanent buildings in Kodamaguda was in progress. Levelling winch house-site, penstock grading, levelling for power-house and construction of labour sheds were progressing. Rubblestones for Coffor Dam work at Jalaput

are being collected. Much progress was not possible during the month due to rains. Total labour force during the month was 3,979.

Moyar Hydro-Electric Scheme

The civil works from Headworks up to Moyar Forebay were nearing completion. Protection works along the flume were continued. The low-pressure pipe line was completed. High-pressure pipes were under erection.

Work on steel frame work for power-house foundation for all the three machines, and the control gallery and store room roof was completed. Work on all the side walls of the power-house was nearing completion. The foundations of structures in the transformer yard were completed while erection of switchgear was progressing. Erection of O.C.Bs. for power transformers 1, 2, 3 and for Pykara feeder 1 and 2 were completed.

Pykara Plant III Stage Extensions

Construction of Pykara Dam involving excavation for foundation and masonry building for main dam and

Extension expert under Point-four Programme

The Government have decided to obtain, for a period of about six months, the services of Mr. Gordon R. Schlabach, an American Expert in Agricultural Extension Service under the Indo-U.S. Point Four Programme in order to survey the Agricultural Extension Work in this State and to lay down improved lines of work, etc. The expert is expected to arrive in India within a month.

Artificial Rain Making

This Government have taken up with the Government of India the question of the desirability of that Government formulating a scheme for producing artificial rain. They have suggested that the Indian Meteorological Department may be asked to study the problem and to formulate a Scheme for the guidance and benefit of the States. Available literature on the subject has also been called for from the Government of India. The reply from the Government of India is awaited.

Re-organisation of Agricultural Education

The question of Re-organization of Agricultural Education has been engaging the attention of this Government and the Hon'ble Minister for Agriculture held discussions with the Vice-Chancellors of Madras and Andhra Universities last month in order to introduce intensive practical training in the B.Sc. (Agri.) course.

The Five-Year Plan

Steps are being taken to include provision in the current year and in 1952-53 for schemes included in the Five-Year Plan which have been explained in the 'Planning Supplement' of the *Madras Information* recently issued. The State Planning Committee, which is a departmental committee, considered the question of Village Production Councils for rural development and its recommendations will be examined.

Agriculture Development in South Arcot

Chemical Fertilisers

A quantity of 538 tons of chemical fertilisers has been distributed in South Arcot District under the Supply of Chemical Fertilisers scheme. An extent of 14,350 acres was covered under this scheme, which has resulted in an additional production of 25 tons of foodgrains.

Distribution of Compost

Seven thousand two hundred and seventy-four tons of compost have been prepared and sold by the Municipalities in the South Arcot District to the ryots and an extent of 198 acres has been covered by this scheme. Two thousand four hundred and three tons of rural compost have been distributed to the ryots so far and an extent of 1,506 acres has been covered, thus exceeding the target of 600 acres and resulting in an additional production of 20 tons of foodgrains.

Improved Cereal Seeds for Ryots

During the month of September 1951, the Agricultural Department has distributed 181 tons of paddy seeds to the ryots in South Arcot district, bringing the total quantity so far distributed in the district to 347 tons. An extent of about 4,500 acres has been covered so far under this scheme, resulting in an additional production of 9 tons of foodgrains.

More Wells

During September, 184 wells were constructed in South Arcot District under the well subsidy scheme, bringing the total number of wells so far completed to 2,773. An extent of 1,066 acres has so far been brought under cultivation, resulting in an additional production of 299 tons of foodgrains.

POWER

20

MADRAS INFORMATION

wing walls was in progress. Work on construction of portion of earthen dam on the right flank was progressing. All the pipes required for the erection of the Pykara IV penstock line were received at site and more than half the length was erected in position. The foundation for the power-house extension was completed.

Madurai Thermal Scheme

Erection of the third Boiler was completed and steam raised. Erection of minor accessories was being attended to.

South Kanara Scheme

Survey of the line from Hulikal to Mangalore was completed and preparation of tree valuation schedule was in progress.

Tungabhadra Hydro-Electric Scheme

Detailed investigation of canal site power stations was in progress. Site survey was completed and excavation of trial pits and drilling of bore-holes with power drills was in progress.

Vijayavada and Visakhapatnam Power-House Extensions

Vijayavada.—Superstructure for pump house was completed and plastering of outside walls was in progress. Work on engine room and coal hopper was progressing.

Visakhapatnam.—Painting the iron members of boiler house for second coat was completed and third coat was in progress.

Coded District Scheme

Survey of the 33 K.V. line from Adoni to Yemmiganur was completed. On the Rayadurg 11/33 K.V. line, 210 single poles were erected. Two hundred and fifty poles were erected in Rayadurg distribution and painting of poles was progressing.

A view of the Pykara Dam under construction

Nandyal and Tadipatri Schemes

Almost all works have been completed as far as power stations are concerned at Nandyal and Tadipatri. Distributions at both places were also completed partly and supply commenced.

Nellore Thermal Scheme

All works were completed except sewage arrangements for latrines in the annexure of M.B. Shed. Temporary arrangements have been completed at Nellore Power-house to charge at 11 K.V.

Madanapalle Scheme

Tenders for erection of panagarah shed for Power-house have been received and scrutinized.

Madras Plant Extensions

The floor slab and roof slab in the switch annexe and turbine roof slab were concreted. Brick walls have been completed up to switch roof level. The brick work for walls of evaporation plant was progressing. Concreting the base slab and side walls of Coal Conveyor No. 1 and top slab of Coal Conveyor No. 2 was also progressing.

The work on front "Bailey wall" and feed line for Boiler No. 4 was in progress. The work on economizer of this boiler was completed and the construction of second chimney was commenced. Work on Boiler No. 3 was in progress. The condenser shell of the 15,000 K.W. turbo-alternator has been mounted and tube plates have been aligned.

Operation Branch

Hydro areas.—The three hydro systems continued to run in parallel with Madras Electricity System this month also. The Madurai Thermal Station was paralleled with the grid to meet the combined peak load of the systems wherever necessary. Supply was maintained satisfactorily.

(Continued on page 27)

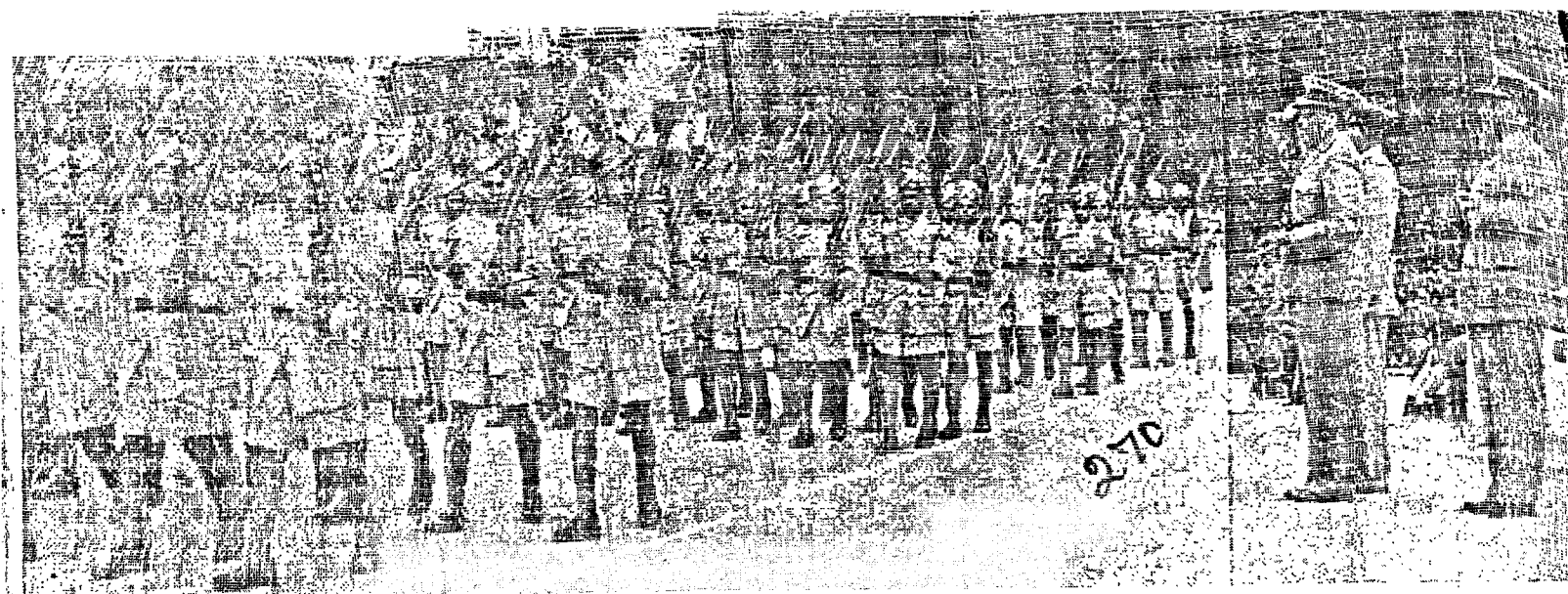
Police Training College Sports and Tattoo

A large and appreciative gathering witnessed some interesting items in the sports and tattoo, held on November 1, 1951, on the grounds of the Police Training College, Vellore, under the Presidentship of Sri K. Ramunni Menon, Chief Secretary to the Government of Madras.

The highlights of the sports were the open events like the one mile-race for men, musical chairs and "your partner's shoe-in-a-sack". Members of the public and the officials took part in the last-mentioned game.

With regard to the tattoo, mention may be made of the torch light formations and mass physical training demonstration, in which all the Sub-Inspector Cadets took part. Other interesting features of the tattoo were the Parade without Instructor and the aerobatics.

After sports were over, Mrs. T. G. Sanjeevi, wife of the Inspector-General of Police, gave away the prizes and trophies to the successful competitors in the sports.



Top : The Inspector-General of Police taking the salute at the March Past of the Sub-Inspector Cadets at Vellore.

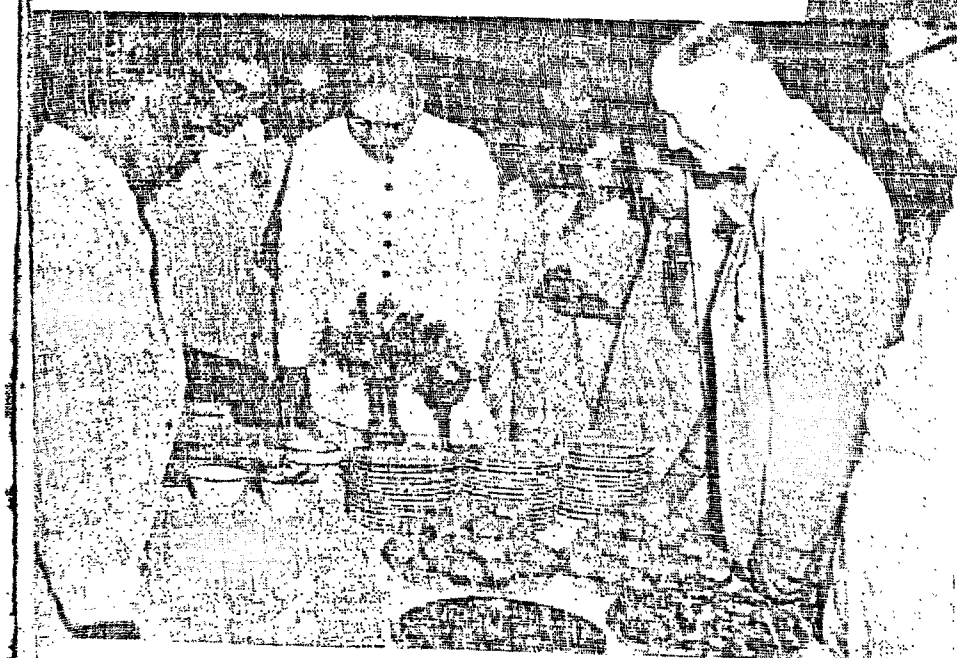
Centre : The Inspector-General pins the medal for all-round efficiency on the chest of cadet Narayana Reddy, the recipient.

Bottom : Sri K. Ramunni Menon, I.C.S., Chief Secretary, who presided over the Sports function, addresses the gathering.



ANNAPOORNA CAFETERIA

Above: Her Highness the Maharani of Bhavnagar presided over the inaugural function of the Annapoorna Cafeteria, a non-cereal-canteen, at Government House, Mount Road.



Above: Hon. Sri Roche Victoria declares open the Cafeteria.

Left: His Excellency the Governor and others vie with one another to buy the delicious dishes supplied at the canteen.



Below: Chief guests at the inaugural function.

"Enlist Goodwill of the Public"

Inspector-General's Appeal to Police

An appeal to the Police Force in the State to conduct themselves absolutely impartially both during the ensuing general elections and during the course of the electioneering campaigns of the various political parties in the State was made by Sri T. G. Sanjeevi, Inspector-General of Police, on the occasion of the passing-out parade of the Sub-Inspector cadets, held at Vellore on October 31, 1951.

A large gathering of officials and non-officials witnessed the passing-out parade. About 200 Sub-Inspector-cadets presented arms to the strains of the State Police Band. There was a march past of the cadets with the Inspector-General of Police taking the salute, standing in front of the National Flag.

Continuing his address, the Inspector-General of Police added that it was the duty of the Police Force to protect society not merely against the criminal and the common thief but also from the unscrupulous black-marketeers. He further observed: "Without the co-operation and goodwill of the public, you will not at any stage of your work or career be able to achieve anything. You must, therefore, enlist public co-operation and goodwill from the very initial stages of your career. You can enlist that co-operation and support from the public only if you prove yourselves worthy of that co-operation and goodwill."

The Inspector-General of Police awarded an all-round efficiency medal to Sri N. Narayana Reddy, a Sub-Inspector-cadet. There was a variety entertainment in the night.

"Annapoorna" Cafeteria

On November 10, 1951, an institution of significance was opened in the City of Madras by Sri J. L. P. Roche Victoria, the Food Minister. That was "Annapoorna", a non-rice cafeteria started by the Madras Food Council and the Central Tea Board on the Government House Estates. Her Highness the Maharani of Bhavnagar presided. His Excellency the Governor also graced the occasion with his presence. Sri A. B. Shetty, Minister for Agriculture, Sri K. Ramunni Menon, I.C.S., Chief Secretary, and other officials were present.

The genius of a nation lies in its capacity to fight and survive under stress and strain. If rice is not available in sufficient quantity it does not mean that people should refuse to familiarise themselves with other food-grains and deliberately choose the path of under-nourishment and gradual decay in a sense of fatalism. All habits including dietetic habits are man-made. The spirit of man can change it. 'Annapoorna' is the visible expression of that spirit.

