

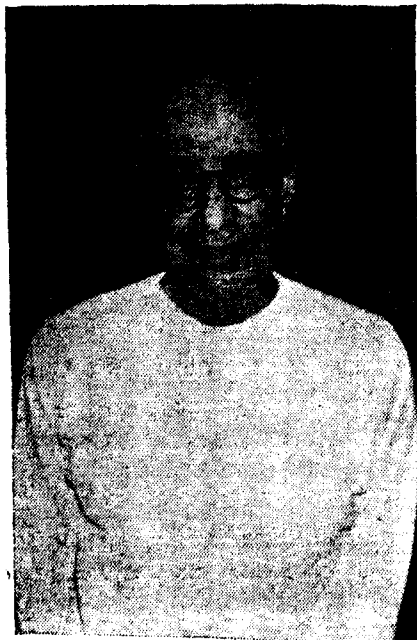
Chief Minister's Message



Fort St. George,
MADRAS.

I know that the publications of the Department of Information are "taken for granted" and hardly overtake anti-Government propaganda which has the intrinsic advantage of sensationalism. I know also that "messages" have become far too common to make any impression. The joy of Independence appears almost lost. One wishes we lost Independence for a week, provided we could get it back after the week of pain is over! It is only when we lose a thing that we realise its value.

C. Rajagopalachari



PARTY TO DR. PATTABHI SITARAMAYYA: Sri C. Rajagopalachari, Dr. Pattabhi Sitaramayya, Sri N. Ranga Reddi and Sri V. C. Palaniswami Gounder share a table at the party given to Dr. Pattabhi Sitaramayya on the eve of his departure to Nagpur to accept office as Governor of Madhya Pradesh State.



FOOD

Food Position in Madras State

By SRI C. SUBRAMANIAM, Minister for Food.

It was on the 6th of June that the Chief Minister announced the new Food policy of the Government of Madras, decontrolling all the foodgrains including rice. This measure has received the spontaneous approval of almost all sections of the people. There are some who oppose this measure on political grounds. For them I have nothing to say. There are some others, who genuinely doubt the wisdom of this step. This talk is mainly intended for them. Food controls came into existence during war time, consequent upon the stoppage of imports from Burma and the conditions of scarcity created thereby. These controls were intensified year after year, and were extended to other commodities like textiles, iron, steel and other consumer goods. These controls came into existence, so that the poor people may not be hard hit by conditions of scarcity in essential articles. But in actual working, we found that these controls had become irksome and engendered many evils like black-marketing, corruption, harassment, etc.

When the National Government came into existence at Delhi, in deference to the wishes of Mahatma Gandhi the experiment of gradual decontrol was first tried at the end of 1947. Unfortunately the year 1948 turned out to be a particularly bad year on account of adverse seasonal and crop conditions, and the circumstances were not favourable for the success of that experiment, with the result the Government were forced to introduce controls again in 1948. Since then up to the end of 1950, the scheme of rationing was in force in the State. At the end of 1950, it was recognised that a policy of progressive decontrol should be adopted, and a major change in the Food policy was effected in 1951.

Procurement and Rationing

Intensive procurement was restricted to the surplus delta districts and in the highly deficit districts of Malabar and Nilgiris, and a system of levy procurement was in force in the self-sufficient districts. Compulsory procurement of foodgrains was given up in all other districts. Statutory rationing was confined to the urban areas of deficit districts and informal rationing in rural areas was given up in all districts, except in the highly deficit districts. But, in order to keep prices down, fair price shops were opened in the derationed rural areas. There were many people who predicted disaster when rural rationing was given up, but we found that no great strain was put on the people in obtaining their food requirements, and as a matter of fact, people in rural areas were feeling happy that they were no longer subjected to the rigours of control.

Soon after the present Ministry took over office, they gave their anxious and careful consideration to the Food policy and the desirability of relaxing the controls further.

Growing Dissatisfaction

It was felt that there was a growing volume of discontent and opposition to these controls and the urge for complete decontrol was increasing among all sections of the people, including the consumers. The producers, on their part,

were bitterly complaining about the harassment inflicted upon them under the Intensive Procurement Scheme and about the uneconomical prices paid to them. These conditions had created a feeling of complete frustration amongst agriculturists, and there was a consequent lack of enthusiasm for growing more food. It was almost a vicious circle that scarcity conditions necessitated control, and control in its turn produced scarcity by killing the enthusiasm amongst the growers to produce more food. It was necessary to put an end to this state of affairs.

The consumers also were criticising the Government for their failure to supply adequate rations, and also about the bad quality of foodgrains supplied. There were complaints and bitterness all round, and it looked as though nobody wanted these controls. In addition to this, these controls had certainly resulted in numerous forms of evasion of laws, and even honest ryots had been tempted to dishonesty and black market transactions. The consumer also was forced to transgress the law at some point or other in order to get his food requirements.

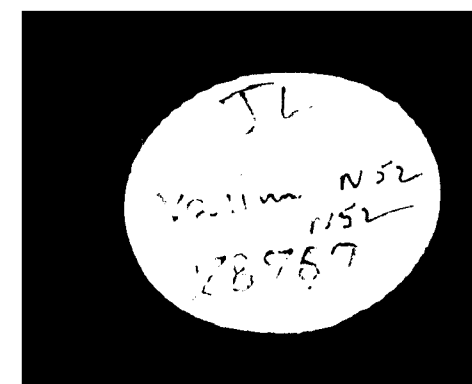
Decision to Decontrol

It was under these conditions that the Government decided that the time had come to take a bold step and abolish all controls. In taking this decision, we thought the time was quite opportune in view of the favourable stock position of rice and other foodgrains with the Government. As a first step, we removed all controls on the movement by motor or other mechanical transport from one district to another. I shall now briefly explain the main features of the new scheme of decontrol launched upon by this Government.

With a view to regulating movement of rice from surplus areas to deficit areas, the State will be divided into six zones with one or two surplus districts supplying in the free market the needs of a few deficit districts included in each zone. Thus, (1) the surplus district of East Godavari has been clubbed into a zone with the deficit districts of Srikakulam and Visakhapatnam, (2) West Godavari, Krishna and Nellore with Madras City, Chingleput, Chittoor and North Arcot, (3) Guntur with Anantapur, Bellary, Cuddapah and Kurnool, (4) Tanjore and South Arcot with Tirunelveli, Ramanathapuram, Madurai, Coimbatore, Salem and Tiruchirappalli, (5) South Kanara will form a zone by itself, and (6) the highly deficit districts of Malabar and the Nilgiris will form a separate unit.

Malabar and the Nilgiris

The requirements of Malabar and the Nilgiris Districts and Hosdurg Sub-taluk of South Kanara District will be supplied from imports arranged through the Government of India. Within the zone a free market will be allowed to function. There will be no control as regards price or the quantity of rice to be distributed except through fair price shops. Movement within each zone will be free. Inter-zonal movement by railways or motor vehicles will not be allowed except under permits issued by the Collector



of the District from which transport is proposed. Transport of stocks by head-loads or other non-mechanical conveyances will not be interfered with. Since then it was found there was considerable difficulty in moving foodgrains from the districts of West Godavari and Krishna to the other districts in Zone No. 2, so free movement has now been allowed in the districts of Guntur, Nellore, East Godavari and Krishna.

Wheat and Milo.—The distribution and sale of wheat and milo have been completely decontrolled and derationed in the State with immediate effect. There will be no control over the sale price of wheat but as regards milo, since the Government of India are subsidising the sale of milo and incurring considerable losses, it will continue to be sold at specific prices in order to pass on the benefit of subsidy to consumers. There will be no limit to the quantity of wheat and milo that any consumer can buy.

There are ample stocks of rice, wheat and milo under the control of Government at present—about five lakhs tons of rice, 50,000 tons of wheat and 70,000 tons of milo—and they are ready to meet any situation that may develop in any part of the State. Till grains are freely available in the free market, the Government will continue to supply rice through fair price shops as it was done through ration shops before decontrol. This could be done for more than eight months with the present stocks. I can, therefore, assure the people that nobody will be allowed to suffer for want of availability of foodgrains and that there is no room for any apprehension that the poor people may be hard hit by this scheme of decontrol. Fears have been expressed by some that black-marketeers will try to corner stocks and increase the prices of foodgrains. But the Government are fully armed with powers to deal with any situation that might arise due to the activities of these unsocial elements and Government will not hesitate to

Grow More Food Activities in May 1952

Part A

Weather Conditions

The month was hot and dry during the first fortnight but a sudden depression developed in the Bay of Bengal by the 20th of the month and caused widespread and heavy rains in the districts of Chingleput, Chittoor, Cuddapah, Kurnool, Anantapur, Nellore, Guntur, Krishna, East Godavari and West Godavari. The rainfall recorded was about 6 inches in East Godavari, 10 inches in parts of Cuddapah, 3.84 in Anantapur and 14 inches in parts of Nellore and Guntur Districts. The rains prevented serious water famine in Rayalaseema and parts of Nellore District and filled up many rainfed tanks giving opportunity to raise short-term paddy and millet crops.

Part B

I. Works Schemes

Repairs to Old Tanks.—Sixteen works were sanctioned during the month at an estimated cost of Rs. 2,76,625. The extra acreage covered by the works is 302 and the additional production anticipated is 169 tons.

Construction of Irrigation Tubewells.—During the month under review seven noteworthy borings were completed

use all their powers to meet this menace firmly if it should arise at any time.