Her Highness the Maharani of Bhavnagar said that in view of the food crisis that was facing them, it was essential they should popularise the use of non-cereals to supplement their food requirements. Ever since its inception, the Madras State Women's Food Council had taken steps for conducting active propaganda for popularising non-cereals and for starting various kitchen gardens throughout the State. Besides, the produce from the vegetable garden and milk powder obtained from the Guild of Service were taken twice a week and distributed amongst the poor and needy villagers. They had also approached the various hotels and restaurants and other institutions to popularise non-cereal food.

Her Highness thanked the Government of Madras for their goodwill and support to the cafeteria, and said that it would serve a long-felt need in showing to the public

the variety of edible and tasty foods that could be produced out of non-cereals to supplement their rations and at the same time maintaining the caloric and nutritive value of the required standard. They expected ere long to have a mobile cafeteria which would serve the needs of the industrial areas such as the harbour locality and mill areas. They also hoped to secure a permanent building for the cafeteria with the help of the Government. Her Highness the Maharani congratulated the Madras State Women's Food Council, especially Mrs. Rajammal Anantharaman, Mrs. Cherian and Mrs. Clubwala, on their ceaseless efforts to bring into existence the cafeteria. She expressed her thanks to the Central Tea Board and the Army for their keen interest and co-operation in this work.

Mr. Roche Victoria declaring open the cafeteria said that in the interests of popularising non-cereal food it was their duty to encourage such cafeterias. He referred to the recent statement made by Mr. Nehru, Prime Minister of India, on the need for changing food habits to get over the food crisis and said that such cafeterias would show how to prepare tasty foods from non-cereals. In Hyderabad he visited the non-cereal canteen and found the food excellent. Here in Madras, they must have recipe to suit their own tastes. This was the first time they were starting a permanent institution like the cafeteria which was going to be a model for many other centres in the mufassal. The Minister said that after all in the matter of food men had to take whatever was given to them by their women. That was why he felt that in any agency which was meant for changing the food habits of the people, women had a very important part to play. The cafeteria, he added, was in the hands of proper persons. It was going to be run by people who had business experience of running such canteens and he wished it all success.

Blood Transfusion Saves Human Life

Miraculous Uses of this Method

By SRI T. RAGHAVAN

Blood Transfusion and Blood Banks are no longer new words or subjects to us in these days. Many of us would have seen it in the hospital or in various exhibitions and others would have heard about it by this time. By the word 'Blood Transfusion' we mean the transfer of blood from a healthy man to another person who is ailing for want of blood. It is undoubtedly a life saving measure of modern method of treatment; many lives have been saved and many lives are being saved everyday.

The total quantity of blood in a healthy person is said to be about 5 or 6 litres or 5,000 to 6,000 c.c., out of which one can easily give away a very small quantity without any adverse effect to his health. And this can be easily compared to the taking out of one bucket full of water from a well, which does not make any appreciable difference in the level of water. It had been made possible by researches that blood from one human being can be transferred to another with very much beneficial effects to the recipient and without any adverse effects to the donor, if necessary precautions are taken in the process.

Prevalent Even in Ancient Times

Though many of us have begun to hear about this subject of blood transfusion only after the outbreak of the second World War, it was not an unknown subject even to our ancient people. Thus we find, even in our ancient Sanskrit literature *poet Kshamandran mentioning Chakravarthy Shibi having offered his blood to the ailing persons of his country. Besides this, the ancient Egyptian Princess used to take blood bath for rejuvenation and recuperation of health.* During the middle ages drinking of human blood was popularly considered as a health restorative measure. It is said that among the Romans it was a common custom to rush to the prisons for drinking the freshly flowing blood from the decapitated prisoners.

New Turn

With the discovery of circulation of blood by William Harvey in 1616, the subject of blood transfusion took a new turn and attracted the attention of many Scientists. Various experiments were conducted on animals like the sheep, dog, etc., transfusing blood from one animal to another. The next stage of development was the transfusion of animal blood into human beings; but as the animal blood was incompatible with the human blood all these transfusions resulted in disastrous consequences. The first experiment of this kind goes to the credit of Professor Denys, a Physician to Louis the XIV of France in 1667 transfusing 9 ounces of blood from a lamb into a young man who was suffering from severe fever which made the physician to bleed him twenty times as well for bleeding was a popular method of treatment in those days for many ailments. Many Scientific authorities who were opposing blood transfusion in those days made fantastic forecasts such as the growth of horns in man after transfusion with sheep's blood, but none of these patients lived to grow horns.

Later we come to a period when human blood was used for blood transfusion instead of animal blood, but nonetheless the result did not improve much. Because of this dangerous result blood transfusion fell into disrepute. But now we know that the actual reasons for the failure of blood transfusion at that age was due to the ignorance of different types of blood now known as blood groups, ignorance of the science of bacteriology and the ignorance of method for prevention of blood clotting. Thanks to the researches of Pasteur and Lister, the obstacles due to sepsis were got over towards the end of last century.

Important Discovery

The greatest achievement and the most important single discovery in the history of blood transfusion was the demonstration in the year 1900 by Carl Landsteiner about the different types of blood among the human beings even though all blood looked red in colour. He differentiated four blood groups as group 'O', 'A', 'B' and 'AB' and also demonstrated that the blood of different groups could not be mixed together indiscriminately as it produced clumping or destruction of blood cells. All the complications and reactions of blood transfusions met with at the hands of the previous workers were all due to the ignorance of these facts. During the development of the foetus or the baby in the womb of the pregnant mother, blood is differentiated into one of these groups, which need not necessarily be the same as that of the father. The individual differences in blood group are entirely constitutional in nature and were determined only by Mendelian hereditary principles and not in any way influenced by environments or any other conditions. When this fact was realized it paved the way for putting blood transfusion on a safe footing.

Obstacle Overcome

Even though the knowledge of blood groups and many technical and scientific advances in bacteriology were introduced into the subject of blood transfusion, clotting of blood continued to be great obstacle to a successful transfusion. In the year 1914 *Hustin of Belgium* discovered that by addition of a substance called citrate of sodium, blood could be prevented from clotting and at the same time the citrate of sodium was harmless to the patient and that this blood could be stored in the Refrigerator for use in emergencies for a few days. This discovery led to the immediate and widespread adoption of blood transfusion as a therapeutic measure in the treatment of various diseases and conditions.

Life Saving Device

Coming to the most important aspect of the subject let us see how blood transfusion saves lives. In a civilised and industrial country accidents are common, e.g., train accidents, mill accidents, road accidents, etc., wherein the patient loses much blood and goes into a condition called shock and unless this loss is made good immediately the life of that poor patient is at stake.

Development in our State

The Blood Transfusion Service was first organized in Madras during World War II in the year 1941, for the purpose of building a reserve of blood and plasma for the treatment of emergency casualties. In 1946, the Madras Government recognized the Blood Transfusion Service as it had sufficiently demonstrated the usefulness of transfusion in the treatment of diseases and injuries met with in the civil life.

Blood Banks have been opened in the City State Hospitals and many District Headquarters Hospitals with the King Institute as the Centre. At present we have 19 Blood Banks distributed all over the State.

Donate your Blood!

Till now you were hearing about the value of blood transfusion. Now I come to another important point, that is the donation of the blood by the public to enable the Blood Banks to supply the same for deserving patients. *You have understood from my talk that large quantities of blood are required to save humanity from its suffering. I appeal to you all to volunteer to give some of your blood as charity for saving a dying patient.* You will see the dynamic result of your charity in blood donation as it saves a life within a few minutes. Let the donor remove from his mind any fear that it may weaken his health or endanger his life or handicap his normal duties. *Blood donation is quite harmless and it is quite painless too.*

Every donor undergoes a thorough medical examination and if he is found medically fit in all respects then only he is accepted as a Blood Donor. Any healthy person, man or woman, between the ages of 20 and 60 years may serve as blood donor and they can donate once in three months. If every one of us make up our mind to donate at least once a year there would be no scarcity of blood in any of the Blood Bank in India. The donor after giving blood has to rest for fifteen minutes and then he may attend to his work as though nothing has happened. Blood Banks are helping you to do a philanthropic act of personal service to suffering humanity with very little inconvenience to you. *Blood donation is the noblest of all donations.* Therefore I appeal to you all once again to report to your nearest Blood Bank and donate a little of your precious blood.

(By Courtesy of A.I.R., Madras.)

Removed from Service

Sri S. Subramaniam, Stores Assistant, the Machkund Hydro-Electric Scheme, has been removed from service with effect from October 1, 1951.

This action has been taken on the recommendation of the Tribunal for Disciplinary Proceedings, who found Sri S. Subramaniam guilty of corruption.

The conditions like blood vomiting as in cases of ulcer in the stomach, coughing out of blood as in Tuberculosis of the lung, severe bleeding in case of piles, haemorrhagic complication of typhoid fever, etc., are treated adequately with blood transfusion.

Another very important use is during the child birth where the mother after delivery of the child sometimes goes on bleeding very profusely and her life is in peril from which a timely transfusion alone could save her.

Operations Made Easy

Many major operations are made easy only by the blood transfusion. Many a surgical condition which the surgeons might not have attempted in the olden days are being tackled successfully to-day because of the availability of blood and plasma. Transfusions are sometimes given before the operation, during the operation and after the operation. Many patients are safeguarded beforehand by blood transfusion to enable them to withstand a severe operation. Thus many a patient who could have been considered as unfit for operation previously are now made fit for operation.

Many cases of burns which would have died invariably in the olden days are being saved by the timely plasma transfusion as well as blood transfusion. Time factor is an important one which decides the fate of the patient, for when the shock condition of the patient is allowed to remain for a longer time no amount of blood or plasma will save the case. This hypothesis is applicable to shock produced by burns, haemorrhages or any other cause.

In anaemias or bloodlessness of various degrees and types, blood transfusion plays an important role not only in the cure of the disease but also in shortening the period of ailment. There are many conditions of infancy and childhood which are beneficially treated with transfusions.

Cure for Blue Baby

Many of us would have heard about a condition called Blue Baby. Though blue eyes are said to be a mark of beauty the Blue Baby is a dangerous disease of the new born. It is produced by the destruction of the Baby's blood by some destructive agent in the mother's blood. In other words it amounts to an homicide by the mother by means of her blood which is quite beyond the control of the mother. The treatment of this condition is an immediate blood transfusion simultaneously removing the child's own blood, i.e., the child's own blood is replaced by fresh blood. *The first of this kind of treatment was done in Madras in the year 1946.*

A common condition of children known as infantile cirrhosis of liver, or children's liver and spleen enlargements are very beneficially treated now-a-days with repeated plasma transfusions.

So much is said about the value of blood transfusion and now the question is how to obtain so much of blood needed for transfusion of such large number of cases. Last year about 6,000 transfusions were done in Madras State alone.