Though hardly a fortnight has elapsed since the inception of the scheme, the Government have received very encouraging reports from all parts of the State about its results. An all round fall in the open market prices of rice has been reported from all centres. Rice is said to be available in the open market in some centres at prices on a level with controlled prices, and no scarcity in the availability of foodgrains has been reported from anywhere. These reports of the first effects of the scheme are very encouraging and the Government are confident that the prices will settle down soon and stabilise round about the level of controlled prices.

Now, the producers have been given freedom to sell to any person and at any price they want, the consumers to purchase from any person up to any quantity they want, and the merchants to purchase at any price and without any licensing restrictions. But every one of them has to play his part well in order to make the scheme a complete success. For the success of the scheme, it is necessary that people should observe voluntarily the controls which were imposed on them by compulsion.

Now that controls are removed, people should not go about wasting food by having feasts without any restrictions. We can't afford to waste food even to the slightest extent. It is also necessary that we should restrict the use of rice to the minimum possible level. Wheat is available in large quantities but of late, the off-take of wheat has been going down. The people should get accustomed to use wheat as food. For all these, the willing co-operation of the people is absolutely necessary. The success of the present scheme will open before us bright vistas of new life free from obnoxious controls and restrictions of any kind and it is up to everyone of us to make this vision real.

(By Courtesy, A.I.R., Madras)

by the Industries Department in South Arcot. The number of wells so far completed under the scheme comes to 99, out of which six were failures.

Land Improvement Works.—An area of 2,811 acres was reclaimed by the departmental tractors and bulldozers.

II. Supply Schemes

A total of 1,199 tons of ammonium sulphate, 353 tons of phosphatic fertilisers, 867 tons of improved paddy seeds, 11 tons of millet seeds and 30 tons of green manure seeds were distributed by the Agricultural Department.

Compost.—Preparation of rural compost was in progress in almost all the districts, and a quantity of 5,042 tons of compost was prepared and a quantity of 6,358 tons was applied to the fields.

Pest Control.—The army worm of paddy was reported on an extensive scale from Malabar, Tirunelveli and South Kanara Districts, and it was effectively controlled in 906 acres by dusting 10 per cent BHC. The Lesser Paddy grasshopper pest was controlled over an area of 534 acres in Coimbatore, South Arcot and Salem Districts by dusting 10 per cent BHC. Damage from field rats continued to be reported from all districts and poison baiting with zinc phosphide was conducted over an area of 873 acres.

Increasing Agricultural Production

By SRI N. MURUGESA MUDALIAR, Deputy Secretary, Department of Food and Agriculture

Talking about agricultural production, let me begin by referring to the season. To town dwellers, the weather may not be of much consequence, but to farmers it is a material factor which influences their operations all the time. The cycle of drought which has affected us for the past five years, appears to have definitely left us, and with average luck, the next year or two should be fairly favourable for crop production. Ordinarily one good year is followed by two years of drought; but this time we had five years, a sufficiently long period for even the drought. It is fairly definite from meteorological observations in the past that no drought will last more than five years. We can therefore start our work of increasing production this year with humble prayer and faith in Providence. Although the south-west monsoon is still rather weak, it has relieved distress in the arid regions of the Rayalaseema and the thirsty areas on the Carnatic Coast. If past records are guides, the monsoons following a drought are usually very plentiful. This year our rivers and lakes and tanks might get full and sustain our crops.

The next most favourable feature is the recent fall of the general price level which came about miraculously, almost as a God-send. If the price trend was to the contrary, its effect on producers and consumers after a continuous period of suffering for nearly five years would have been disastrous. The general prices have appreciably fallen while the prices of farm produce are very fair. This means that the production costs and the living costs of the farmer will not go up and the price that he will get for his produce will have no tendency to go down. The wholesale price index number for foodgrains in November 1951 was 380 and in May 1952 it was 407. The index for commercial crops was 635 in November 1951 and 449 in May 1952. This trend in prices has also given a warning against undue extension of acreage under commercial crops. The tumbling down of prices of oilseeds and other commercial crops has torn the illusion that anyone could build his prosperity purely on cash crops. A further development which emphasised this warning was the unprecedented slump in sugar. Many people who diverted their paddy lands to sugarcane, not as a periodical rotation but as a means of making more profit, have burnt their fingers.

Cash Crops Versus Food Crops

Commercial crops which provide cash for financing of farm operations are necessary for the economic prosperity of the agriculturists; but not at the expense of food crops. It is perfectly possible to obtain more outturn from commercial crops by using improved seeds and application of manure instead of by diversion of acreage. In the face of a food shortage the substitution of commercial crops in the place of food crops would be unwise and detrimental. It would be like expanding a shop in one's premises to encroach on the kitchen. Any imbalance in crop production will lead to grave consequences. It will lead to increased living costs and prevent the consumer from buying industrial products. The best policy therefore will be to produce both food and commercial crops and if need be at a reasonable sacrifice of the commercial crops

in order that there will be no stalemate resulting in agriculture not being able to buy the products of industry.

In recent years there has been a decrease in the total cropped area due to continuous droughts. What is worse, the acreage under food crops is more or less stationary while the acreage under non-food crops has shown a tendency to increase. This tendency for food acreage to sag is an alarming factor considering the increase in population. Where there are more mouths to feed more hands must be put to work, or at any rate, more work must be done and not only the total cropped area but also the area under food should be adequately increased. The inhibiting factors hitherto have been the drought and the control of prices of foodgrains and the control over distribution.

Incentives for Farmers

The recent act of Government in decontrolling foodgrains has removed all obstacles and opened the possibility of increasing the production of foodgrains. The restriction on the price and intensive procurement have been regarded as the greatest disincentives for farmers, both big and small, to increase the production of paddy in spite of all the Government aids given to grow more. Whether there was justification or not for this, there was certainly a psychological feeling which was detrimental to increasing food production. The controlled prices might have been fair enough but the abolition of free marketing and the constant irritation provided by the procurement agencies in checking up production and the quota to be made available for procurement have undoubtedly killed the zest to go all out and produce the largest size of food crops, and a disregard for quality and grading equally contributed to retard incentive to get the best quality produce and obtain the best price for it. Production thus become a muddy stream, stagnant and slow moving.

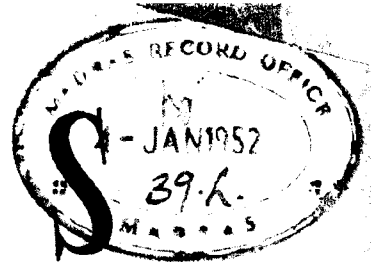
The question was repeatedly asked why should a farmer grow more paddy considering the small margin of profits when sugar, cotton, oilseeds or tobacco were practically not controlled and brought more profit. The argument may be quite unreasonable but nevertheless understandable. Fortunately quite a small percentage of intelligent farmers have however realised that food farming was paying even under controlled conditions and that the only limitation is the lack of water. With decontrol food farming is bound to become more popular. It requires less investment and profits will be satisfactory. Further, food prices are more stable than the prices of commercial crops which fall more precipitously than food crops in a falling market.

Preparation of Parity Index

It is therefore necessary to realise that the maximisation of food production is the more natural thing and that its sacrifice on other grounds would be short-sighted. An attempt has been made to assess the economic condition of the farmer by the preparation of a parity index with two components viz., (1) the index of the price, received by the farmer for the commodities marketed by him and

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(2) an index of the prices paid by him which is a component of the index of the cost of living of the farmer and the index of the cost of cultivation. The index fell by two points from February to March in the case of foodgrains and by 22 points in the case of commercial crops in the same period. This will illustrate how the food prices will keep up its head in a falling market. There is a very well informed school of thought which holds that we are definitely on the road to a slump and that the artificial high prices of cash crops will no more stage a comeback.

In such a prospect, the increase of food production without necessarily cutting down commercial crop production will be the most sensible thing. Against this background of facts, the present decontrol must be regarded by farmers as the best opportunity for increasing production. The fact that decontrol has been timed before the cultivation season, is another advantage for the producers. They can see the road clear, they can see the barbed wire of price control and procurement pushed aside. They can go ahead with confidence and zest and plan their operations. Indeed from all reports, such a feeling is manifest throughout the State. Everybody concerned should determine not to let time slip.

Planning for Future Seasons

Every farmer whether big or small should decide for himself how much increased production he could plan for in the next cultivation season. Such planning will be in his own interest which is as sacred as the interest of the community. We used to lament that there is widespread under-employment of the agricultural producers. The reason is not far to seek. It is not as if the farmers are not hard working and keen and intelligent. Nearly 80 per cent of our holdings are less than five acres in extent. The bulk of the producers are living on the margin and are unable to invest in the improvement of land. It would be interesting if a sample survey was made to find out if in all cases the entire extent is farmed in one way or another.

TRAINING IN SOIL FERTILITY: Under the auspices of the International Rice Commission of the Food and Agricultural Organization, a post-graduate training course in soil fertility, with special reference to rice culture, was inaugurated by Sri Nityanand Kanungo, M.P., on 15th July 1952, at the Agricultural College and Research Institute Farms, Coimbatore. Here Sri Nityanand Kanungo is seen delivering his speech.



Hitherto rural credit has been mainly employed to liquidate the debt which was the aftermath of the last slump in prices. Now all available credit should be used for improving land and increasing production. The agricultural and land improvement loans for which increasing provisions are made by the Government and the credit afforded by the Co-operatives should be valuable aids to production at the present time.

Value of Extension Service

The major factor for securing increase in production is the application on a wide scale of the scientific knowledge relating to agriculture. The strengthening of the Government Extension Service will assist the farmers in this respect. It is needless to recount the various other aids provided by Government under the Grow More Food Programme with which both the public and the farmers are now familiar. The aids for reclamation of land by tractors, supply of machinery for power lift irrigation facilities for under-ground water exploitation, the renovation of tanks, the distribution of innumerable minor irrigation works, large-scale distribution of chemical fertilizers, the encouragement of compost production, the supply of improved seeds, the popularization of contour bunding and soil conservation measures, the reorientation of research work in order to be of direct use to the farmers, and the starting of village agricultural associations would be useful to increase production. Encouraged by the good results of the application of improved methods of agriculture, many farmers are now confident of making investments on improvements in their own farms on their own account without looking forward to Government help. This is a good sign of the possibilities of increasing production.

The new type of agriculture for securing increased production is the one that will give employment throughout the year. Wherever possible irrigated crops, garden and dry crops, development of topes and improvement of pastures are all to be undertaken together. Mixed farming which will improve land as well as livestock, will

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increase farm incomes which could be used for expanding production.

Role of Community Projects

The Community Projects that are now being undertaken are aimed at developing the material and human resources of the selected areas. Six projects which comprise about 200 villages each are being started and the work done in these 1,200 villages will demonstrate the possibility of locating production by integrated effort and application of sufficient capital and scientific methods.

A combination of circumstances render the present movement opportune to make an energetic effort to increase agricultural production. The giving up of food control which was a war-time legacy, a promising turn in the weather cycle, the downward trend in general price level which assures lower cost of production, a free market for farm produce which must secure favourable prices, the various Government aids which have popularised the technological possibilities of increasing yields of crops, the expansion and strengthening up of the Extension Service, the availability of credit facilities for greater investment in agriculture, the Community Projects which would be an object lesson of getting the best out of the land, are all favourable factors in the present situation.

Deficit agricultural production means shortages, lower national income, under-employment, less favourable balance of trade and gradual economic improvement. The deficit should be measured with reference to the maximum potential to which production could be raised by the efficient management of land, water and livestock. The co-efficient of efficiency will be the percentage of the actual achievement of the potential. Rightly or wrongly the intelligentsia influences the popular mood. The need of the hour is for all concerned to stress on the present possibilities of increasing production in agriculture so that the humblest in the land may have more rice in their pots, a little more cash in their pockets and ample work to do.

(By Courtesy, A.I.R., Madras)

Grant for State Women's Food Council

The Government have sanctioned a recurring grant of Rs. 322-8-0 per mensem for a period of one year from December 1951 to the Madras State Women's Food Council.

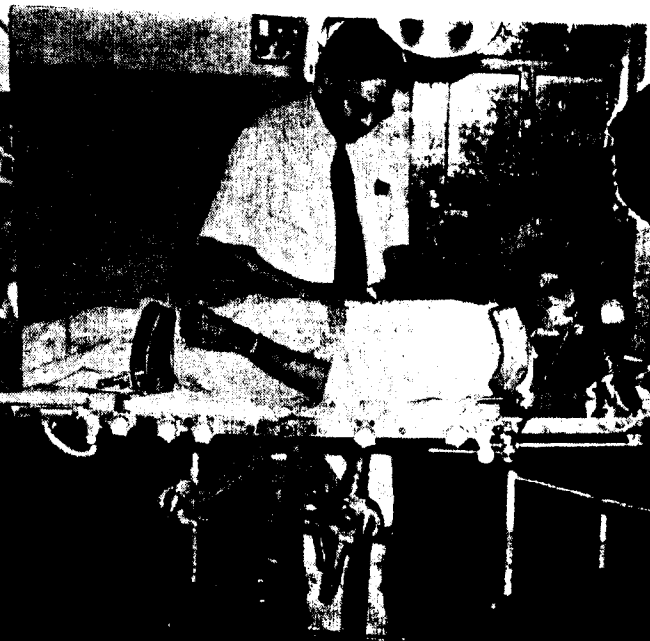
VALUE OF GREEN MANURE: Sri Nityanand Kanungo visited the Research Institute Farms. Picture shows the Paddy Specialist explaining to Sri Kanungo the good results obtained by using green manure.





The Mahatma Gandhi Memorial T.B. Sanatorium at Tanjore which was declared open by Sri P.S. Kumaraswami Raja.

A patient is being examined.



An up-to-date instrument used in treatment of the disease. Its use is being explained to the Chief Minister.

The Chief Minister addressing on the occasion.



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BUDGET AT A GLANCE

THE BUDGET FOR 1952-53

	Preliminary Accounts, 1951-52. RS. IN LAKHS.	Budget Est. 1952-53 RS. IN LAKHS.
I. Revenue Account—		
A. Revenue (on the basis of existing taxation)	59,17.94	61,75.74
B. Expenditure on Revenue Account	62,47.04	65,34.44
C. Deficit (A minus B)	— 3,29.10	— 3,58.70
II. Capital Expenditure outside the Revenue Account—		
(i) Capital outlay excluding State Trading Schemes	19,67.82	19,86.50
(ii) State Trading Schemes	1,31.11	88.00
Total	18,36.71	20,74.50
III. Loans and Advances by the Madras Government—Net disbursements	3,17.52	1,31.97

Sri C. Subramaniam, Finance Minister, presenting the Budget for 1952-53 in the Madras Legislative Assembly



Notes For Farmers

Intensive Cultivation Scheme

As the Intensive Manuring Scheme in Madras State was a great success during 1951-52, the Government of Madras have ordered its continuance for 1952-53 also according to which takkavi loans will be granted at the rate of Rs. 25 per acre up to a maximum of Rs. 200 per ryot to enable him to purchase chemical fertilisers for his paddy crops. A sum of Rs. 82.01 lakhs has been sanctioned for granting loans to the ryots for the purchase of chemical fertilisers in 1952-53. The loans will be recovered in full immediately after the harvest of the long-term crops with February-March 1953 kist.

The following areas have been classified as Intensive Cultivation areas for the year 1952-53.

1. The entire districts of Srikakulam, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Nellore, South Arcot, Tanjore, Tiruchirappalli, Madurai, Tirunelveli, South Kanara, Malabar and Chingleput.

2. Hadagalli, Hospet, Siruguppa and Royadurg taluks of Bellary district.

Cumbum, Kurnool, Siruvel, Nandyal, Nandikotkur and Koilkuntla taluks of Kurnool district.

Cuddapah, Proddatur and Jammalamadugu taluks of Cuddapah district.

Gobichettipalayam, Bhavani, Erode, Dharapuram, Palladam and Coimbatore taluks of Coimbatore district.

Namakkal taluk of Salem district.

3. (i) Puttur, Chittoor, Tiruttani, Kalahasti and Chandragiri taluks of Chittoor district; and

(ii) Ramanathapuram, Paramakudi and Tiruvadanai Taluks of Ramanathapuram district which are commanded by the Well Subsidy Scheme.

(iii) The whole of North Arcot district excluding Chengum and Tirupattur taluks.

The Government have sanctioned special staff for the implementation of the scheme in the districts of East Godavari, Krishna, Guntur, Nellore, South Arcot, Tanjore, Tiruchirappalli, Madurai and Tirunelveli with effect from the date of appointment up to 30th November 1952 or till the necessity therefor ceases, whichever is earlier. In other districts the scheme should be implemented by the existing Agricultural staff. Arrangements have been made for moving sufficient stocks of fertilisers to the districts concerned well in advance of the season. The Agricultural Department will expedite the supply of fertilisers to co-operative societies and tender firms in advance so that the fertilisers may be made available to the ryots even in interior parts of the districts. Collectors have been authorized to make necessary allotments to meet the expenditure towards the distribution of loans.

The following special facilities have been provided under the scheme: (1) Takkavi loans will be liberally granted to the needy agriculturists. An additional staff consisting of one Special District Agricultural Officer and several Agricultural Demonstrators, Maistries 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. (2) Advice will be offered by the officers of the Agricultural Department on the mode

Intensive Manuring Scheme

The Government have sanctioned the continuance of the Intensive Manuring Scheme for the year 1952-53 and have also allotted a sum of Rs. 82.01 lakhs for granting loans to the ryots for the purchase of chemical fertilisers. After consideration whether the loans should be granted free of interest or not the Government have decided that interest at 4½ per cent per annum should be charged on the loans granted to the ryots under the Intensive Manuring Scheme.

The Director of Agriculture and the Collectors have been requested to issue instructions that interest at the rate of 4½ per cent per annum is charged and recovered from the loanes after the harvest of the long-term crop along with the March 1953 kist.

Ryots are therefore advised to make full use of the special facilities granted to them and thus make a substantial contribution towards achieving self-sufficiency in food-grains.

For details on the quantity of different fertilisers to be used, all ryots are advised to contact the nearest Taluk Agricultural Demonstrator or the District Agricultural Officer of the District.

of application of these fertilisers. (3) Fertilisers will be taken within easy reach of the agriculturists. (4) Loans will be granted on the personal security of the ryots concerned.

Subsidy for Rural Compost to End

In view of the refusal of the Government of India to grant subsidy for the manufacture of rural compost during 1952-53, the Government of Madras have decided to discontinue the Rural Compost Scheme. The Director of Agriculture has been informed that the subsidy of Re. 1 per ton of rural compost manufactured by the ryots should be withdrawn with immediate effect.