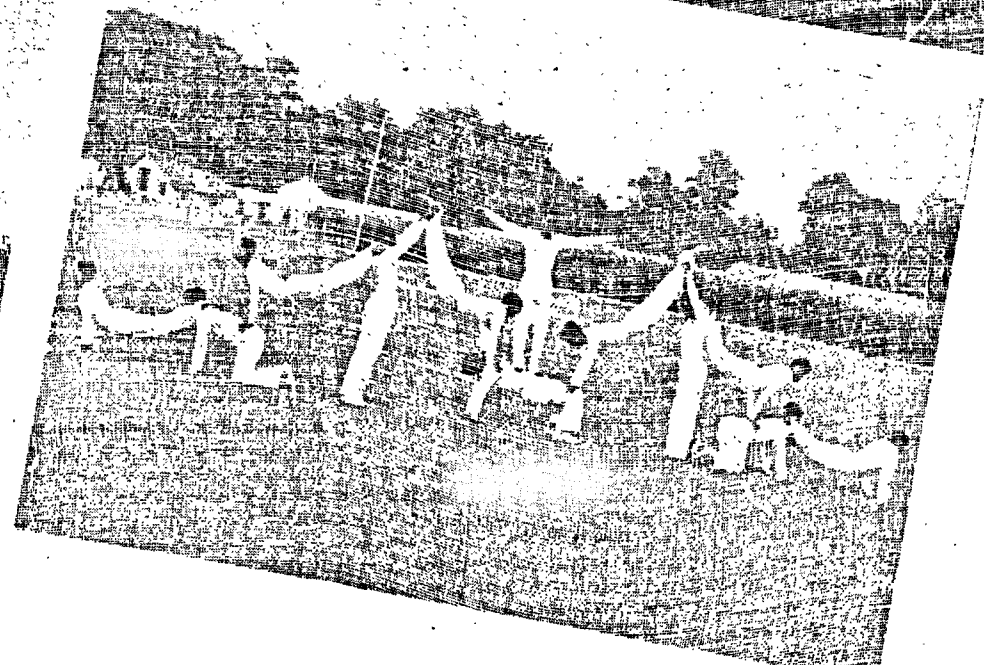
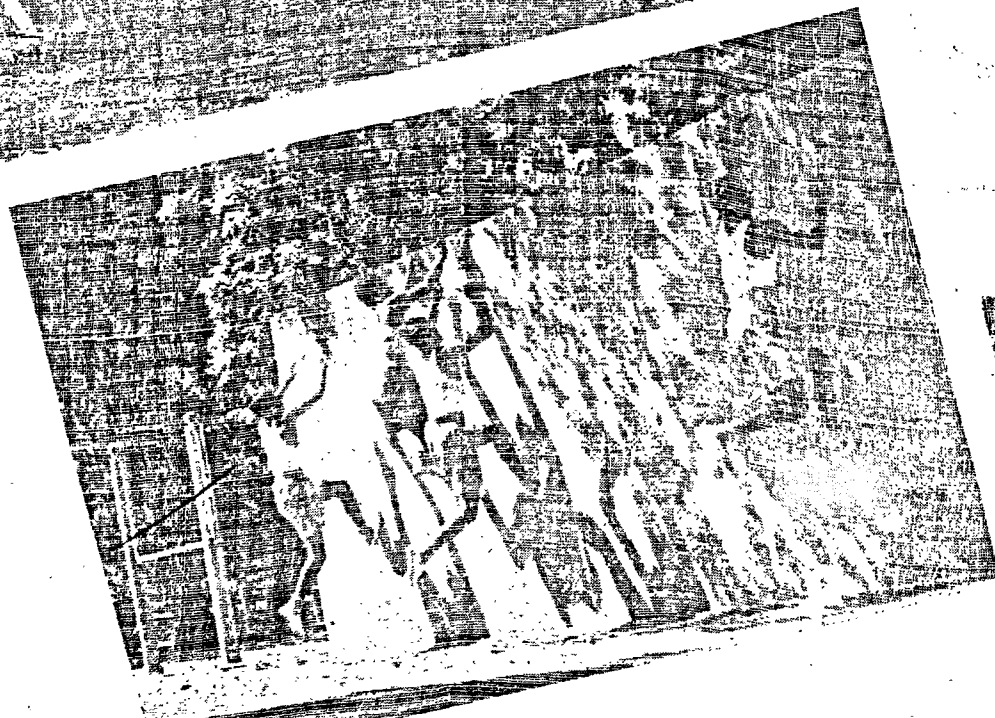
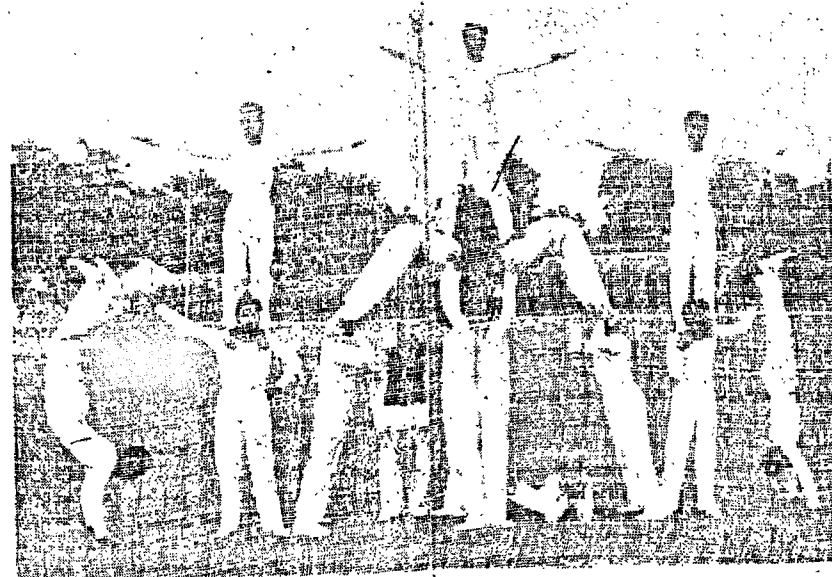
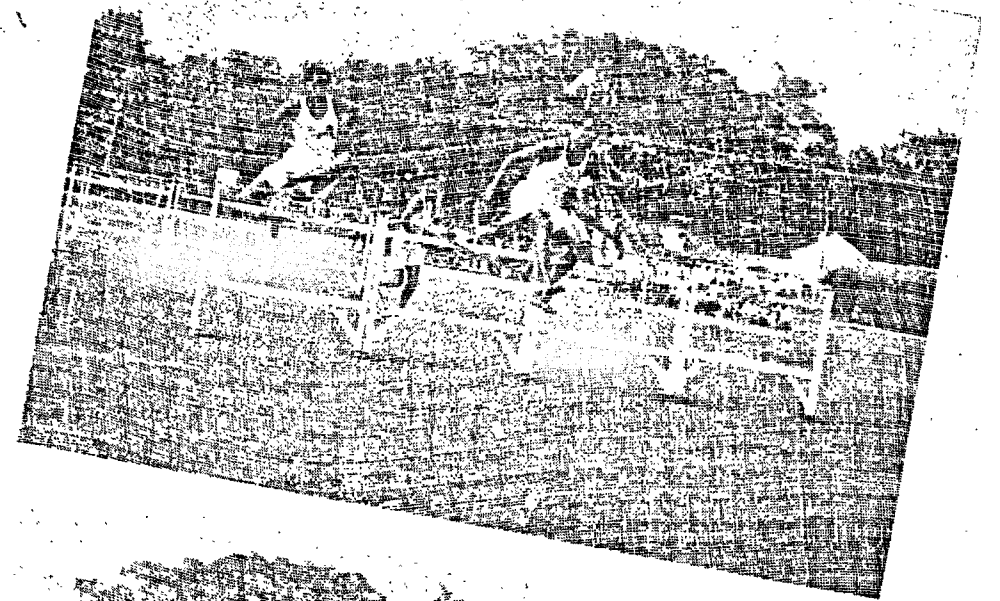
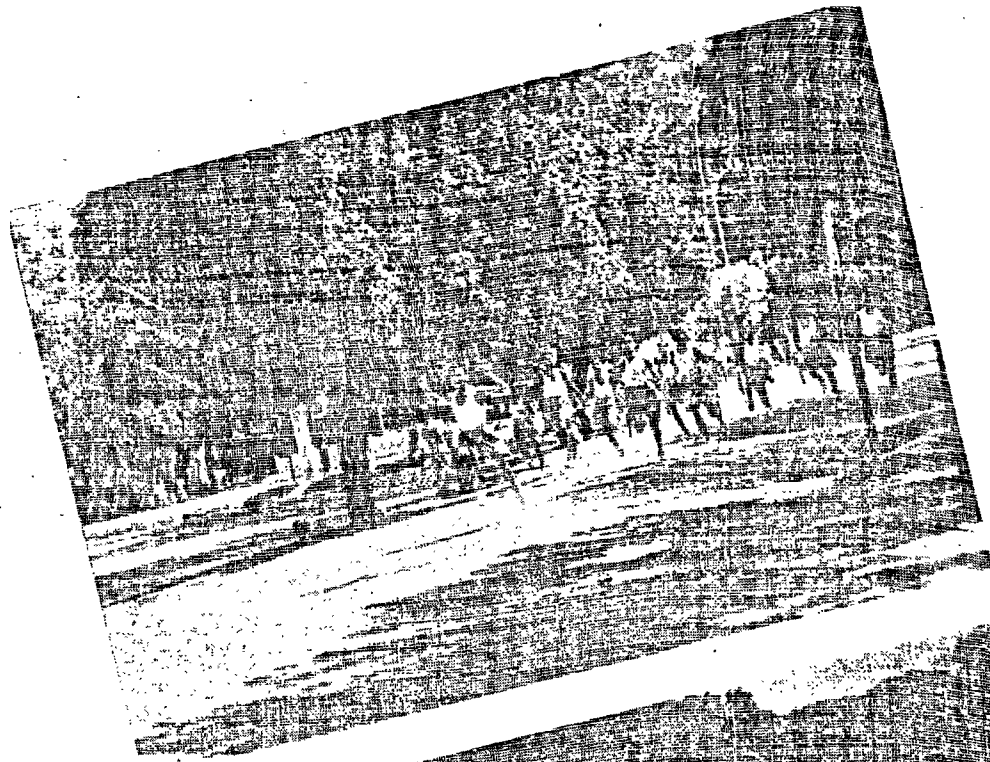
(POLICE SPORTS AND TATTOO

The annual Sports and Tattoo of the Police Training College at Vellore took place recently. The Sub-Inspector cadets and others participated in them. The pictures in these pages give us some idea of the several events that were gone through during the Sports. They are—

Left top : Closing in on one-mile race; *centre* : Mass drill at Tattoo; *bottom* : scaling a 10-feet wall (an item connected with training given to the Sub-Inspector cadets).

Centre : Arch and rotating formations by the cadets.

Right top : Hurdle race; *centre* : Kolattam by Police constables, an item in the variety entertainment; *bottom* : Bridge formation by the cadets.



New Headquarters Hospital, Kozhikode

Rs. 40 lakhs for Buildings

The existing hospital at Kozhikode having become very crowded and inadequate to meet the needs of the increasing population, the necessity for a well-designed building for the hospital was felt even as early as 1920. The Government accepted the need for the hospital and negotiations were started to secure the Basel Mission Hospital buildings and compound on the north-east of the Mananchira maidan but due to the high price demanded for the buildings and site according to the then prevailing standards, the proposals were ordered to be dropped. In 1938 another site on the eastern side of the Women and Children's Hospital was tried, and this had also to be given up, as the locality was found crowded and unsuitable. A few years later, in 1941, the present site was proposed and administrative approval obtained for Rs. 9.9 lakhs for the construction of new buildings for the District Headquarters Hospital. Detailed estimates were prepared for the three main buildings, namely (1) the Administration and X-Ray block, (2) Medical, Septic and Private wards, and (3) General Out-patient department, and technically sanctioned and the works taken up for execution during the same year. By the time the first block came up to basement level, the war situation became worse and the works were ordered to be held up temporarily. It was not till 1945 that the question of resuming the work could be taken up. Meanwhile, a controversy arose about the suitability of the site, and suggestions were made to shift the site to West-hill or East-hill. Ultimately, a decision was arrived at, mainly through the efforts of the Hon'ble Sri Madhava Menon, to have the hospital at the present site and work on the first floor was started in earnest in January 1948. Meanwhile, the prices of labour and materials had risen up rapidly, necessitating the revision of the estimate. The whole scheme according to the administrative approval given by Government on 19th September 1950 is estimated to cost Rs. 40.205 lakhs.

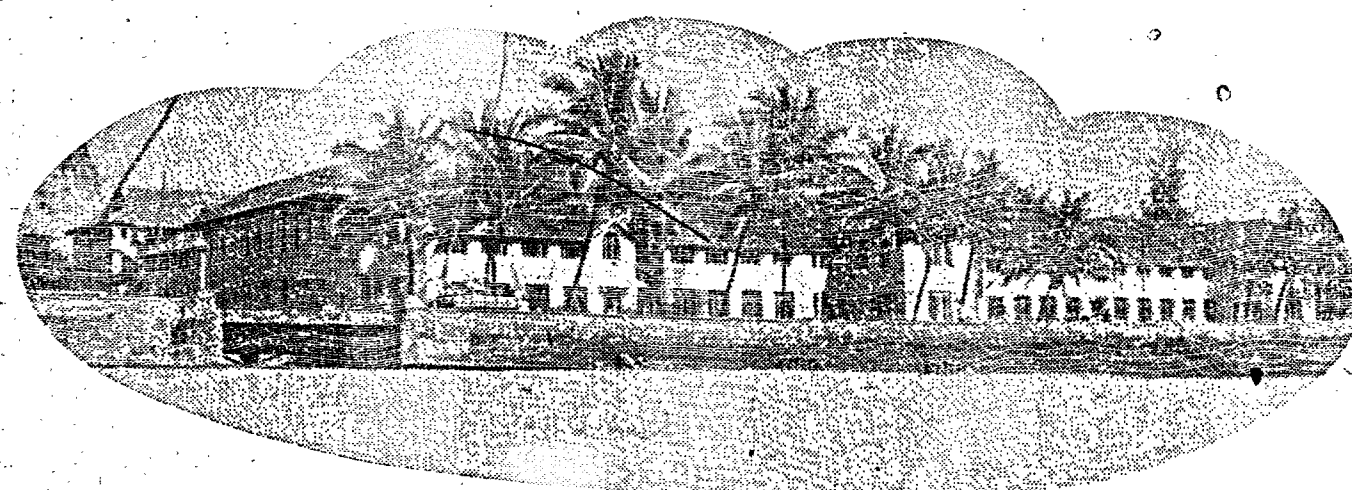
The following are the buildings that are contemplated in the schemes :—

	Cost. Rs.
1 Administration block	3,78,000
2 Medical, Septic, Chronic and Private wards.	3,55,000
3 Wards block	5,40,000
4 X-Ray block	4,05,000
5 Kitchen block	66,000
6 Ophthalmic ward	3,30,000
7 Venereal, Tuberculosis and Police ward.	4,35,000
8 General Out-patient department block.	6,60,000
9 Isolation ward	45,000
10 Laundry	52,000
11 Mortuary	16,500
12 Garage for Ambulance and cars and Incinerator.	20,000
13 Quarters for 30 Nursing Orderlies in 3 blocks and 20 thotties in 2 blocks.	1,58,000

The scheme also includes provision of necessary machines for the laundry, electrical and sanitary fittings for all the buildings, roads, compound wall, etc. The construction of the Ophthalmic ward and the Venereal, Tuberculosis and Police ward has however been deferred by Government for the present.

Completion Quickened

While sanctioning the resumption of the work in 1948, the department was directed to spread the work over 8 years but actually an increasing tempo of work was kept



The new buildings of the Headquarters Hospital at Kozhikode

up and in spite of the several difficulties, the bulk of the work has been completed even in these three years, so that the Public Works Department has been able to hand over the buildings for occupation in 1951 five years earlier than the date originally fixed for the completion of the scheme.

The following buildings have been completed so far and have been handed over to Medical Department on 31st October 1951 for occupation :—

(1) Administration block, (2) Medical, Septic, Chronic and Private ward, (3) Wards block, (4) Kitchen block, (5) Thotties lines, (6) Garages and (7) Laundry.

The items yet to be done are—

(1) X-Ray block, (2) General Out-patient Department block, (3) Isolation ward and (4) Mortuary.

These will also be completed very quickly and made available for use in due course.

500 Beds

The total bed strength of the hospital is 511 but provisions has been made for supplying 30,000 gallons of water per day for an estimated population of 1,500 including patients, staff, visitors, etc., at the rate of 20 gallons per head per day. For the present, water will be pumped from a 12 feet diameter well excavated inside the compound.

Increased Facilities in Hospitals

Free Treatment of Tuberculosis for the Poor

The Government have approved the proposal of the Director of Medical Services to purchase and stock P.A.S., a drug used in the treatment of tuberculosis in combination with streptomycin, in the city hospitals and the Tuberculosis Sanatorium, Tambaram, and have sanctioned, in this connection, a sum of Rs. 10,000 for the current year.

Mobile Dispensary for the Nilgiris

The Government have sanctioned the purchase of a chassis for a motor van, which will be used as a mobile dispensary in the Nilgiris District. The Madras Provincial Welfare Fund, Nilgiris, has contributed Rs. 10,000 towards the cost of the mobile dispensary.

Blood Transfusion

Government Medical Officers of the rank of Civil Assistant Surgeons, attached to Blood Banks, are permitted to give blood transfusion, at the request of private medical practitioners in places other than the hospital, outside the normal hours of duty. Blood for transfusion may be taken from the hospital stocks, if necessary, on payment, without detriment to the needs of the hospital.

The blood transfusion apparatus and blood containers may be lent to private medical practitioners on payment of fees prescribed by Government in the Civil Medical Code, viz., a minimum of Rs. 10 and a maximum of Rs. 30 for every 24 hours for a set of instruments taken at a time.

and lifted to an elevated service reservoir having a capacity of 20,000 gallons. It will be distributed to the several parts of the building through a net work of pipes. A supply from the municipal water mains to an extent of 30,000 gallons is also proposed to be obtained when the Calicut Water-supply Scheme is completed. Modern sanitary fittings have been provided for the entire building.