Tractors for Non-Agricultural Uses

The Government have directed that the rate of hire charges for the supply of any tractor for non-agricultural purposes should be 100 per cent over the existing rates.

The tractors will be supplied for non-agricultural purposes during the off-season, when the soil conditions are unsuitable for ploughing work.

State Food Advisory Committee Abolished

The State Food Advisory Committee, reconstituted in the Order dated September 12, 1949, has been abolished, in view of the Government's revised food policy.

Crops Reports

Blackgram

The area sown with blackgram in the Madras State in 1951-52 is estimated at 281,000 acres. Compared with the estimated area of 283,100 acres of the previous year and the average area of 296,000 acres during the previous five years, the present estimate shows a decrease of 0.7 per cent and 5.1 per cent respectively. The decrease in area this year is due mainly to want of rains at the time of sowing.

The crop is grown mainly in the districts of Srikakulam, Visakhapatnam, East Godavari, Krishna, Guntur, South Arcot, Salem, Coimbatore, Tiruchirappalli, Tanjore, Madurai, Ramanathapuram, Tirunelveli, Malabar and South Kanara. An increase in area is estimated in the districts of Srikakulam, Visakhapatnam, East Godavari, Guntur, South Arcot, Chittoor, North Arcot, Tiruchirappalli and Malabar, and a decrease in the other regions of the State except in Bellary, Cuddapah and South Kanara where the area was the same as that of last year.

The yield per acre is expected to be below the normal in all the regions of the State due mainly to want of adequate rains during the growth of the crop. The seasonal factor for the State as a whole works out to 81 per cent of the normal as against 77 per cent estimated for the previous year. On this basis the total yield works out to 24,500 tons. Compared with the yield of 23,700 tons estimated for the previous year and the average yield of 26,500 tons during the previous five years, the present estimate shows an increase of 3.4 per cent, and a decrease of 7.2 per cent respectively.

Potatoes

The potato crop is grown chiefly in the Nilgiris District and to a small extent in Salem and Madurai Districts of the Madras State. This report relates to the period up to the end of December 1951.

The area sown under the winter crop in 1951-52 is estimated at 3,650 acres. Compared with the area of 4,060 acres estimated for the corresponding period of last year, this is a decrease of 10.1 per cent.

The yield is expected to be normal in Salem and Madurai Districts. In the Nilgiris District the harvesting of the crop has concluded and the yield is reported to be below the normal, due to frost especially in Ootacamund Taluk.

Greengram

The area sown with greengram in the Madras State up to 25th December 1951 is estimated at 467,800 acres. Compared with the estimated area of 458,100 acres for the corresponding period of last year, it is an increase by 2.1 per cent. Compared with the average area of 466,400 acres for the previous five years, it is an increase of 0.3 per cent. The increase in area this year is attributed to timely rains at the time of sowing.

The crop is mainly grown in the districts of Srikakulam, Visakhapatnam, East Godavari, Krishna, Guntur, Bellary, Nellore and Tanjore. A decrease in area is estimated in the districts of Srikakulam, West Godavari, Guntur,

Cuddapah, Nellore, Chingleput, North Arcot and Coimbatore and an increase in the other regions of the State except in Chittoor, Madurai and Ramanathapuram where the area was the same as that of the last year.

The crop is reported to have been affected by delayed and inadequate rains in the districts of Kurnool, Anantapur, Chingleput, Coimbatore and Tanjore. The yield is expected to be below the normal in all the districts of the State. The seasonal factor for the State as a whole works out to 87 per cent of the normal as against 85 per cent for the previous year. The increase in the seasonal factor this year is largely due to better season for greengram in parts of the Circars Districts. On this basis, the total yield works out to 34,100 tons in terms of cleaned grain. Compared with the yield of 33,100 tons estimated for the previous year, the present estimate is an increase by 3.0 per cent. Compared with the average yield of 32,300 tons for the previous five years, it is an increase by 5.6 per cent.

Tobacco

The area sown with tobacco up to 25th December 1951 is estimated at 336,100 acres. Compared with the area of 351,600 acres estimated for the corresponding period of last year it shows a decrease of 4.4 per cent. The decrease in area this year is largely due to inadequate rains at the time of sowing.

An increase in area is estimated in the districts of Visakhapatnam, Bellary, Coimbatore, Tanjore and Madurai and a decrease in area in the other regions of the State except in Salem, Tiruchirappalli, Ramanathapuram and Tirunelveli Districts, where the area was the same as that of last year. The variation is marked in the district of Guntur (— 29,500 acres).

The crop is reported to have been affected by drought in the districts of Krishna, Kurnool, Anantapur and Cuddapah where the yield is expected to be below the normal. The condition of the crop in the other regions of the State is reported to be generally satisfactory.

Horsegram

The area sown with horsegram in the Madras State in 1951-52 is estimated at 1,356,400 acres. Compared with the area of 1,343,300 acres estimated for the corresponding period of last year and the average area of 1,398,400 acres for the previous five years, the present estimate shows an increase of 1.0 per cent and a decrease of 3.0 per cent respectively. The slight increase in area this year is due to timely rains at the time of sowing.

An increase in area is estimated in the districts of Visakhapatnam, West Godavari, Kurnool, Bellary, Cuddapah, Nellore, South Arcot, North Arcot, Salem, Coimbatore, Tiruchirappalli, Madurai, Tirunelveli and South Kanara and a decrease in the other districts of the State except in the districts of Chingleput, Tanjore and Malabar, where the area was the same as that of last year.

The crop is reported to have been affected by inadequate rains in the districts of Kurnool, Anantapur, Cuddapah, Nellore, Chittoor, North Arcot and Coimbatore. The yield per acre is estimated to be below the normal in all



Address by Sri C. Subramaniam, Finance Minister of the Government of Madras, from All-India Radio, Madras, at 9.30 p.m. on Friday, the 27th June 1952.

The Budget which I presented to the Legislature of this State this evening is my first one, and I would have felt happy if I could have announced reliefs and bounties all round. But in the prevailing conditions, none of you would have expected this miracle to happen.

Our Government took office less than three months ago, in circumstances of exceptional difficulty. The spectre of famine loomed large in many parts of this State and our energies and resources had to be harnessed for relief of the people, irrespective of the cost to the Exchequer. By the grace of God, rains have come down where most needed, given us hope. During these months of distress, spirited individuals and organizations have cooperated with the Government in alleviating suffering. I thank them all. Relief measures will be continued in so far as the extent required and for as long as necessary. The men of our Army in particular, have earned the good goodwill of the people by deepening wells, locating springs and distributing drinking water in Rayalaseema. They are now continuing their useful work in the areas.

In terms of money, the several relief measures including remissions and suspensions of Land Revenue and loans to cultivators are expected to cost the State Rs. 6 crores, over last year and this. My first Budget had therefore to be a Famine Budget.

The transactions of last year resulted in a revenue of Rs. 329 lakhs, and early enough, I could sense that the current year would also show a deficit of the same. When this position emerged, what could I have done? One course open to me was to cut down expenditure and put a ban on all new schemes, but that was not desirable in a Welfare State.

National Five-Year Plan

You know, a National Five-Year Plan has been announced and is now being implemented. So far as our State is concerned, there is nothing very spectacular in this

Relief Measures in Stricken Areas To Cost State Rs. 6 Crores

Finance Minister Presents Budget For 1952-53

Plan, as it provides only for the continuation of the many schemes of development that have been under way, during the last few years. Would it have been wise for me to ignore even this modest Plan and arrest all development schemes on the plea of inadequate resources? That should certainly have met with public disapproval. Again, economy in administrative expenditure is desirable, and the Government will do whatever is possible in this direction. But large-scale retrenchment would throw into the streets a number of useful people, which can only add to the prevailing distress. That way does not lie a lasting solution to our financial difficulties.

You may ask, "What about our reserves?" This Government had nearly Rs. 44 crores worth of securities on the 1st April 1946, but this had been reduced to about Rs. 14½ crores by the 1st April 1952, and this was not adequate to cover even the capital expenditure of about Rs. 20 crores anticipated in the current year. The reserves were utilised on useful capital works, mainly on the Irrigation and Electricity side. The major schemes are nearing completion and their benefits will accrue to the public within a year or two. It is incumbent on us to push through these works—the Tungabhadra, Lower Bhavani, Malampuzha and other Irrigation Projects, the Machkund and the Moyar Hydro-Electric Projects and other schemes for extension of electricity to the country side as early as possible.

Levy of Fresh Taxes

The National Plan itself envisages additional taxation, so as to bring in about Rs. 4 crores of extra revenue

every year. The Government therefore came to the conclusion that this was hardly the time to grant tax reliefs and thereby seek popularity, but that it was their duty to levy fresh taxes.

The proposals made are—

(a) A surcharge on passengers travelling by public transport buses at the rate of one pie per mile.

(b) Enhancement of the Sales Tax on motor spirit from 4 annas to 6 annas per gallon. Transport buses subject to surcharge on passenger fares will be given full rebate on this additional levy, from the date the surcharge is actually collected.

(c) Levy of a surcharge on Land Revenue on larger holdings based on a sliding-scale.

(d) Levy of betterment fees on lands newly brought under irrigation at public expense. The levy is proposed to be spread in easy instalments over a period of years.

(e) Levy of a special tax on the sales of foreign liquor to permit-holders.

These measures are expected to bring an extra revenue of about Rs. 4 crores per annum and of about Rs. 270 lakhs during the remaining period of the current year. With this addition, our revenues for this year will come to about Rs. 64.46 lakhs, and the expenditure on revenue account will be about Rs. 65.35 lakhs, leaving a small deficit of about Rs. 89 lakhs, which may be covered in due course by probable economies in expenditure.

Now let me turn to the new schemes which have been provided for in the Budget. The ultimate cost of all the

new schemes provided in the Budget amounts to Rs. 6 lakhs non-recurring and Rs. 42 lakhs recurring. Special mention may be made of a building grant of Rs. 4 lakhs towards the opening of a new aided Engineering College at Karaikudi, a building grant of Rs. 2 lakhs to another aided Engineering College at Coimbatore, and special grants of about Rs. 1 lakh each to the Andhra and Annamalai Universities and Rs. 30,000 to the Madras University. It is proposed to raise the Government Arts College for Women, Guntur, from II grade to I grade and new courses of study are being opened in the Arts Colleges at Srikakulam, Kumbakonam, Madras, Rajahmundry and Pudukkottai. It is also proposed to put up new buildings to accommodate the Engineering College, Anantapur, now located in semi-permanent army huts.

In the Public Health Department also, several beneficent schemes are being taken up. The available bed strength is being increased in the City and district hospitals to the extent new space is available. The expansion of the Guntur Hospital, to an ultimate bed-strength of 500, is being sanctioned along with the proposal to construct Medical College buildings. Grants-in-aid will be given for 38 new Maternity and Child Welfare centres. A special grant of Rs. 2 lakhs is proposed to a new tuberculosis sanatorium in Malabar. A programme for the provision of drinking water in the Agency areas, at an ultimate cost of Rs. 16 lakhs is being sanctioned.

Amongst the new schemes of the Animal Husbandry Department, the key-village scheme is of special interest because it aims at stocking certain select areas with cattle of improved breeds, to serve as centres for the spread of those breeds to adjacent villages. In the Industries Department, it is proposed to sanction the manufacture of 50 additional hand-boring sets, for being hired to cultivators. The accommodation available at Todhunter's for low paid employees of the Government in Madras will be increased by the construction of 30 additional quarters at a cost of Rs. 2 lakhs.

The Case of Public Servants

Those of my listeners who are public servants may be wondering why I have not said anything so far about their demands for an increase of their pay and allowances. The Government are fully alive to their difficulty and believe me, they want to help this useful class of people to the utmost. But they are not sure that a direct addition to their emoluments would confer on them benefits commensurate with the huge cost to the general tax-payer. As soon as we took office, we gave our careful consideration to this problem and the Government have already sanctioned fee concessions to take effect from the 1st July for the children of all non-gazetted officers, employees of local bodies and all aided school teachers.

This form of assistance will bring relief to those who need it most and so should be welcomed generally. The extra cost to the State on this account may be of the order of Rs. 1 crore per annum, and the Budget for the current year provides Rs. 50 lakhs for it provisionally. The Government are also considering the question of revising the rules for medical assistance. The recent rise in prices of edible oils, condiments and textiles should benefit the public servants to some extent.

Plight of Handloom Weavers

This brings me to the sad plight of the handloom weavers of this State at present, as a consequence of the rise in prices. The Government have just sanctioned a scheme for setting them back on their feet. You also have



Sri C. Rajagopalachari, Chief Minister, presenting the Budget for 1952-53 in the Madras Legislative Council, on behalf of the Finance Minister

AGRICULTURE

the districts of the State. The seasonal factor for the State as a whole works out to 72 per cent of the normal as against 76 per cent estimated for the previous year. On this basis the yield works out to 87,500 tons. Compared with the estimated yield of 90,600 tons for the corresponding period of the previous year, and the average yield of 96,800 tons for the previous five years, the present estimate shows a decrease of 3.4 per cent and 9.6 per cent respectively.

Ginger

The area under ginger in 1951-52 in the districts of Visakhapatnam, Nellore, Madurai, Malabar, South Kanara and the Nilgiris is estimated at 13,100 acres. Compared with the area of 11,500 acres estimated for the corresponding period of last year, it shows an increase of 13.9 per cent. Compared with the average area of 10,900 acres for the previous four years ending with 1949-50 the present estimate reveals an increase of 20.2 per cent. The increase in area this year is due mainly to incentive afforded by the high price for ginger.

An increase in area is estimated in the districts of Malabar, South Kanara and the Nilgiris. The estimated area is the same as that for last year in the districts of Visakhapatnam, Nellore and Madurai.

The yield per acre is estimated to be normal in the districts of Nellore and South Kanara and below the normal in the districts of Visakhapatnam, Madurai, Malabar and the Nilgiris. The total yield is estimated at 4,410 tons of dry ginger. Compared with the estimated yield of 3,700 tons of dry ginger for the corresponding period of last year, it shows an increase of 19.2 per cent. Compared with the average yield of 3,590 tons of dry ginger for the previous four years ending with 1949-50 the present estimate reveals an increase of 22.8 per cent.

Cholam (Jowar)

The area sown with cholam in 1951-52 in the Madras State is estimated at 4,529,100 acres. Compared with the final estimate of 4,532,100 acres for the previous year, the present estimate is a decrease of 0.1 per cent. However, it shows an increase of 0.1 per cent when compared with the average area for the four years ended 1950-51, viz., 4,525,000 acres.

Cholam is not grown in the districts of South Kanara and the Nilgiris and is an insignificant crop in Malabar and Tanjore Districts. Compared with the final area for 1950-51 the present estimate reveals a decrease in Visakhapatnam, West Godavari, Guntur, Bellary, Anantapur, Cuddapah, Nellore, Chittoor and Coimbatore Districts, and an increase in the other districts of the State, except Tanjore and Malabar where the area is expected to be the same as that of last year. The decrease in area is marked in the districts of Guntur (-16,600 acres) Nellore (-9,100 acres).

The main crop has been harvested in most districts of the State. The yield per acre of both the Kharif and Rabi crops is estimated to be below the normal in all the districts of the State, especially in Anantapur, Cuddapah and Chittoor, due mainly to inadequate rainfall in the north-east monsoon period.

The seasonal factor for the State as a whole works out to 72 per cent for the Kharif crop and 70 per cent for the Rabi crop as against 73 per cent and 72 per cent respectively for the previous year. The total yield for the State as

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MADRAS INFORMATION

Minister for Agriculture at the Coimbatore Paddy Breeding Station



AT THE STATION: Dr. R. Naganna Goud, Minister for Agriculture, at the Paddy Breeding Station, Coimbatore.

Dr. R. Naganna Goud, Minister for Agriculture, Madras, during his visit to Coimbatore inspected the Paddy Breeding Station, Coimbatore, and evinced keen interest in the work that is being carried on there. The Navarai paddy was at its best. He was shown the breeding material that was on the field which included crosses for evolution of disease resistant strains, drought resistant strains, short duration 'dormant' strains, etc. He was impressed by the *Sesbania Speciosa* planted close along the edges of fields to get sufficient green manure for the next crop. The *Gliricidia* planted along the main channel bunds and one of the double bunds of the fields also attracted his attention. The Minister for Agriculture was glad to note that groundnut T.M.V. 2 and cotton crops, P. 216-F (short duration) and MU. 1, were being grown successfully in the rice fallows with a few irrigations.

a whole is estimated at 937,100 tons of unhusked grain or 796,600 tons in terms of cleaned grain. This represents a decrease of 1.5 per cent when compared with the yield of 951,400 tons of unhusked grain and 808,700 tons in terms of cleaned grain estimated for the previous year and a decrease of 9.6 per cent when compared with the yield of 1,036,300 tons of unhusked grain and 880,800 tons in terms of cleaned grain in an average year.

The average wholesale price of cholam per imperial maund of 82-2/7 lbs. (equivalent to 3,200 tolas) as reported from some of the important market centres on 29th March 1952 was Rs. 8-6-0 at Tiruchirappalli, Rs. 8-15-0 at Cuddapah, Rs. 9-1-0 at Rajahmundry, Rs. 10-14-0 at Bellary and Rs. 13-2-0 at Adoni.

Compared with the prices reported for the corresponding period of the previous year, the price has remained stationary at Rajahmundry and it showed a decrease of 18.3 per cent at Cuddapah. Cholam was reported to be not available at the other centres during the corresponding period of the previous year.

CO-OPERATION

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MADRAS INFORMATION

Co-operative Activities

Reviewing the administration of the Co-operative Department during 1950-51, the Government have observed that while recording the all-round progress made by the Co-operative Department during the year under notice, the Government are particularly glad to note its contribution towards increasing production of food and cottage industrial goods. The Government add that it is noteworthy that weavers co-operatives contributed nearly one-third of the handloom cloth manufactured in the State. Other notable items of progress are in the work of resettlement of ex-servicemen, rehabilitation of ex-tappers, equitable distribution of controlled commodities and relief of the housing shortage.

The other salient features of the Government's review are:

Co-operative Societies.—On 30th June 1951 there were 24,205 societies with 33.41 lakhs of members and Rs. 85.32 crores of working capital, as against 22,784 co-operative societies with 31.22 lakhs of members and working capital of Rs. 71.11 crores at the end of the previous year. The Government continued to use the co-operatives for the procurement and distribution of foodgrains, distribution of chemical fertilisers, and fabrication and distribution of agricultural implements. The Government also entrusted during the year the distribution of iron and steel to co-operative societies. The Government have also ordered the reallocation of mill cloth quota to co-operatives, which had been stopped in January 1950. Co-operatives of different types continued to play an increasing role in the production of food, textiles and cottage industrial goods.