Sewage from the different wards is collected through sewers in a pumping station and pumped to the treatment works consisting of a septic tank for primary treatment and dispersion trenches for secondary treatment. The existing earthen storm-water drain running across the hospital compound was converted into a pucca underground masonry drain. This work alone cost Rs. 30,000.

Construction of a large pile of buildings presents several difficulties to Engineers in-charge, as practically every building material is in short supply. These difficulties have been overcome and a major portion of the work has been done in a fraction of the time originally allotted by Government for the scheme.

The hospital was declared open by the Hon'ble Minister for Law and Education, Sri K. Madhava Menon, on 31st October 1951 in the distinguished presence of the Hon'ble Chief Minister Sri P. S. Kumaraswamy Raja and amidst great public enthusiasm.

A deposit equal to the normal charges due for the days for which the instruments are required will be levied in advance. An amount equal to 50 per cent of the normal charges per day fixed in each case will be levied as penal charges in addition to the normal charges for each day of delay after the due date, the total period being limited to seven days.

Gift of Maternity Ward

The Government have accepted with thanks the offer of Sri V. S. Arunachalam Chettiar, Sivaganga, Ramanathapuram District, to construct a maternity ward of 3 beds in the Government Hospital, Sivaganga, in memory of his deceased wife, and hand it over with equipment to Government for maintenance.

Gift of Building to Hospital

The Government have accepted with thanks the offer of the P.C.C.S., Ltd., Kushalamannam, Malabar District, to transfer free of cost, the ownership of the building, in which the Primary Centre (a medical institution), Kushalamannam, is located, to the Medical Department.

Gift of Tuberculosis Ward

The Government have accepted with thanks the offer of the Krishna District Tuberculosis Association to construct a Tuberculosis ward of 14 beds in the Government Headquarters Hospital, Machilipatnam, and hand it over with equipment to Government for maintenance.

Rural Welfare Activities

[A brief note on the salient features of the activities of the Rural Welfare Department in the areas selected for Rural Welfare work during September, 1951.]

Tiruchirappalli District

During the month of September 1951, in Vengalam and Valikandapuram firkas, radio sets were installed in four villages and a library was opened at Annamangalam. Spinning competitions were conducted in eight villages and prizes were distributed to best spinners.

In Musiri firka under the Extensive Khadi Scheme, 37 charkas were introduced and Khadi to the value of about Rs. 150 was sold. About 300 chittams were purchased from the spinners. Fifty-two compost pits were dug in the month.

In Vellakoil centre, four Grama Sevak Sanghams and three Valibhar Sangams were formed. Ninety hamlets and 30 cheries were visited; 30 soak pits were constructed; 12 mass sanitation drives were conducted. Prayer meetings and Bhajans were conducted. There were congregational spinning.

Bellary District

During the month under review, 15 sanitary drives were conducted; 50 Grama Sanghams were formed; 52 compost pits were dug and 21 charka demonstrations were held. Five charkas were distributed in the month and 300 hanks of yarn were spun by the self-spinners. A subsidy of Rs. 75 was paid to each of the night schools at Thimmapuram and Molagavalli for the purchase of slates, books, charts, etc.

South Kanara District

In Kumbha firka, one adult school was started at Pallathadka. Two and half acres of waste land were terraced by the bull grader.

The Nileswar Panchayat Board constructed one public latrine in the Nileshwar shandy place for which grant was paid from the discretionary grant. The villagers of South Trikarpur formed one foot path from Alanthod to Kakkumam at the instance of the Rural Welfare staff without any financial aid from the department. The length of the foot path is about three furlongs. Three compost pits were dug in South Trikarpur village. Sanitation drive was conducted in the Harijan colony of North Trikarpur and the locality cleaned with the assistance of the residents and they were instructed to dig compost pits and to construct trench latrines.

Nilgiris District

Sixty compost pits and three trench latrines were opened during the month and a sum of Rs. 291 was disbursed to 46 ryots as subsidy for compost making. Demonstration was made for the proper preservation of cattle manure. Twenty-two manure pits were opened and two old pits were renovated.

Demonstration was made to record the difference in yield between fields applied with organic manure and chemical fertilizer. Vegetable seeds were supplied to the ryots from the Agricultural Department. To popularize vegetable cultivation, arrangements were made for free supply of vegetable seeds to the ryots.

A sum of Rs. 2,170 was disbursed as Agricultural loans to eight ryots for purchase of seed and manure. Pests and diseases were effectively controlled by the supply of insecticides. An agricultural show was held at Nanjanad Research Station.

North Arcot District

One well work in Kadalady firka and two well works in Thuringapuram firka were completed during the month. The villagers paid 1/3rd of the cost of the above works as voluntary contributions. A short camp under Gandhian Constructive programme was conducted from 13th September 1951 to 19th September 1951 at Sorakalathur village in Thuringapuram firka to give training to the villagers in Rural Reconstruction work. Twenty charkas were introduced under the Extensive Khadi Scheme. Twelve yards of Khadi cloth were woven from the yarn produced by the self-spinners.

The villagers of Kadalady constructed and offered a building worth Rs. 2,000 for the location of school free of rent. Fifty-two compost pits were dug and ten trench latrines were constructed during the month. Mass sanitation work was done by the Rural Welfare staff at Seelapandal and Sorakalathur villages.

Guntur District

During the month of September, in Guravareddipalem centre, six mass and 22 individual sanitation drives were conducted; 20 charkas were introduced; 16 adult schools were started. Three spinning demonstrations were conducted. Three hundred and forty-two tons of compost manure specially prepared was applied to 85 acres of land. Seventy compost pits were newly dug. One hundred and twenty-six pairs of cart tyres and 19 axles were distributed. Twenty-four adult classes were conducted by the Rural Welfare staff where 412 adults are receiving instructions in 10 adult schools.

In Ongole firka during the month 31 individual and eight mass sanitation drives were conducted. Sixty manure heaps were properly covered or rectified. Five unhealthy pits were filled up. Four soak pits were newly constructed.

Visakhapatnam District

In Pendurthi firka, 65 sanitation drives were conducted, seven charkas were introduced, one poultry unit was formed, five magic lantern shows were conducted; 67 spinning demonstrations were held and 37 compost pits were dug. In Kotauratla firka, 27 spinning demonstrations were conducted, 60 sanitation drives were held and 65 compost pits were formed and 20 adult education classes were conducted.

Tirunelveli District

During the month of September 1951, 89 compost pits were dug and 772 hanks of yarn were spun. Tools were issued to five artisans free of cost during the month.

Madurai District

During the month, the Rural Welfare Officer, visited 89 villages. One hundred and thirty-two meetings were arranged in the various villages. Subjects, like Grow

Chingleput District

Thirty-eight compost pits were dug during the period. Thirteen manure pits were prepared in Govindamedu, Placepalayam, Kumaracheri, Vilapakkam and the Kadu villages. Surroundings of six wells were cleaned. Seven streets were cleaned in Thirupachur, Thangumur, Pulimbakkam, Kavivandur, Kumaracheri, Placepalayam and Govindamedu. Propaganda was done in the infected villages on the preventive measures of Cholera by means of short talks in the villages. First aid was rendered to 48 persons.

Chittoor District

During the month of September 1951, two works with the discretionary grant, 40 works under Rural Water Supply and 12 under communications were in progress. Six hundred and twenty-five books were distributed. One spinning demonstration was held and demonstrations with improved ploughs was held in three villages.

Nellore and Adoni electrical undertakings were taken over by Government on 28th September 1951 and 25th September 1951 respectively.

The generation, peak load and number of services given during the month in the several areas were as follows:—

(Continued from page 20)

The number of units generated, peak load and number of services connected during the month for the three hydro-electric systems were as follows:—

Name of the system.	in Generation units.	System peak load in K.W.	Services connected.		
			Agricultural.	Industrial.	Domestic.
Pykara ..	19,525,000	41,050	84	3	212
Mettur ..	20,812,040	39,600	67	7	147
Papanasam ..	*11,258,900	22,300	11	15	373
Total ..			162	25	732

* Out of this, 1,027,800 units were generated by Madurai Thermal Station.

The West Ramanathapuram Electric Distribution Company electrical undertaking was taken over by Government on 21st September 1951.

Thermal areas.—Supply conditions in Madras and Andhra Systems were satisfactory. The Madras Electricity System continued to take relief from Mettur Electricity System.

Work on the erection of 5th 1,500 K.W. turbo-set at Visakhapatnam was completed and the set is to be commissioned shortly. Erection of the 85 K.W. set at Sriakulam was fast progressing. At Vijayavada, the need boiler No. 4 of a capacity of 55,000 lb./hr. was commissioned during the month along with the 4th 3,000 K.W. machine. Restrictions on new loads were lifted and the new machine was supplying additional power to West Godavari, Rajahmundry, Kakinada and some additional loads in Vijayavada area.

Supply from the new diesel station of Nandyal and Tadpatri was commenced during the month.

Name of the system.	in Generation units.	Peak load in K.W.	Services connected.		
			Agricultural.	Industrial.	Domestic.
1 Madras ..	9,358,000	26,900	13	23	284
2 Vijayavada—					
Steam ..	2,106,850	4,400	20	..	57
Diesel ..	113,300	770	..	..	..
3 Visakhapatnam—					
Steam ..	1,211,420	3,290	..	..	52
Diesel ..	92,660	750	..	..	..
4 Kakinada ..	155,287	624	..	..	..
5 Nellore ..	216,070	620	..	..	10
6 Rajahmundry.	93,777	526	..	..	..
7 Proddattur ..	18,198	85	..	..	9
8 Kurnool ..	87,208	340	..	..	..
9 Anantapur ..	40,720	150	..	..	..
10 Cuddapah ..	53,754	192	..	..	..
Total ..			33	23	412

In the Madras Electricity System, 55 D.C. services with an approximate connected load of 118.62 K.W. were changed over to A.C. supply.

During the month, extensions costing over Rs. 10,000 and less than Rs. 30,000 were sanctioned by the Chief Operation Engineers and the Chief Engineer at an estimated total cost of Rs. 2,69,850.

Prohibition Brings Prosperity

Critics of Prohibition are never tired of repeating the oft-repeated argument that this reform is a socio-political fad which has resulted in a loss of 17 crores to the State Exchequer; yet others have argued how the lack of drink has affected the health and efficiency of workers. The legally minded critics have looked upon Prohibition as a serious violation of individual liberty. But few of these critics have ever tried to step down from the drawing room pedestal and go into the countryside to see what Prohibition has done to the poor villagers, the agriculturists and the labourers.

Here are a few of the typical instances which are legion, that reveal what Prohibition has meant to the poor, the lowly, the sons of the soil, who matter much more than the airy critics. These are cases which are authentic and the persons are real and living to give the lie direct to the cry that Prohibition is a failure. These have been collected after careful study and research.

Case 1.—Krishnan Nambiar of Kuttathur amsam in Chirakkal taluk of North Malabar was a regular drunkard in pre-Prohibition days. He had lost all his family property and had contracted a debt of more than Rs. 1,000. After sun-set womenfolk in his house were really afraid of his arrival and when he reached, 'it was hell let loose'. Now after four years of Prohibition all that is past history. The domestic scene is one of peace. He has been able to clear all his debts, and what is more, Krishnan Nambiar has constructed a house at his own cost worth Rs. 10,000.

Case 2.—C. Subbaroya Goundar of Kandadu village in Tindivanam taluk was a regular customer of the local tavern. He was in debts, all his hard-earned money melted away by the liquid fire. But to-day he is a different man. He has no tavern to go to. He is employed in the ration shop and also attends to cultivation work. The lost wealth and prestige are slowly returning.

Case 3.—Chenganna of Vengamvaripalle of Chittoor district sold his landed property worth Rs. 750 and jewels worth Rs. 500 for he had not money enough to spend on drink. The women of the house suffered in silence. But to-day, as a result of four years' of Prohibition and consequent saving, he has set apart a cash saving of Rs. 700 and also purchased an acre of land. Happiness has come to the house.

Case 4.—Thangavelu Achary of Palladam taluk in Coimbatore district had an income of Rs. 90 before Prohibition. Out of this amount he spent Rs. 30 to 40 on drink and spent the rest alone on family. Now he spends Rs. 70 for his family and sets apart Rs. 20 for a rainy day.

Case 5.—Ranuvappa Gounder of Avanashi taluk had an income of Rs. 60 in pre-prohibition days. He spent Rs. 15 on drink. After Prohibition his income rose to Rs. 200 a month. After spending Rs. 150 a month he saves Rs. 50.

Case 6.—Ammavasi Mudali of Avanashi taluk had an income of Rs. 25 before Prohibition. After Prohibition it rose to Rs. 120. In those days he was spending Rs. 5

a month on drink and spent Rs. 15 on the family. Now he spends Rs. 100 on the family and gives Rs. 20.

These are but a random survey of cases which are genuine and real. Instances like these would be recorded covering the entire State. The family budgets of these ex-addicts are proof positive of the economic benefit of Prohibition. They show the graph of human happiness rising higher and higher among human beings. The State stands for the welfare of human beings. Those who put their faith in the swelling of the State Exchequer with the lost revenue from drink restored will do well to pause and study these human experiences before theorising on State economy.

Assembly Constituencies of Madras State

In exercise of the powers conferred by section 17 of the Representation of the People Act, 1951, His Excellency the Governor of Madras has called upon all the Assembly Constituencies of the State of Madras to elect members, in accordance with the provisions of the said Act and of the rules and orders made thereunder, before 11th February 1952, which is the date appointed in that behalf by the Election Commission.

Madras Leather Factory

The dispute between the workers and the management of Messrs. Madras Leather Factory, Madras, was referred to the Industrial Tribunal, Madras, for adjudication. The Tribunal has passed an award directing the payment of the following wages:—

	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
Sweepers	0	13	6	0	0	6	1	0	0
General workers ..	1	0	6	0	1	0	1	7	6
Machinemén	1	1	6	0	1	0	1	9	6
Cutters	1	1	6	0	1	0	1	9	6
Head cutter	1	12	0	0	1	0	2	0	0
Women workers making washers.	0	0	4½	per washer.					

The Tribunal has also directed the payment of a flat dearness allowance of Rs. 25 per mensem to all workers except women workers making washers and also the costs incurred by the union assessed at Rs. 25. The award shall be given effect to within thirty days from the date of publication in the *Fort St. George Gazette*.

Scholarships for Backward Class Students

The Director of Harijan Welfare has sanctioned residential and non-residential scholarships to 49 students, belonging to backward classes and undergoing engineering courses in the Engineering colleges at Madras, Anantapur, Kakinada, Coimbatore and Annamalai-nagar. The total value of these scholarships amounts to Rs. 20,627. These scholarships are in addition to those, which have already been renewed.