Agricultural Societies.—The two-fold scheme in respect of agricultural societies, viz., one for increasing their number so as to bring within their fold 50 per cent of villages and 30 per cent of rural population and the other for reorganising them into multipurpose societies, was continued during the year with full vigour. The loans issued by agricultural credit societies during the year amounted to Rs. 7,65.29 lakhs, as against Rs. 6,44.00 lakhs during the previous year. Loans issued for productive purposes amounted to Rs 7,33.45 lakhs during the year, whereas the corresponding amount during the previous year was Rs. 6,13.57 lakhs.

Food Production.—Co-operatives again played a notable part in the production of food crops during the year. Twenty-two irrigation societies provided facilities for irrigating 4,894 acres; 2,026 societies undertook distribution of chemical fertilisers and they distributed 44,421 tons of ammonium sulphate and 10,153 tons of superphosphate to agriculturists. In addition to food production, co-operatives made a remarkable contribution to the production of textiles. The weavers co-operatives in the State numbering 1,017 with 1.76 lakhs of looms accounted for about one-third of the handloom cloth produced in the State. Their sales exceeded Rs. 1,000 lakhs.

Housing Societies.—Co-operative housing societies recorded another year of progress. The number of housing societies of all types increased from 280 to 293 during the year; 678 houses were completed by these societies during the year and 1,842 houses were in various stages of construction.

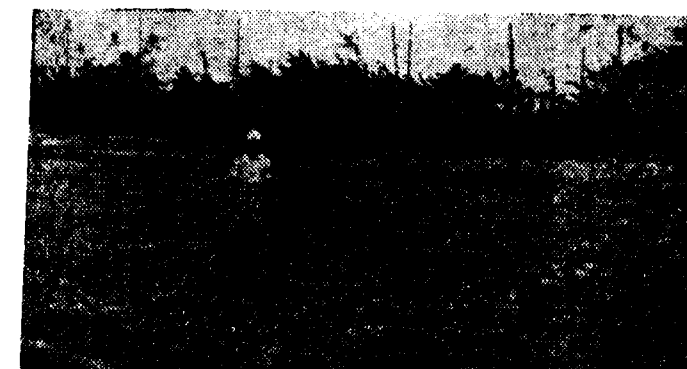


GREEN MANURE: *Sesbania Speciosa*, a green manure crop grown along the edges of paddy field bunds.



COTTON: P 216 F (short duration cotton) grown after the harvest of the paddy crop.

GROUNDNUT: TMV 2 (groundnut) grown successfully in the rice fallows.



you are aware, the Government have relaxed food rations from the middle of this month. I am gratified the welcome accorded generally to this bold measure the beneficial results that have already set in, on this front. The Government have full faith in all classes the people of the State—producer, merchant and farmer—and believe that they will play their part well, that Madras would have given a lead to the rest of the country in the safe return to normalcy.

Enlightened Co-operation

The public have another opportunity to show their enlightened co-operation in the constructive efforts of the

State. The Government will issue an open market loan for financing the capital outlay in this year. All of you, rich and poor alike, should see to it that this loan is a success.

There is no short-cut to prosperity. We can improve our conditions only if we work hard and in unison. If we continue as several warring groups, we will not even deserve the name of a State. As *Tirukkural* so tellingly puts it.

உலகு முழுதும் பாழடைந்திருக்கிறது
கொல்லும் குறும்பும் இல்லாது நாம்

The task before us is great and urgent, and the willing and wholehearted co-operation of one and all is required to meet this. It is no time for petty jealousies and bickerings. Let us join together in the service of the people, and we may hope that God will bless us.

(By Courtesy, A.I.R., Madras.)

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.	1950-51.	Preliminary Accounts, 1951-52.	Budget Estimate, 1952-53.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
	LAKHS.	LAKHS.	LAKHS.	LAKHS.	LAKHS.	LAKHS.	LAKHS.	LAKHS.
Education	4,59.72	5,90.27	7,03.70	8,85.94	9,58.41	10,42.65	10,95.64	11,79.67
Medical	1,80.00	2,15.93	2,38.50	2,76.54	2,96.18	3,11.87	3,14.46	3,33.80
Public Health ..	54.48	87.32	1,90.55(a)	90.54	1,14.42(a)	1,04.06	1,85.77	1,49.10
Sanitation works	97.42	1,56.15	2,84.94	3,96.31	6,33.70	8,09.03	10,03.75	10,25.57
Revenue and Capital Accounts).								
Culture	74.06	1,05.74	1,16.93	1,26.74	1,82.74	2,75.35	3,11.54	3,88.74
Primary	23.64	26.95	31.81	40.58	49.67	56.69	61.31	62.01
Operation	30.93	44.33	42.69	53.41	73.64	76.48	74.99	77.81
Industries	72.49	96.60	1,12.71	1,20.30	1,29.00	1,57.46	1,77.03	2,95.50
Priority Schemes (Capital account).	69.10	1,00.85	4,24.76	4,24.55	5,63.85	7,37.45	7,52.48	8,00.00
Total	10,61.84	14,24.14	21,46.59	24,14.91	30,01.61	35,74.04	39,86.97	43,12.20

(a) Rs. 100 lakhs in 1947-48 and Rs. 10 lakhs in 1949-50 represent contributions to the Rural Water-supply Fund.

Provision for New Schemes

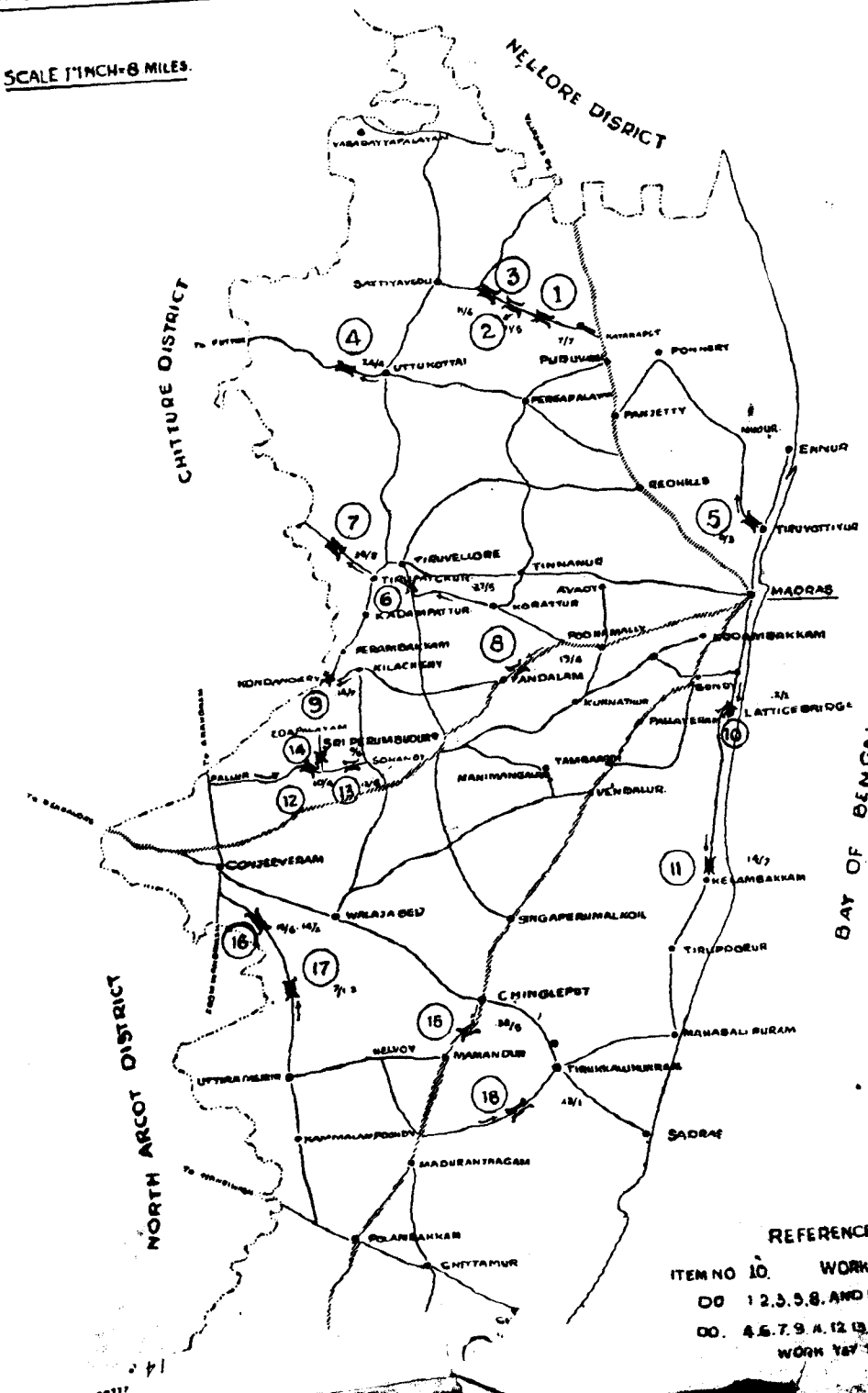
The new schemes provided for in the Revenue Account are as follows:—

	Provision in the Budget for 1952-53.
	RS. LAKHS.
(a) Education Department	35
(b) Grants to local bodies for new road works and for improved surfacing of roads and for village communications	46
(c) Medical and Public Health Departments	7
(d) Agriculture and Animal Husbandry Departments	6
(e) Industries Department	5
(f) Grants to local bodies to cover deficits	8
(g) Other Departments (Judicial, Police, Public Works—Buildings, etc.)	11
Deduct—Additional Revenue expected from some of the schemes	2
Total	116

MADRAS INFORMATION

CHINGLEPUT DISTRICT MAP

SCALE 1" INCH=8 MILES.