Audio-Visual Education

The issue of the G.O. No. 659, Education, dated 20th March 1951, followed by G.O. No. 2517, Education, dated 19th September 1951 regarding audio-visual education, has evoked criticism in certain quarters, and an article also appeared in one local daily criticizing the action of the Government. The Government feel it necessary to clear up the misapprehensions entertained in this connection, which have evidently led to these criticisms.

To begin with, it may be pointed out that there is a good deal of misconception as to the exact scope of the scheme of "audio-visual education" approved by Government. It is not necessary to be an expert to realize that what is envisaged is the use of modern scientific aids by the teacher in the class-room, at the appropriate time to benefit the pupils. Nor is it necessary to point out that, while, on the 'audio' side, the teacher's voice, and on the 'visual' side, the 'black-board' may be said to be at one end of the scale, so far as the aids for imparting "Audio-Visual instruction" are concerned, modern science has placed the fruits of the inventions like the animated picture, and the radio within the easy reach of the class-teacher; and that both in the West and in the East, there has been a systematic attempt in the past few years to harness these, for improving the Class-room technique.

It is as a part of this endeavour that this Government, in 1947, permitted the levy of a special fee, the 'visual education fee'—at present called the 'audio-visual education fee'—from the pupils of the secondary schools and the students of the colleges at varying rates. Simultaneously, a scheme of licensing 'exhibitors' of 16 m.m. cinema films came into existence, operating mainly in respect of schools. In 1947, the total number of such licences was 21. In March 1951, the total was 52. These licensees, according to the arrangement that existed up to the end of the school-year 1950-51, were left to deal with the Headmasters of the schools direct in the matter of giving cinema shows, though they were allowed to exhibit in the schools only the films 'approved' by the Director of Public Instruction. The Education Department did not exercise any direct control beyond approving the films and licensing the exhibitors, and issuing general instructions. The charge for each show of one hour was Rs. 40 to Rs. 45.

Sometime in November 1950, the Government desired to examine how far the arrangement of licensing "exhibitors" was a success from the educational aspect, particularly since the cost on account of these cinema shows was to be met out of the accumulations in the 'visual education' funds of the institutions.

Unsatisfactory State

The information collected revealed a very unsatisfactory state of affairs. A majority of the secondary schools in this State, were levying the special fees from 1948-49, the number varying between 800 and 900. But the position regarding the shows was very disappointing, as may be seen from the statistics appended.

Number of shows in the year.	Number of schools which had shows in		
	1948-49. (Number of licensees 21).	1949-50. (Number of licensees 51).	1950-51. (Number of licensees 52).
(1)	(2)	(3)	(4)
One show only ..	15	33	118
Two shows to 10 shows ..	133	380	489
Eleven shows to 20 shows ..	47	64	67
Twenty-one shows to 40 shows ..	17	34	18
Above 40 shows ..	1	8	2
Total ..	218	519	694
Number of schools where no shows were given ..	885	723	663
Total ..	1,103	1,247	1,357

It may also be mentioned that there was no indication that the shows had any relation to the class-room; they were mostly given after school-hours, to large audiences consisting of pupils from several classes. Moreover, it was found that the schools which apparently presented some difficulties, or were not conveniently situated for the exhibitors, were left out, even when there were electrical facilities, the exhibitors concentrating their attention on the schools which were more easy of approach. Some of the exhibitors used paid commentators to give running commentaries, often of an amusing and entertaining nature. The shows in many cases did not give satisfaction, and there were complaints. It was pretty clear that these shows were tending towards becoming more like "Punch and Judy" shows rather than 'educational' shows as a part of the programme of "Visual instruction". Further, it may be seen from the statistics that while some schools received some attention, a good many of the schools did not receive any, though they were collecting the visual education fee. A system of "leasing" and "sub-leasing" of the equipment by a capitalist firm to individuals also grew up. From the statistics collected by the department, it is seen that there was one case of a licensee with a single projector and possessing no films, getting about 11,000 rupees for having given shows during the period of six months—from July to December 1950. During the same period a City firm got a sum of about Rs. 27,000 by way of remuneration, for giving cinema shows in the City schools.

Preventive Steps

The first step taken for preventing the deterioration of the situation further, was to discontinue the licensing of exhibitors with effect from the school year 1952-53, through the issue of the order, dated 20th March 1951. However, soon after, the Ex-exhibitors formed themselves

(Continued on page 40)

Harijan Welfare Work in Our State

A Short Survey

By Hon'ble SRI B. PARAMESWARAN, Minister for Harijan Welfare.

Only recently on the 2nd of October we celebrated the Gandhi Jayanthi keeping in memory the noble path shown to us by him. His inspiring teachings add work are green and fresh in us and we have resolved to follow them with unswerving faith and fidelity for the good of this country and the world at large.

As everybody knows Gandhiji's activities in his later life were many and varied and all of them were directed towards the uplift and the good of humanity, especially the poor and the helpless. When he began the struggle to free this country from the yoke of the foreigner, he insisted on three important requisites, namely, Khaddar, Abolition of Untouchability and the Hindu-Muslim Unity, as conditions precedent for the attainment of Swaraj.

The highest importance was attached by him to the Abolition of Untouchability and he gave most of his time and energy to that task. The famous Poona Fast which he undertook to prevent the division of Hindus into "touchables" and "untouchables" and the promise given by him on behalf of the Caste Hindus to see that untouchability was abolished as speedily as possible are matters of history. He constituted the Harijan Sevak Sangh in furtherance of that promise and the Sangh which opened branches in all the Provinces and the States in India, has played an important part in the removal of untouchability to an appreciable extent. He collected large sums of money wherever he went to support the said movement and used it to the best advantage possible; and if untouchability is made a punishable offence, the credit goes to that great and noble soul in whole.

Separate Department at work

As you are aware, a separate Department called the Harijan Welfare Department has been created in this State to look after the ameliorative work for the Harijans. In the Districts also the Harijan Welfare staff has been strengthened wherever necessary and in all Districts the office of the Harijan Welfare Officer has been upgraded. It will not be possible for me to give an account of the vast and varied work carried on by the Harijan Welfare Department for the benefit of the Scheduled Castes within the scope of this short broadcast. A few figures indicating the money to be spent by the Government in the current year on each branch of the ameliorative work would give you an idea of the pace and extent of the progress achieved in this vast field.

	RS.
(1) Award of scholarships and other educational facilities including the provision for converts to Christianity	8,48,950
(2) Boarding grants for pupils in private hostels subsidized by Government.	21,09,300
(3) Provision of mid-day meals to Harijan pupils studying in the Harijan Welfare Schools	17,90,000

	RS.
(4) Provision of house-sites for Scheduled Castes	5,00,000
(5) Construction and repairs of wells and provision of sanitary amenities	5,78,000

I would commend to all hearers the very useful publication entitled "Harijan Welfare in Madras State" brought out by the Madras Government recently which contains a full account of all the activities of the Harijan Welfare Department through which the Government are implementing the recommendations of the Harijan Welfare Committee.

Revolutionary Reforms

The Temple Entry Authorisation Act and the Civil Disabilities Removal Act have removed untouchability on a legal basis. Whatever solicitude the Government may have for the welfare of the Scheduled Castes and whatever amount of money might be spent for their ameliorative measures, the social disabilities from which the Harijans are suffering cannot be removed all of a sudden. Whether it be in the domain of Legislative Enactments or in the field of Executive action on the protective side or in respect of incurring expenditure for promoting their welfare on the positive side, it is clear that the new State with the national Government assuming power and responsibility evinced for the first time almost a revolutionary outlook and zeal in removing the blot of untouchability.

The personal law of the land previously recognized and permitted the practice of caste distinctions and untouchability. Ignoring them or fighting them entailed untold sufferings and sacrifices. Even an alien Government that trotted out their cause ad-naseum in justification of their continued power and domination over us did not come forward to raise their position and status by incurring necessary expenditure. Even as late as 1925-26 only a sum of Rs. 8.7 lakhs was spent and with all the goading of the Congress in opposition the expenditure rose only to Rs. 35.30 lakhs in 1946-47. But after the present Government took charge, it marked a steep rise, the expenditure shooting up to Rs. 76.28 lakhs in 1949-50 and about a crore of rupees in 1950-51.

For the current year, i.e., 1951-52 the provision made in the Budget is Rs. 1 crore and 4 lakhs excluding the provision of 6 lakhs for staff. During the last three years the expenditure has more than doubled, bearing eloquent testimony to the sincerity and zeal of the Government in playing the role of a modern Welfare State at a time when the strictest economy and the most drastic retrenchment has been called for all around, i.e., at a time none too suspicious for such a liberality.

But in venturing to undertake this huge expenditure, it knew that it is necessary and cannot be avoided. It is

conscious that without such Herculean efforts the hazardous and immense task of the abolition of untouchability so solemnly resolved, so formally agreed to and sincerely undertaken in the Poona Pact following the Epic Fast, so strictly laid down in the provisions of the Removal of Civil Disabilities Act, 1938 and Madras Temple Entry Authorisation Act, 1947 and finally so rigidly embodied in Article 17 of the Constitution, cannot be fulfilled both in its letter and spirit.

The imperative need is a change of heart among the Caste Hindus and the Harijans presenting themselves before their brethren as they were and still are to a large extent cannot bring about the desired effect and the State can and really does make matters easier for the thorough change of heart by incurring such heavy expenditure to improve the lot of Harijans and nobody can grudge this, and least of all, the Caste Hindus on whom the heavy and onerous responsibility of washing out their past sins of commission and omission primarily rests. The Caste Hindus as was very often emphasised by Gandhiji should realise that it is due to their own neglect and to the subjection in which they kept the Harijan community that the latter are now in such backward state; that it is due to such measures by the Caste Hindus that we in India are open to this great reproach of having kept millions of our countrymen in this down-trodden state, worse perhaps than even the slaves of olden days, for, at least the slaves were not classed as 'untouchables'. It is for the Caste Hindus to remove this standing reproach to Hinduism. The Government are fully determined to take every step they can to remove these distinctions.

Public Co-operation Essential

The problem bristles with many difficulties owing to its socio-religious and political aspects. It is so complicated that the Government alone cannot successfully solve it by their unaided resources and efforts. While the Government are doing and will continue to do all that lies in their power, the public and non-official organisations must come to the aid of the Government in eradicating this age-long evil of untouchability and in raising the community to the level of more advanced communities.

Critics are not wanting who subtly suggest that the creation of a new Department to deal exclusively with Harijan problems and the organisation of special schools and hostels separately for them tend only to create a new privileged class and perpetuate class distinctions instead of bringing about complete amalgamation with the Caste Hindus. Abnormal conditions of life and inhuman disability under which the Harijans have been placed for ages past, necessitate special treatment and conferment of special preferences and privileges in their favour to overcome the handicaps, but the intention is not to make them permanent or to make the Harijans an exclusively privileged class for ever. The aim is only to enable them to attain a position of equality so that they can freely mingle and merge themselves with others as soon as possible.

With this end in view the law has been changed in their favour; and innumerable facilities and large concessions have no doubt been conferred on them. The Harijans should give up all sense of inferiority and fear and must learn to demand and obtain their rights in and through the law and must make the best use of all facilities offered by the State. Thus they must rise to their full stature and find an equal place with all others in Society and the body

politic. This is what they owe to themselves and to others who espouse their noble and just cause. Thereby they will make the very critics realise that the special concessions and separate institutions are only temporary expedients to accelerate the progress of Harijans in all directions. There is already a growing realisation to broaden these institutions and throw them open to all without distinctions of caste, creed or colour and to bring about a complete fusion of not only all sub-castes and section among the Harijans but also of Harijans with non-Harijans in order that all may meet, eat, study, work and live together as equal members of one harmonious and homogeneous Society and Nation. May we all rise to the occasion and justify the expectations of Mahatma Gandhi, the Father of our Nation, who staked his life more than once for this purpose reminding ourselves of his noble injunction.

Unless and until we befriend the Harijan and until we treat him as our own brother, we cannot treat humanity as one brotherhood. The whole movement for the removal of untouchability is a movement for the establishment of universal brotherhood and nothing less.

(By courtesy A.I.R., Madras.)

Abolition of Forced Labour

The abolition of forced labour was the subject of discussion at the 14th session of the International Labour Conference, held in Geneva, 1930. In 1931, the convention, adopted by the International Labour Conference, was placed before the Indian Legislature and both the Houses adopted a resolution, generally recommending to the Government to take action on its various provisions. On the suggestion of the Government of India, administrative instructions were issued by certain State Governments to stop the use of forced labour and many Indian States also enacted legislation on the subject of forced labour. The Provincial Labour Ministers' Conference, held in November 1947 recommended a general enquiry to ascertain the prevalence of forced labour. More recently, the Agricultural Labour Enquiry, ordered by the Government of India, disclosed the existence of forced labour, in some form or other in 74 villages in the Punjab, United Province, Bihar, Orissa, Madras, PEPSU, Madhya Bharat, and Jammu and Kashmir.

After India became an independent country, the question of forced labour engaged the attention of the new democratic Government. The result was that when the Constitution of India was enacted, legal protection was guaranteed against forced labour. Article 28 (1) forbids forced labour, except in the cases covered by Article 23 (2), which refers to the right of the State to impose compulsory service for public purposes—and makes contravention thereof an offence. All laws to the contrary are void under Article 13 (1) and notwithstanding anything in any such law, the exaction of forced labour in contravention of Article 23 would be a punishable offence under Section 374 of the Indian Penal Code.

Thus, the position today is that on the legal plane, all action needed has been taken for protection against forced labour and on the administrative plane, data have been collected—and more is being collected—which may form the basis of investigation and executive action by the State Governments.

Lignite Mining in South Arcot

2,000 Million Tons Available

A Boon to Industrial Development

The investigations conducted by the Geological Survey of India during 1943-46 revealed the existence of lignite over an area of about 23 square miles, and the reserves were estimated at 498 million tons. The Government of Madras followed up the investigations and got the services of Sri H. K. Ghose, a Mining Engineer, for the sinking of a trial pit to get further details regarding economics of exploiting lignite. Bore holes sunk in the area have revealed the existence of lignite over a further area of 77 square miles. The total quantity available is estimated at 2,000 million tons of lignite. The Mining Engineer originally put down two pits, one of 10' diameter and the other 18' diameter. The 10' diameter pit was abandoned as there was a heavy rush of water and sand when it reached a depth of 172'. The second pit was worked to a depth of 145'. These trial pits revealed that the lignite deposits are sandwiched between two water bearing beds and that it was essential to have the water table surveyed before the lignite could be worked. The Government have sanctioned a scheme for the survey of the water table by the Geological Survey of India and they have also ordered necessary power drills for this purpose.

Investigations

In October 1950 the Government sanctioned the putting down of another pit for the extraction of bulk samples. This pit of 10' diameter was worked to a depth of 175' when the lignite was met with and the Mining Engineer has up to 1st October 1951 extracted about 20 tons of lignite.

While this investigation was going on, the Government have been taking the advice of Mining Engineers in India like Dr. J. W. Whitaker, Director, Fuel Research Institute, Dhanabad, Mr. Corbett, Chief Mining Engineer, the Coal Commissioner and the officers of the Geological Survey of India. All the Experts in India who visited the area were of the view that the lignite could be worked successfully. The Government have also consulted the following six foreign firms and experts regarding the exploitation of lignite and its utilization:—

- (1) Prof. J. A. S. Ritsan, Royal School of Mines, London.
- (2) J. C. Mitcheson, Consulting Mining Engineer, Staffordshire, U.K., England.
- (3) A. H. Ayers, Chief Engineer, Utah Construction & Co., San Francisco.
- (4) D. J. Bleifuss, Chief Engineer, International Engineering Company, San Francisco.
- (5) Messrs. Powell Duffryn, Technical Services, Limited, London.
- (6) Messrs. Lurgi Company of Germany.

Most of these firms have expressed the hope that it would be possible to mine the lignite successfully. Some of them have also offered their services to help this Government in working up the minerals. During his visit to Europe in June last, Hon'ble the Minister for Land Revenue also contacted a few firms in United Kingdom

and Germany engaged in coal extraction with a view to securing their advice and help in the economic extraction of lignite.

Results of Tests

The Government have already undertaken tests on various samples of lignite obtained from the bore holes. Important factors which have come to light from the tests are:—

- (a) that the moisture content is fairly low for this class of fuels;
- (b) that the ash content is generally low;
- (c) that the sulphur content is also low; and
- (d) that the calorific value after processing is fairly high, comparing favourably with Grade I Coal from Bengal.

Varied Uses

The tests so far conducted reveal that lignite can be used for the following purposes:—

- (1) Generation of power and other industrial purposes;
- (2) Extraction of Montan wax for different uses;
- (3) Briquetting the residual lignite as fuel;
- (4) Distillation to get tar for creosote;
- (5) Gasification of residual lignite for producer gas;
- (6) Liquefaction to give petrol;
- (7) As fuel for brick making or refractories.

Fractional distillation may yield the following:—

- (a) Toluene (base of Tri-Nitro-Toluol, a High Explosive);
- (b) Saccharine (source of greatest sweet);
- (c) Various medicines;
- (d) Naphthalene, Cresote, Carboic acid, etc.;
- (e) Fertilizer (Ammonium Sulphate), etc.

The lignite deposits are found below a thick layer of valuable clays which contain alumina in various percentages useful for refractories required in metallurgical industries. The sale of these clays will be a source of revenue and will contribute to lowering the cost of extraction of lignite.

It is now proposed to send bulk samples to the following research institutions for test:—

- (1) Fuel Research Institute, Dhanbad, India;
- (2) Institute of Indian School of Mines, Dhanbad, India;
- (3) Messrs. Lurgi Company of Germany;
- (4) Tata Iron and Steel Company, India;
- (5) Benares Hindu University, India;
- (6) India Supply Mission, Washington.

Economic Exploitation

The Government have been pursuing vigorously the question of the economic exploitation of the minerals and its utilization in the industries of the State. In January

last Mr. Robert S. Sanford of the United States Bureau of Mines visited Neyveli and suggested that a Committee of four Engineers may be constituted with a Mining Engineer from U.S.A. to be obtained under President Truman's Point Four programme to determine the engineering feasibility and the economic desirability of working the South Arcot Lignite. This Government have accepted the suggestion and have constituted the Committee. The Committee consists of the American Mining Engineer Mr. Paul Eyrieh, Technician, Bureau of Mines, U.S.A., an Officer of the G.S.I., the O.I.C., L.I. and a Senior Chemist Dr. Subbarathnam, Chemical Testing and Analytical Laboratory. It has also been decided to include a Power Engineer and an Irrigation Engineer in the Committee in a consultative capacity. The American Engineer is likely to arrive shortly to enter upon his investigations.

A High Power Committee with the following members has also been constituted for advising the Government on the actual development programme:—

- (1) Chief Engineer (Irrigation);
- (2) Coal Commissioner, Calcutta;
- (3) American Mining Engineer, and
- (4) The Director, G.S.I.

The Government have also addressed Messrs. John Taylor and Company of Kolar Gold Fields to enquire whether they are willing to associate with this Government in the exploitation of Lignite. Further course of action for the development of Lignite mines will depend upon the recommendations of the Expert Committee and the High Power Committee constituted by the Government.

How Palm Gur is Manufactured

The technique of tapping Palms and making Palm Gur is very easy; any person of ordinary intelligence can master this art within six months. The palmyra, coconut and Sago Palms throw out spathes when they are in florescence. These spathes are tapped, massaged and bound in order to accelerate the flow of juice. The uppermost portion of the spathes is sliced off with a sharp knife and the exudation of the juice begins. This juice called Neera is then collected into an earthen pot suspended to the spathe. In order that the juice may not get fermented, a small quantity of lime is deposited in the pot. The lime is taken out before Neera is converted into jaggery. Cleanliness of tools, pots and the tapped portion is an important factor in this process.

Neera is then collected and heated and super-phosphate is added to it, after the lime is deposited at the bottom, Neera is decanted into the pan for evaporation.

It is necessary to remove the scum during the process of boiling. So also the walls of the pan have to be cleared of scum, so that the resultant product may not be charred or turned bitter.

When heated to 116° to 118° Centigrade, Neera is converted into jaggery. Striking the pan is done at this juncture and the pan is removed from the furnace. The viscous mass is slowly stirred so that the hot pan may not cause the product to be charred at the bottom. The jaggery is then poured into suitable moulds and hard blocks of Gur are ready for use after some time.

Unlike other Palms, the Date Palm calls for a different method of tapping. When the tree is eight to ten years old, the growing tender portion of the topmost trunk just below the place shooting out new leaves is scrapped with a sharp instrument after chopping off the lower leaves. This scrapping is an artful operation. Its object is simply to open the pores of the interior skin; hence, a very thin layer has to be scrapped every time. From these pores oozes the juice. Subsequent process is same as the above.

In order to protect the Gur from getting moist during the rainy season it is stored in the paddy stock or in cotton seeds or kept in a warm place in the house.

Palm Gur industry can be started with a small capital. The poor farmer can adequately supplement his income by taking to it as a side industry. So, it is the sacred duty of every patriotic citizen of India to spread the message of the Palm Gur.

(Tad Gud Kachor)

BOOK REVIEW

"WORLD CANCER DAY SOUVENIR"

Published by the Women's Indian Association, Madras
pages 54 + XVI.

The Women's Indian Association, Madras (a branch of the All-India Women's Conference), has started a Cancer Relief Fund with the aims and objects of (i) establishing a special hospital for prevention, treatment and research in cancer; and (ii) carrying on propaganda for the education of the people and for the collection of funds towards the attainment of these objects. On the occasion of World Cancer Day, observed in Madras on 8th April 1951, the Association brought out a Souvenir underlining the danger inherent in the cancer problem and outlining the measures possible to combat this formidable disease.

The Souvenir details facts about cancer, the need for effective organised action, incidence of the disease, cancer in relation to everyday habits with particular reference to Madras State, and notes on how different agencies have tackled the problem.

Thanks to the indefatigable energy of Dr. (Mrs.) S. Muthulakshmi Reddi, a very effective manifesto for the inauguration of an Anti-Cancer Campaign is presented in the Souvenir. It is made clear that with early diagnosis and adequate facilities for treatment, cancer need no longer be a dreaded scourge to which the victim must necessarily succumb. With public co-operation and State assistance a concerted effort can be made in the direction of controlling the cancer disease.

Two art plates, one showing the organs in which the primary tumours of fatal cancer develop and the other emphasising the remedies (radio, x-ray and surgery) and a number of interesting photographs enhance the educative value of the publication.

Steps to Augment Fish Production

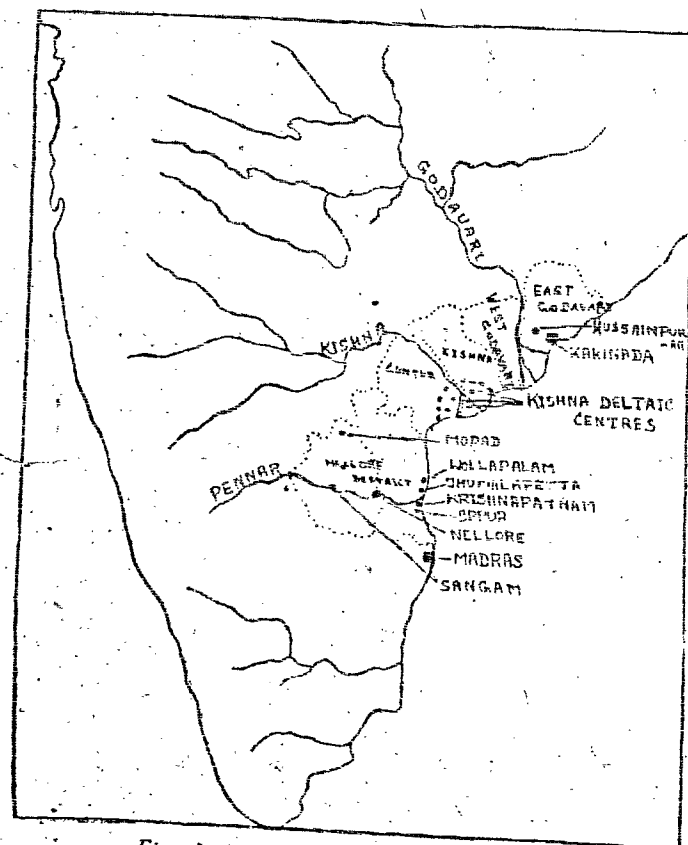
How to Breed Good Species

By SRI V. D. SPURGEON

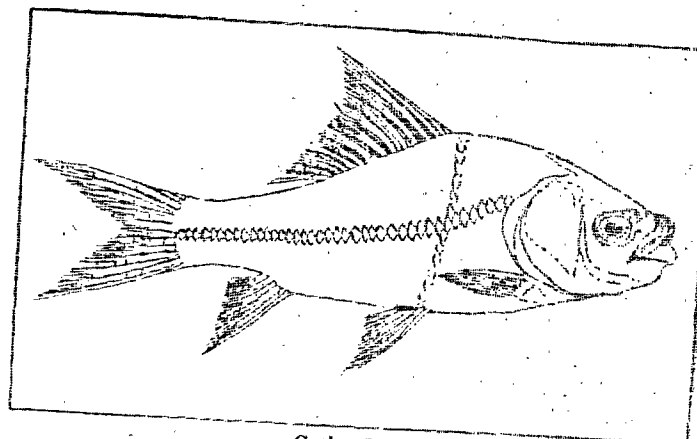
(The author embodies in this note, the results of his three years' survey in the Northern Circars and gives particulars of season, mode of collection, conditioning and transport together with the nearest Railway Station for the information of the interested public and for the use of State Personnel in their task to augment the fisheries of countless inland water areas of the State.)

The fish-seed resources in the Madras Presidency are not sufficient to keep pace with the all-out programme to increase the inland fish-crop to the maximum. Unlike Bengal, the fry problem presents a peculiar difficulty. To overcome the apparent deficiency in seed supply, it was felt necessary to make a rapid survey of all the fry-yielding regions and locate dependable collection areas.

With the two principal rivers, Godavari and Krishna, in the north and Pennar in the South of the Circars, there are potential fry sources. Besides, the navigable Buckingham Canal, running almost parallel to the sea throughout its length of 300 miles from Vijayawada to Madras with connections to the sea, opens new vistas for collection and transplantation of many marine and estuarine fishes that can be acclimatised to life in fresh or slightly brackish waters.



Fingerlings' collection sites in Northern Circars



Catla Catla

Fresh Water Varieties

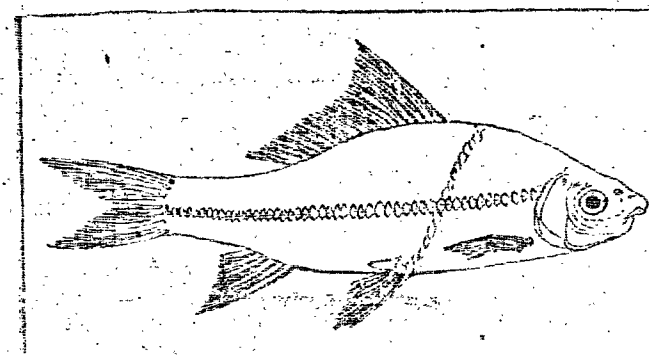
(1) *Catla catla* (Hamilton) (Telugu—"Krishna Botcha.")
Catla is the most quick-growing carp. Because of this advantage and also due to its non-predaceous nature and easy availability coupled with good eating, this fish is most popular for pond-culture with the Fisheries Department as well as lay public.

It is an annual feature of the Madras Fisheries Department to collect as much *Catla* fingerlings as possible from Northern Circars' centres, Thungabhadra region and Cauvery waterways and to transplant them in perennial, long-seasonal and temporary waters in the Presidency. As a result of annual stocking in Mopad Reservoir in Nellore District, this carp has not only established itself but has started breeding there. Again as a result of stocking in Mettur Reservoir, the Cauvery river below the Dam, is well populated at present with *Catla*.

The rate of growth of *Catla* is given variously in various reports. What was noticed by me is given below:—

Catla fingerlings measuring up to 6 inches were introduced by me in November 1944 in Kambala tank in Rajahmundry and when fished in March 1946 the size averaged 3 feet. The growth rate for one year works out as 22 inches which is an astounding rate. Plenty of fish food in the tank was responsible for this rapid growth.

This tank measures nearly 6 acres. This piece of water did not fetch the Municipality any revenue for the past several years. On the other hand they had to maintain a full time watcher and incur expenditure in removing the quick spreading water-hyacinth. When I volunteered to improve this tank, the Municipality readily handed it over to the Department without claiming any compensation. By 1946 the tank presented a lovely appearance and the *Catla* and *Labeo* stocked by the Department were sold for Rs. 700. On the whole the Department had to spend only Rs. 100 for dewatering and Rs. 100 in stocking the tank. Without any more cleaning



Labeo fimbriatus

expenditure, the sales of fresh fish at Rajahmundry town should have gone up much higher in the subsequent years.