Vanamahotsava in Madras State

By Dr. R. NAGANNA GOUD, Minister for Agriculture

The subject of my talk tonight is 'Vanamahotsava in Madras State'. I shall briefly touch upon the importance of trees, how our forefathers valued, planted and preserved them, how an era of neglect followed with several attendant evils and the present compelling necessity to repair those evils.

Trees influence the local climate and help to bring about rain to supply water for drinking and irrigation. They prevent erosion of the soil, and preserve its fertility and productivity. They give us fruits, timber, fuel, fodder and green manure. They also lend beauty to the landscape.

Trees confer on man not only material benefits, but also provide the necessary environment for his spiritual advancement. It is under the shades of the forests that Indian metaphysics and the spirit of enquiry into the mystery of existence were born. The great Puranas and Upanishads were written in the sylvan setting of the forests. Many scenes in our two great epics, the Ramayana and the Mahabharata, were laid in the forest. The great Vijayanagar Empire was founded in the heart of the forest, while the warrior King Shivaji had his apprenticeship in the art of war in mountain fastnesses and forest glades. Our tradition is thus intimately linked with forests.

Life and Breath of Man

Our ancestors having realised that trees were the life and breath of man, preserved and planted them systematically and scientifically. They even inculcated a religious

From the talk broadcast by Dr. R. Naganna Goud, Minister for Agriculture, on July 19, 1952 at 9-15 p.m. from A.I.R., Madras.

VANAMAHOTSAVA AWARD TO SOUTH KANARA: Shri Sri Prakasa, Governor of Madras, presents the State Silver Shield to the District of South Kanara, the most successful district in the Vanamahotsava Campaign of 1950-51. Sri A. R. Rajaratnam, Collector of South Kanara, is seen here receiving the shield from the Governor.



fervour for rearing trees. They celebrated forest festivals and adored trees. They dedicated some species of trees as sacred to the gods; for instance, the Arasu and Vilva trees are held in veneration. History records that the Great Ashoka and other ancient kings planted banyan trees on the road sides.

But unfortunately an era of neglect followed with many evils in its train. By the circumstances created by wars, many forests have disappeared. Fires also are responsible for ruining some of our forests. The rapid denudation of tree growth from hill sides and cultivated plains had led to devastating floods, erosion of soil, progressive diminution of rainfall and general deterioration of climatic conditions. The stage has already been reached when the cultivator is compelled to divert all his valuable farmyard manure from his field to his hearth, resulting in ever-increasing impoverishment of the soil.

Zeal for Planting Trees

Today, we are up to arrest the pillage that has been going on for years. To prevent this destruction of vegetable cover of the soil, we should arouse consciousness among our people regarding the value of trees and instil in them a zeal for planting trees and protecting them. This tree planting movement was started above five years back. Advantage was taken of the enthusiasm aroused among the people in connection with the celebration of the Day of Independence and the Tree Planting Week was celebrated in this State from 15th August during 1948 and 1949, but experience has revealed that tree planting done in the middle of August suffers from a grave handicap, that is, the loss of half the growing season which commences in July, when the south-west monsoon sets

in. It has therefore been decided by the Government of India to observe the first week of July as the National Tree Planting Week and that the Week should be celebrated as an annual national festival for planting of trees and should be called Vanamahotsava. We have accordingly been celebrating Vanamahotsava in this State in the first week of July from 1950. Only a couple of weeks back we celebrated the third Vanamahotsava throughout this State.

It is very difficult to fix a week for Vanamahotsava which will suit all parts of the country from the climatic point of view, but for the purpose of intensive propaganda and uniformity, the first week of July has been chosen; but the planting of trees can go on till October for statistical purposes and for the various prizes awarded.

Where to Plant Trees

After having mentioned why we should plant trees and when we should plant them, I shall now indicate where we should plant the trees. At present 17.1 per cent of the total area of the State is covered by forests and another 1.9 per cent of the area is covered by miscellaneous trees and groves. It is considered that the economic well-being of the State cannot be maintained at a safe and proper balance, unless the proportion of the area under forests is increased to at least 25 per cent. The Forest Department is intensifying its work for the regeneration of the denuded forests and to expand the forest area. The villagers should co-operate with the Forest Department in putting down forests fires when they occur. The public at large, the several Government Departments, Municipalities, District Boards, Panchayat Boards, the Universities, colleges and schools and other private institutions should interest themselves in planting trees in their local areas.

There is large scope for planting trees in compounds of Government buildings, Court Houses, rest houses, camping grounds, compounds of private bungalows, public gardens, burial grounds and other open spaces; canal and channel banks, road sides and railway lands; school and

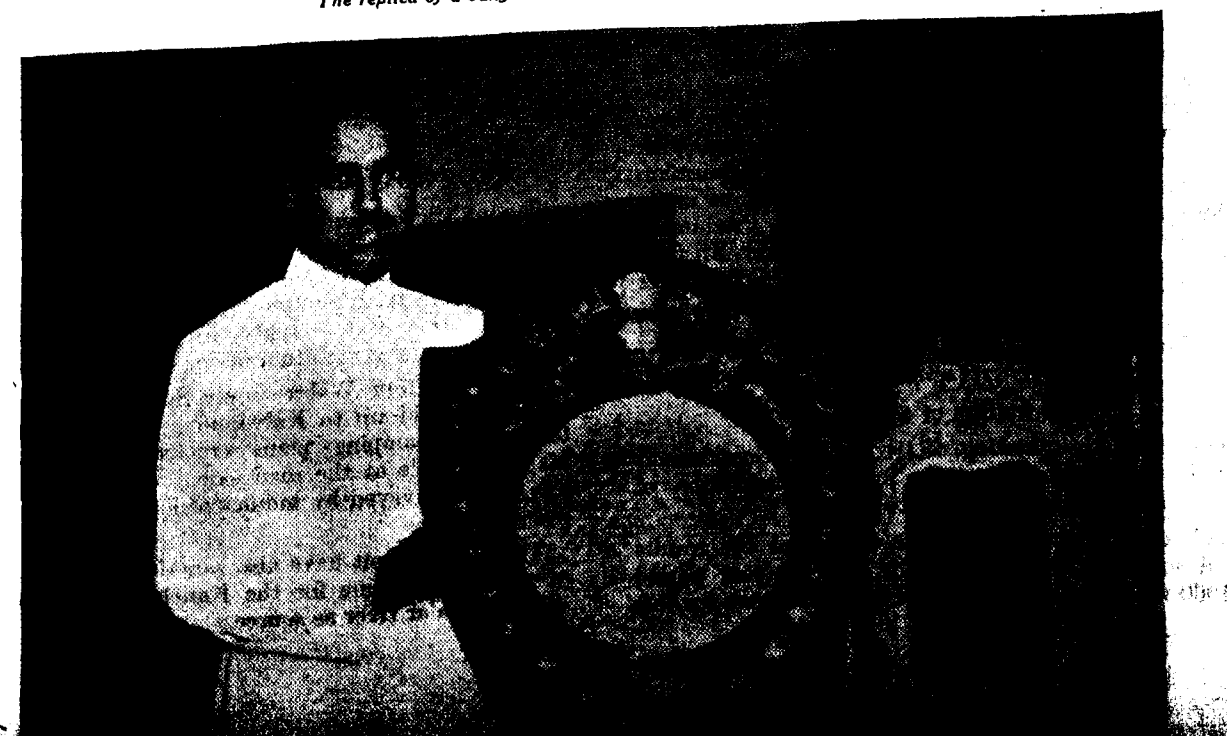
college compounds; village waste lands and the fields of cultivators. Under a provision in the Board's Standing Orders ryots can plant trees on poramboke lands, which are not available for assignment under darkhast rules. Government lands which have been lying waste for ten years can be granted under the Cowle system for planting private or public thopes.

What Trees to Plant

I shall now mention what trees should be planted. In the choice of trees, we must give first priority to fruit-bearing trees like the mango and the jack. The next place should be given to fodder trees like Karuvellam or Nalla Thumma and Illupai or Ippaeh and green manure trees like Pungai. We must also plant quick growing fuel trees like the babool and casuarina. The village fuel forests should be developed and the use of farmyard manure as fuel should be prevented. The Highways Department should plant avenue trees like the neem, the banyan, the tamarind and the Flame of the Forest for shade and ornamental purposes. The Agricultural Department has published pamphlets giving details of the several species of fruit, fodder, green manure, fuel and avenue trees that can be usefully planted and how and where to plant them.