One hundred and fifty tanks in Nellore and Krishna Districts were taken over and stocked with carps and brackish water species in 1944. During 1945-46 these tanks produced fish worth Rs. 75,000. The 93 tanks alone (in Nellore District) used to fetch very low rentals prior to this kind of intensive stocking. What is possible by intensive stocking is clearly demonstrated to the Public in the case of Kambala tank in Rajahmundry Municipality in East Godavari District and in the 150 tanks scattered all over the deltaic regions of Pennar and Krishna rivers in Nellore and Krishna Districts respectively in the Circars.

Hussainpuram (East Godavari District)—Two miles by metal road from Samalkot Junction on the Southern Railway.

Hussainpuram centre is an invaluable source for *Catla catla* seedlings. The Godavari in July-August receives heavy floods and during this season *Catla* spawners are reported to indulge in amorous play in the shallower margins of the river and spawn. The fry avoid the strong currents of the river, and move into the irrigation waterways. The Cocanada Canal that takes off from the main river at Dowleswaram Anicut receives a great influx of *Catla* fingerlings from August till the middle of November each year.

Around Hussainpuram, covering an area of 4 square miles, the irrigational water-ways ramify in a close net-work of canals, channels and drains. The fry on their onward movement eventually pass on to the shallow and well-manured paddy fields which are excellent nurseries for the protection and growth of *Catla* fry. With the harvesting of the paddy crop, the fry would naturally meet with premature death. The agriculturists alive to this fact of helplessness of the fingerlings, exploit the situation with alacrity. During the season, it is a gruesome spectacle to see thousands of the closely woven "Mavulus" or basket-traps of all description being set up at every turn of the canals and supply channels. These, literally, filter the water and entrap even the smallest of fry. The Assistant Director of Fisheries at Nellore posts "Rescue-squads" with necessary implements to save these potential carp-seedlings from the clutches of fishermen and transports them to be transplanted in all cultivable waters. The staff carry tin-carriers, hand-nets and conditioning boxes to suitable places. The fingerlings

are sorted out and conditioned upto a period of 3 days according to the size of the fry and the distance of transport. It is an impressive sight to see thousands of *Catla* fingerlings being collected, sorted out, conditioned and transported by rail and road with scientific precision. This practice has tickled the curiosity of pond-owners and of late they call at collection places to buy fingerlings. The popular transport with them is *push-cycle* fitted with earthen pots. There is a great demand for *Catla* fry from all interested fish-farmers. The Mysore Government till recently deputed officers to export *Catla* to Mysore from this source.

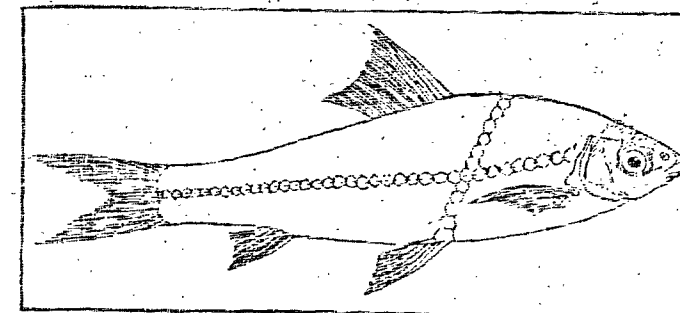
Till October the fry measure round about 1". From 1" size onwards the fry are easily identifiable even by an untrained eye on account of their marked heads, upturned mouths and conspicuous opercula. During September-October the collection is at its peak. By November the catches wane and the fish measure round about 2½ inches. At this stage, the seedlings are not suitable for long-range transport. In the last week of November the season closes. Annual crop from this spot is on an average, 25,000 fry.

(b) Komatingunta, Veeranki lock, Collair, Kaikalur, Gudlavelluru lock, Gudivada, Baturalli, Polraz canal, etc., in Krishna canal system are other centres. Nearest Railway Stations for them are Tarvapali, Neppali, Gudlavalluru, Gudivada, Kaikalur on the Vijayawada-Masula branch line in M.S.M. Ry.

The fingerlings in Krishna appear later in August and disappear in October, earlier than in the Godavari Delta. For this vital difference between rivers that lie only 100 miles apart, the reason seems to be in the fact of less rainfall at the source and the consequent poor floods in Krishna and also as Day recorded due to rapid flow of water in Krishna.

Krishna canal-system spreads beautifully over an extensive plain country of 40 square miles. The soil is of rich alluvial nature, luxuriant with paddy, sugarcane, tobacco and turmeric cultivation and orchards of all description. The villages figuring round 4,000 in this area possess several thousand tanks under ideal conditions. With luxuriant growth of aquatic vegetation like, *Nelumbium*, *Nymphaea Hydrilla*, *Vallisneria*, *Ipomea*, *Ceratophyllum*, *Tymphaelephantina*, *Spirogyra* etc., the ponds are admirably suited for carp-culture.

The State appoints "Collection-Parties" which travel round the important sources in a "whirlwind" tour to collect as much as possible from the innumerable waterways



Cirrhina Reba

and stock them in suitable tanks. The mere regulation of fishery in the area, gives ample protection for the immature carps and allows them to ultimately escape into canal-fed tanks. The fisheries in this region have thus got augmented considerably—a fact witnessed in the increased quantity of fresh water fish that arrives in village and urban markets. It is estimated that the fisheries have nearly doubled in value. *Catla* gathered and distributed from this area figures round 25,000 fry every year.

Much depends on intensifying the collection of *Catla* seedlings and extending the cultural practices to all nooks and corners of the Presidency.

Labeo fimbriatus (Telugu "Yerrakendai").—Next to *Catla*, *Labeo fimbriatus* is the best carp for inland culture in Madras Waters. In Madras this important carp enjoys a wide distribution. It is met with in Northern Circars, Rayalaseema and Tamilnad. Due to its wide distribution and on account of satisfactory rate of growth and non-fighting nature this fish is extensively used in pond-culture. In Tanjore District, in the South, *Labeo fimbriatus* seedlings are available in the Cauvery irrigational waterways and lakhs of them are collected and transplanted every year. Much hope is placed on this carp for augmenting inland fisheries south of Madras. Its importance in Northern Circars cannot be underestimated as it is the only carp commonly found at Mopad, Ippur and in Pennar. It is usually stocked when the *Catla* fingerlings are scarce or when the water areas have plenty of rotting bottom vegetation. Any large tank can be stocked with advantage with *Catla*, *Labeo* and *Cirrhina* species. All these three varieties of carps wonderfully distribute themselves at the surface, sub-surface and bottom layers of water and live amicably without competing for food. Hence the advantage in mixed stocking. *Labeo fimbriatus* of 2½ inches grew about 7½ inches during one year, in Kambala Tank at Rajahmundry.

(a) Hussainpuram, 2 miles from Samalkot Railway Station.

In the same centre at Hussainpuram, *Labeo fimbriatus* appears between October-November. Appearance of *Labeo fimbriatus* almost synchronises with the waning of *Catla* in catches. It is thus most gratifying to see that when one species becomes scarce in the area, the other appears on the scene. The State takes full advantage of the Nature's bounteous offer and collects as much as that would appear sufficient for culture in the Northern Districts. It is observed that *Labeo fimbriatus* does not withstand strain of transit so well as *Catla*. By experimentation, it is seen that *Labeo fimbriatus* measuring below 1½ inches travels with markedly low per cent of mortality if conditioning is done carefully for 2-3 days and water is changed en-route at suitable intervals, say every 6 hours or 150 miles of journey. With these precautions a consignment of *Labeo fimbriatus* reached Mangalore (a distance of nearly 800 miles from Kurnool) with only a few casualties.

(b) Mopad—41 miles by bus from Singarayakonda Railway Station in Nellore District.

Mopad is a perennial Reservoir. It covers an area of 5 square miles with a mean depth of 20 feet. Bounded on three sides by high hillocks and an artificial barrier on the fourth side the water is impounded.

Maneru—a fairly big river empties into the reservoir. These conditions help breeding of *Labeo* in confinement. Soon after the burst of North-East-monsoonic showers in July-August and the rush of freshets from uplands, *Labeo fimbriatus* spawns. As *Labeo fimbriatus* and *Catla* are successfully bred here, there is every likelihood of other carps also breeding here. Therefore, *Labeo rohita* and *Cirrhina mrigala* from Bengal can be introduced in Mopad reservoir.

By a closely meshed castnet (of ½ inch from knot to knot) *Labeo fimbriatus* fingerlings are landed. With tin-carriers at the fishing spot, live fry are collected, conditioned and sent round for stocking state-owned and private tanks in Kannigiri, Kandukur and Udayagiri taluks of Nellore District. (*Catla catla* also has begun to breed in this reservoir).

(c) Ippur—11 miles by road from Venkatachalam Railway Station on the Nellore-Madras main line.

The Survepalli reservoir 7 miles in extent receives supply when Pennar is in spate. *Labeo fimbriatus* from the river moves on to the Reservoir and escapes through Idagalli Channel. Around the Government fish-farm at Ippur the irrigational channels, with constant flow of water, attract *Labeo fimbriatus* fingerlings. By basket-traps, thousands of *Labeo fimbriatus* are collected during October-November. For a few days in November the species predominantly figures in the catches—a pleasing sight for a pisciculturist. With minimum labour and free of cost this valuable crop of seedlings is made best use of in stocking the fish-farm and irrigation tanks in the neighbourhood.

Labeo calbasu (Ham). (Telugu "Kagukendui").—*Labeo calbasu* is by no means an unimportant carp for culture in Circars. From the end of October, *Labeo Calbasu* appears as nearly 25 per cent in total catches of fish-fry. This amber-coloured fish with dark dashes on its fins is easily distinguished even by illiterate watchers and maistries. It is recently decided to cultivate this fish also in places where it is not adequately represented. In transport *Labeo calbasu* occupies an intermediate position between *Catla* and *Labeo fimbriatus*. In long transport *Labeo calbasu* does not fare well. Period of conditioning is just the same as for *Labeo fimbriatus*.

Cirrhina reba (Ham.) (Telugu "Aruju").—A beautiful carp that attains a growth of 9 inches in Circars. Its almost parallel dorsal and ventral contour of the body with silvery white hexagonal scales, sometimes shot with crimson along the margin render identification easy for even lay Public. It is widely known as "Aruju" in Telugu.

This carp did not figure prominently in pisciculture in Northern Circars till recently. The author made it a point to collect its seedlings wherever available for transplantation and culture. Its growth in fish farms and tanks was satisfactory. It is expected that *Cirrhina reba* would substantially augment inland fisheries in Nellore District alone in Northern Circars, if collection is intensified and cultural operations extended to all long-seasonal waters.

At Sangam, 21 miles by bus from Nellore Railway Station a fall-in-shutter ancient across the width of river Pennar—gives facilities for collection of this fish.

After monsoon rains the river is in spate. In September-October *Cirrhina reba* fingerlings are in great abundance. The local fishermen who fall short of professional skill that obtains elsewhere, resort to a lazy, yet most destructive method of fishing. By small circular hand nets (locally known as "Thiri") the fishermen choose points of vantage on the down side of the river. The water that gushes through the gaps of 2 pieces of metals forms often a forcible current more than sufficient to invite a stream of the species on their onward instinctive migration. It is here that "thiri" are set, in close proximity to the last point in ascent, namely, the iron shutters. The fingerlings on their mad rush, dash against the shutters and masonry aprons and fall back only to be contented to see themselves secure in the nets with meshes so mercifully reduced to 8th of an inch.

It is a valuable source for this economically important carp. Here collection is easy and there are adequate transport means to the interior for distribution among many rain and river-fed tanks of great possibilities. Now a prohibition is imposed to stop capture of fish fry for consumption. For bona fide cultural operations the State allows a free-hand.

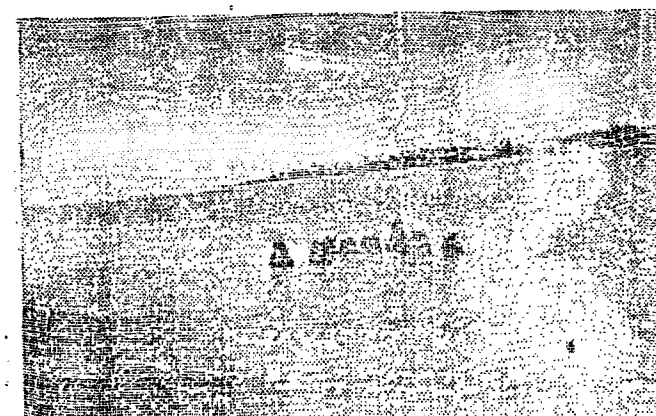
Ippur—11 miles from Venkatachalam Railway Station is another breeding centre. From August to November *Cirrhina reba* are available in basket-trap catches. Hundreds are annually collected and released into the fish-farm, where from later, they are carried to various tanks for culture.

Fishing in Pulicat lake

Pulicat is a salt water lake of 178 square miles. This is about 32 miles from Madras. A bar which is open during the greater part of the year connects the lake with the sea. Varieties of valuable fish enter the lake from the sea, and thrive in it. The lake has very good fisheries throughout the year. Prawns are the most important fishery of the lake. They are highly esteemed by all sections of the public who eat fish. The cost is however high being above Re. 0-12-0 a lb. Only the upper classes are able to buy it in adequate quantities frequently.

Formerly the only line of communication was the Buckingham Canal which connects Pulicat with Ennore. In spite of the rich fishery all the prawns were not usually caught, because the fishermen were unable to bring them in good condition to Madras and get a good price. They were merely drying and exporting to Burma. Under these conditions prawns are landed at 3 p.m. and then brought

A view of the vast lake with fishermen seen hand-picking of fish in the shallow waters



Fishing net being operated

to Ennore by country boats. By the time the product reached Ennore at 3 o'clock over 50 per cent of the prawns were spoiled.

Recently, the Fisheries Department introduced a Fish Transport Van from Pulicat to Madras. These vans are provided with racks to keep about 100 baskets and to carry 20 fisherfolk. The introduction of this van has given a great incentive to fishing in Pulicat area. On an average daily four tons of fish are landed. At 6 a.m. every day a transport van with 100 to 150 baskets of fish leaves Pulicat and reaches Madras by 8-30 a.m. Most of the catches consist of prawns. At the time the prawns reach Basin Bridge the main auctioning centre, the prawns are practically alive. Every day prawns valued at 2,000 to 3,000 lb. is brought to Madras. The price of prawns in the market has also perceptibly come down.

A lone corner of the lake with fishermen's huts and a boat



Multi-Purpose Co-operative Societies

Punthottam

The Society was registered on 18th May 1925 and started work on 19th July 1925. It has therefore passed 25 years of its working.

The area of operations of the society comprises of Punthottam, a hamlet of Agara-Thirunahalam vattam and Kothvasal vattam. The maximum borrowing power of the society is Rs. 8,000. Proposals have been sent for increasing the same to Rs. 12,000.

There are 79 members on rolls with a paid-up share capital of Rs. 1,203. The society owes Rs. 7,053 to the Co-operative Central Bank, Limited, Kumbakonam, under loans besides the cash credit accommodation sanctioned by the Bank Rs. 1,000 for prompt issue of short-term loans and Rs. 1,000 for multi-purpose activities.

There are 65 loans outstanding against members to the extent of Rs. 8,619-8-0.

The society has invested Rs. 600 in shares in Co-operative Central Bank, Limited, Kumbakonam and Rs. 50 in shares in Tanjore Central Co-operative Stores, Limited, Tiruvarur.

The society has Rs. 1,720 to the credit of its reserve fund; of this Rs. 960-7-0 alone has been invested in the Co-operative Central Bank, Limited, Kumbakonam.

Besides credit, the society is doing multi-purpose activities, the by-laws, being suitably amended. The society is doing distribution of sugar in retail on permits issued by the Revenue authorities. It sells coffee seeds at controlled rates, getting the same from the Tanjore Central Co-operative Stores, Limited, Tiruvarur and other articles, such as jaggery, groundnut cake, etc. The total sales under multi-purpose activities during 1950-51 was Rs. 4,125-2-11. The gross profit of the society during 1950-51 was Rs. 188-4-0.

The society was dormant for some years and was placed under the management of the supervisor as Manager. New members were admitted and fresh panchayatdars were elected. The present panchayat evinces great interest in the working of the Society.

Ravikampadu

The Ravikampadu Multi-purpose Co-operative Credit Society was registered on 2nd January 1948. It is in Tonali taluk, Guntur district. It started its work on 25th January 1948 with 57 members with a paid-up share capital of Rs. 1,000. Its area of operations are confined to Ravikampadu and its hamlets, namely Mosalipadu, Thadigiripadu, Abbanagudavalli and loans will be given on the immovable property of members belonging to Koller, Vemuru, Boddulurpadu, Bhattiprolu, Abbanagudavalli.

On date there are 184 members on rolls with a paid-up share capital of Rs. 2,415. As per the by-laws, the

maximum credit limit of the society is Rs. 8,000. There were loans outstanding against members to the extent of Rs. 200 on 30th June 1951. It has taken up multi-purpose activities for the benefit of its members and non-members. Distribution of sugar, jaggery, wheat, manures and cloth was made to the extent of the details furnished below during the year 1950-51.

	Rs.	A.	P.
Cloth	10,719	4	4
Sugar	1,836	11	2
Wheat	227	0	0
Manures	4,877	4	0
Jaggery	966	5	4

Mundaje

The Mundaje Multi-purpose Rural Credit Society in the Puttur taluk of South Kanara district is a good working society in this circle. The society was registered on 16th January 1921 and started work on 3rd April 1921. Its area of operation extends to the villages of Mundaje and Kalmaje. It has now got a membership of 117 with a paid-up share capital of Rs. 3,050.

It has adopted the multi-purpose and social recreational by-laws and has taken up some of the multi-purpose activities. The society is issuing produce loans to its members. In the current year it issued produce loans aggregating to Rs. 40,000. The society has inculcated the habit of savings among members through hundi deposits. It has effected a savings of Rs. 10,000 by way of fixed deposits, recurring deposits, etc. The society is running a library. It is also running a night school by raising donations for the purpose. Bhajanas and Yatslagunas are also being conducted regularly.

Bargur

The Bargur Co-operative Credit Society (Krishnagiri taluk), Salem district, was registered on 10th March 1923 and started work on 20th March 1923. The society was converted into a Multi-purpose Rural Co-operative Society at its general body meeting on 24th May 1950.

The society has on its rolls 223 members with a paid-up share capital of Rs. 5,824. The maximum credit limit of the society is Rs. 60,000, while that of the individual member is Rs. 2,000. The society has built up a reserve fund of Rs. 3,995-10-0. It has invested Rs. 200 in the shares of the Central Co-operative Bank, Limited, Salem, Rs. 500 in the shares of the Krishnagiri taluk Co-operative Marketing Society, Limited, Rs. 100 in the shares of the Salem Co-operative Wholesale Stores, Limited, Salem, and Rs. 50 in the shares of the Kaveripattanam Co-operative Egg Production and Sale Society. The society has created a reserve of Rs. 417 for bad debts and also Rs. 271-13-0 as special reserve.

The outstandings under loans borrowed from the Salem Co-operative Central Bank, Limited, as on date amount to Rs. 21,028 (Rs. 7,450 S.T., Rs. 10,536 M.T. and Rs. 3,033 J.T.). Loans outstanding against members amount to Rs. 25,173. The society has issued a loan of Rs. 2,250 to its members during 1950-51. From 1st July 1951 to 31st August 1951, the Society has issued loans to the extent of Rs. 14,400 to 15 members for the purchase of 15 pumpsets.

Under the scheme of re-organization of R.C. Societies, the Society has adopted the multi-purpose by-laws at its general body meeting held on 26th September 1950. It has implemented the multi-purpose objects by undertaking the supply of agricultural implements and chemical fertilisers to its members. The society is enjoying a several overdraft 'B' accommodation of Rs. 1,000 from the Salem Co-operative Central Bank for the above purpose. The Society has so far purchased 22 bags of Ammonium sulphate and 22 bags of super phosphate for distribution to its members and others. It has so far supplied chemical fertilisers to the value of Rs. 307-6-6 to 15 members. The society has collected Rs. 499-4-0 under Homesafe deposits through 20 hundi boxes and there is a sum of Rs. 87-11-0 to the credit of the society's Common Good Fund. Under the social and recreational activities, the Society has been subscribing to four Journals namely 'Ananda Vikatan' (Weekly), Dinamani (Daily), 'Madras Information' (Monthly), Kooturavoo (Fortnightly).

The net profit earned by the society during 1950-51 was Rs. 267.

Tiruvendipuram

The village, Tiruvendipuram is at a distance of five miles from Cuddalore. A credit society was started here in the year 1918.

On 30th June 1951 there were 101 members with a paid-up share capital of Rs. 2,068.

The name of the society was changed into multi-purpose rural credit society in the last year and the various by-laws enabling the society to do multi-purpose activities were introduced.

This society was one of the rural credit societies selected for distribution of chemical fertilizers. During the year, 5 tons of ammonium sulphate and super phosphate valued at Rs. 1,127 were purchased by the society. Out of this, fertilizers worth Rs. 989 have been sold to members. The balance of stock on hand is valued at Rs. 38.

The society also undertook the supply of milk as a second multi-purpose activity. It has distributed loans to the extent of Rs. 8,000 for 50 members for purchase of milch animals. These members supply about 35 to 40 Madras Measures of milk daily to the society. The milk is supplied to the Cuddalore milk supply union. The Milk Supply Union has opened a milking yard. It is in charge of a yard clerk who supervises and tests the quality of the milk supplied by the members. Thus the society helps a good deal in the supply of milk to meet the requirements of the urban areas. As a result of these multi-purpose activities the society earned a net profit of Rs. 154 in the year 1950-51.

The third multi-purpose activity undertaken by the society is the advance of loans for purchase and installation of oil engines and pumping sets for agricultural purposes under the Grow More Food Scheme. The society has advanced two loans for Rs. 5,000 for purchase of oil engines and pumping sets. The borrowers have fixed the engines in a plot of 5 to 6 acres each.

Isukalaikatteri

The Isukalaikatteri Co-operative Society in Tiruvannamalai taluk in North Arcot district was registered on 19th December 1913 and started on its work on 19th March 1914, with 21 members and a paid-up share capital of Rs. 120. This is one of the oldest societies in the district with more than 37 years standing. There are at present 82 members in the society with a paid-up share capital of Rs. 1,792. Under the reorganization scheme the society adopted the necessary by-laws and it has therefore been converted into a multi-purpose co-operative society with a view to enable it to undertake various kinds of multi-purpose activities. This is one of the good working societies in the taluk. The maximum credit limit under by-law 18 has been fixed at Rs. 17,500 and that of the individual maximum borrowing power under by-law 42 at Rs. 1,000. The society owes a sum of Rs. 15,545 to the Central Bank under short term and Medium term and long term loans and no amount is overdue to the bank. It has been invariably keeping up its obligations to the financing bank. Besides affording credit facilities to the ryots the society has also undertaken multi-purpose activities like the distribution of cloth, agricultural implements and food grains. Consequent on the abolition of rural rationing the society has undertaken to run a relief shop also from 28th May 1951 for distributing foodgrains. The work done is as detailed below for the last one year.

	Rs.
Value of cart tyres, agricultural implements, etc., distributed	2,834
Sale of mill cloth	290
Value of foodgrains such as milo, rice, wheat and sugar through the relief shop	6,310
Total	9,434

The society also availed the opportunity and undertook the construction of godown under the 50 per cent Government subsidy scheme at a cost of Rs. 7,850 of which Rs. 3,925 was the free subsidy by Government and the balance was got out of the society's Reserve Fund and a part from its general funds. This village is a big groundnut producing centre and the groundnut produced is noted for its quality also. Hence the godown constructed would prove very useful for its members and other ryots for holding on their produce for a better market. At present the society runs its relief shop there and also stocks iron

CO-OPERATION

and steel. This godown was opened recently by Sri P. S. Rajagopal Naidu, President, Vellore Co-operative Wholesale Stores.

Employment to Agricultural Labourers

Grants amounting to Rs. 1,45,500 were sanctioned in the month of September to the District Boards of Ramanathapuram, Tirunelveli and Salem for the execution of road works in order to provide employment to agricultural labourers displaced by adverse seasonal conditions, as detailed below :—

Name of district board.	Number of road works sanctioned.	Amount of grant sanctioned. Rs.
1 Ramanathapuram ..	2	33,000
2 Tirunelveli ..	1	22,000
3 Salem ..	10	90,500

(Continued from page 31)

into an Association, and interviewed the Government and pressed for relief mainly on the ground that there was no adequate notice, and that some of them had invested large sums of money in this "middle-class enterprise," and stood to lose heavily. With reference to the Association's representation, the matter was reviewed by the Government and mainly with a view to give relief to them, the present temporary "permit system" for exhibiting cinema films in the educational institutions has been sanctioned in G.O. No. 2517, Education, dated 19th September 1951. Simultaneously such of the ex-exhibitors who wanted to part with their equipment, have also been informed that they can, if they desire, offer their equipment for sale to the Government. It is understood some of the ex-exhibitors have taken out permits under the present scheme.

A few of the salient points of the difference between the old scheme and the present scheme may be referred to—

(i) The educational film which incidentally is only one of the several audio-visual aids, has been made available to the teacher, according to the revised scheme, as an accessory for the purpose of imparting instruction in the class room.

(ii) The revised scheme works under the control of the Director of Public Instruction unlike the old arrangement in which the exhibitor and the headmaster were left to deal with each other.

(iii) From the point of view the exhibitors, the present scheme is more advantageous financially, as may be seen from the fact that at present only one film is exhibited and expected to be shown for a school period of 45 minutes and the charge for this show for 45 minutes is Rs. 2. Previously, for showing 4 films in the course of the hour,

often with running commentaries for which the services of professional commentators had been utilised, the charge was Rs. 40 to 45.

(iv) No special fee will be collected in a school, unless modern "audio-visual" aids of the prescribed type are used in the class-rooms.

These permits will not, however, be issued to private exhibitors in respect of the schools which already own projectors, or which are to be supplied with projectors in accordance with the Government-sponsored scheme of supply of projectors with special concessions, the city schools without projectors to which the Director of Public Instruction lends projectors, and the schools where shows are given by the local bodies under the present system. All film institutions depend upon the films in the Central Library of the Director of Public Instruction which has been recently enlarged, and which hires out films on a nominal charge. There are about 850 films in good condition in this library now. More films will be added, as more schools come to own projectors. It is expected that about 300 schools will be owning their own projectors by the end of this year.

The policy of the Government is to equip every institution adequately with the necessary "minimum" equipment in the field of modern audio-visual aids which will include a 16 mm. cinema projector. The accumulations in the audio-visual funds will be utilized with such Government aid as is necessary to achieve this object.

Corrupt Government Servants Punished

During the month of June 1951, corruption among Government servants was brought to notice against 20 persons including those against whom proceedings were pending at the end of the previous month. Of these, eight persons were let off, as charges against them were not proved. Corruption was successfully detected in the case of nine persons and they were suitably punished. Of these, two persons were awarded minor punishments. The names and designations of the seven persons who were awarded severe punishments are as follows :—

C. Govinda Menon, Sub-Registrar, Kavadanadu, Coimbatore district (compulsorily retired from service); Koteswara Rao, constable, Krishna district (discharged from service); M. S. John, Petty Officer, Srikulam district; N. S. Rangaraju, officiating Revenue Inspector for Wells, Kuttalai taluk; Periasami, peon, under Surveyor for Wells, Kuttalai taluk, Tiruchirappalli district; C. Chandrasekaran, officiating Range Deputy Surveyor, Madagupatti, Ramanathapuram district; C. S. Rangopala Ayyer, Deputy Tahsildar, Pollachi, Coimbatore district (discharged from service).

Proceedings against 248 persons were pending at the end of the month.

MADRAS INFORMATION

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MINISTER VISITS EMPLOYMENT EXCHANGE CENTRE

The Hon'ble Sri Kala Venkata Rao, Minister for Public Health and Resettlement, recently visited the Industrial Training Institute run by the Employment Exchange at Madras. Here he observes the trainees at work in the Radio Section.



Hon'ble the Minister watches the work of the trainees in the General Mechanics' Section.



Sri Kala Venkata Rao examines the work in progress in the "Knitting Section" of the Training Centre for Women.



The Minister for Resettlement is seen evincing keen interest in the work of the Tailoring and Cutting Section.



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Registered No. M-4767

METTUR FISH FOR MADRAS

The Fisheries Department of the Government of Madras have arranged to bring to Madras City in fresh condition various varieties of fishes that are available in plenty in the Mettur dam. This arrangement affords an opportunity to the citizens of Madras to taste delicious fish from a far off place in good condition. Special measures are adopted to keep the fishes fresh.

The Refrigerator Van in which the fishes are transported to Madras.



Hon'ble Sri Roche Victoria examines some of the fishes that arrived at the Central Station recently.



Rager persons gather around to buy the fishes.

Verified
M