The Government are giving all necessary facilities for planting trees. Each Collector is given a sum of Rs. 1,000 each year for meeting the expenditure connected with the celebration of the Vanamahotsava in his district. Recently Government have sanctioned about Rs. 20,000 towards the purchase of about 40,000 coconut seedlings for planting on the sides of roads and on the main bunds in wet land areas in the Rayalaseema Districts. The Chief Engineer of Highways and the Presidents of District Boards in those districts have also been asked to undertake coconut planting wherever possible. The Director of Agriculture and the Chief Conservator of Forests have been asked to arrange for the supply of seeds and seedlings for sowing or planting throughout the State, particularly during the

THE SHIELD: The Collector of South Kanara, Sri A. R. Rajaratnam, with the Vanamahotsava Award Shield. The replica of a banyan tree is embossed in silver on the Shield.



Record Road Development in Chingleput District

In the course of the last two years the expenditure on Government roads and District Board works has nearly trebled with reference to the previous years' averages. The average annual expenditure on Government roads and District Board works in the three years ending 1949-50 was about Rs. 16 lakhs. During 1950-51 it rose up to Rs. 35.73 lakhs. During 1951-52 it is expected to exceed Rs. 45 lakhs. This increased expenditure since 1950-51, marks accelerated progress on all phases of Road Development.

New Road Formation Works

New road formation under Post-war Road Development began in 1947-48 with an expenditure of about Rs. 6,000. It increased steadily to 30 miles length of formation at a cost of about Rs. 1 lakh in 1949-50, and attained great momentum in 1950-51 with a progress of 155 miles, and an expenditure of Rs. 5.20 lakhs. The programme for 1951-52 is about 245 miles and the anticipated expenditure is about Rs. 7 lakhs.

With these, Chingleput District would have put into execution almost all the village roads under the five-year programme of Post-war Road Development and there will be very few village roads left under the programme. Chingleput District will thus perhaps be the first district in this State, to take up for execution within the first quinquennium almost all the roads in the five-year programme, and the first to fulfil the target in the five-year programme.

The 400 miles of new roads that will be completed in the course of the two years ending with 1951-52 will be giving access to villages with a total population of several lakhs of people, who had hitherto no mode of communication for transporting their produce.

Bridges and Culverts

In the course of the last two years ten important bridges and causeways have come up for execution. Eight other important bridges and causeways are expected to come up

Pictures : TOP TO BOTTOM.

1. Poovallikkuppam Road.
2. Bridge work at Thiruvottiyur-Ponneri-Panjetti Road.
3. New bridge in place of old Lattice Bridge.
4. Cement concrete surfacing on the Great Northern Trunk Road.
5. Conphalt surfacing on the Great Northern Trunk Road.

for execution very soon. The total estimated value of all these is Rs. 35 lakhs.

Quite a large number of culverts have also been put up or are under execution during the last two years both on the existing roads and on new village roads. They include about five hundred pipe culverts and precast slab culverts.

Improved Surfacing for Roads

In the course of the last five years substantial improvements like confalt surfacing on the Great Southern Trunk Road, cement concrete surfacing on the Great Northern Trunk Road, on Tirumushi-Satyavedu road near Thiruvallore, and on Kancheepuram-Wandiwash road near Kancheepuram, and asphaltic concrete surfacing at Kancheepuram have been carried out at a total cost of Rs. 25 (twenty-five) lakhs.

Apart from these, surface dressing with precoated chips has also been done on an extensive scale.

This type of dustless surfacing is being done mostly under the normal maintenance grant. The road surface in the built up areas in 80 villages and towns has been improved with dustless surfacing and tens of thousands of the residents have been spared from the ordeal of dust nuisance.

This work is being continued not only in built-up areas but also on other reaches of important main roads where the water bound macadam surface is unsuitable or uneconomical. The five-year programme being drawn up for this purpose is expected to be completed in 2 to 3 years in this district.

Avenue Programme

The five-year programme of avenue plantation was inaugurated in this district by the Hon'ble Sri K. M. Munshi, Minister for Agriculture, and the Hon'ble Sri M. Bhaktavatsalam, Minister for Public Works, Madras State, presided. This programme contemplates the planting of about 20,000 trees in barren reaches. Apart from this, gaps in the existing lines of avenues will be filled under normal maintenance grant.

Pictures : TOP TO BOTTOM.

1. Asphaltic concrete surfacing work in Kancheepuram.
2. Avenue on Chingleput-Thirukalukundram Road.
3. Turfed edge bund with side drain and row of tree guards—Arakom—Kancheepuram Road.
4. Ravages of Avenue theft.
5. Cheap edge protection with parabolic shape for slopes in embankment.



Vanamahotsava. Last year the Agricultural Department distributed over 40 lakhs of seedlings and 6,300 lb. of seeds and over 13,000 fruit trees. The village officers with their talaiyaries and vettis who are in constant touch with the villagers for ascertaining the crop grown on their fields, have been instructed to ascertain their requirements of plants and send weekly reports to the Revenue Inspector and the Tahsildar, who will take steps to supply the plants.

The maistries and fieldmen of the Agricultural Department who are constantly visiting the villages for distribution of seeds, fertilisers, etc., have also been asked to ascertain from the villagers their requirements of plants and send the list to the Agricultural Demonstrators, to get the plants from them and supply them to the villagers. They will also advise them what plants they should plant and how to plant them. The maistries and fieldmen of the Agricultural Department and the village officers of the Revenue Department have also been asked to ascertain from the villagers their requirements of seeds and plants for the next Vanamahotsava and pass on the information through the Agricultural Demonstrator or the Tahsildar concerned to the Director of Agriculture or the Collector or the Chief Conservator of Forests who will take necessary steps for getting the seeds and plants and supplying them to the different centres well in advance.

The countrywide response generated during the celebration of the Vanamahotsava festival has demonstrated an inherent love for trees in the people. To direct the overwhelming enthusiasm aroused throughout the country along permanently fruitful channels and to stimulate an abiding interest in our forests, the Government of India have formed an All-India Forest Lovers Association (Vanapremi Sangh). The Association will forge a common bond between all lovers of trees and woods, private owners of forests and professional foresters. It will ensure an identity of outlook and instil an *esprit de corps* among those engaged in the raising of trees and their upkeep.

The President of India is the patron of the Association. The affairs of the Association will be controlled by a Central Board with the Minister for Agriculture and Food, Government of India, as its ex-officio President. At the instance of the Government of India, the question of setting up a State Board of the Association for this State is under consideration. We have already set up a State Standing Committee for Tree-Planting consisting of officials and non-officials and with the Commissioner of Food Production as its Chairman. An executive committee has also been formed to assist the State Standing Committee. The Food Production Committees in the districts are functioning as District Standing Committees for tree planting. Sub-Committees have also been formed in the districts to assist the District Standing Committees. These Committees plan and direct the tree planting campaign in this State.

Presentation of Shields

To encourage the planting of trees, the Government of India have sanctioned a scheme for the presentation of several shields on all India and State basis.

I shall now refer to the targets fixed and the results achieved so far in our State. For the ten-year period 1951-1960 we have fixed a target of 650 lakhs trees for this

State. In 1950 against a target of 40 lakhs trees, 83 lakhs trees were planted, of which 41 lakhs survived. In 1951 against a target of 50 lakhs trees, about 71 lakhs trees were planted. In 1950, the South Kanara District planted about 17.4 lakhs trees of which 11.6 lakhs trees survived. It has won the State Silver Shield and the All-India Rajendra Shield, being the best district in the Indian Republic. The target fixed for this year is 55 lakhs trees and I appeal to all my listeners to see that this target is over-reached.

The most important part of the tree-planting campaign is the difficult task of after-care of the trees planted. It is necessary that the seedlings planted should be watered till they reach maturity. It is also very necessary to see that the plants are protected from the ravages of cattle by providing suitable tree guards made of thorns, scrap iron or old iron materials or barbed wire.

I once again appeal to all the citizens of this State to plant and protect more trees and bring plenty and prosperity to this State. *Jai Hind!*

(By Courtesy, A.I.R., Madras.)

Grant of Lands for Manufacture of Salt : Procedure Orders Modified

The Government have modified an Order, dated October 14, 1950, which prescribed the procedure in regard to grant to the applicants of State lands suitable for the manufacture of salt.

The assignment of lands will, in future, be made only on condition that the lands are liable to resumption by Government at any time on repayment of land value and the value of the created assets on the land. The lease shall be subject to the following conditions:—

(a) the lease should ordinarily be for a period of 25 years, with an option for renewal for another 25 years, with the proviso that Government would reserve to themselves the right of revising the rate of lease amount at the end of 25 years; (b) the grant of the lease and of its renewal will both be subject to the condition that no compensation (except that for the created assets on the land on a fair valuation) will be paid for the premature termination of the lease, in the event of the Government adopting a policy of nationalization.

Progress of Water-supply Schemes

The infiltration-cum-suction well at the Kalyani Swarnamukhi confluence source for the Tirupati Water-supply Scheme was sunk to the required level, pumping plant installed and trial pumping started recently. This will augment the water-supply to Tirupati through the already existing gravitation main.

In the Chittoor Water-supply Scheme, pumping mains have been laid up to Kalvagunta on Chandragiri Road, temporary pumping plant erected and water-supply made available at the road side. Water from this point has to be conveyed by municipal lorries for supply to the public.

The Government have also sanctioned the investigation of the pilot scheme for the Kancheepuram Municipality with the Palar river as source.

Ensuing Elections—Polling Arrangements Points for Candidates and Voters

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By SRI S. VENKATESWARAN, I.C.S., Chief Electoral Officer, Madras.

Members of the Armed forces, certain high dignitaries like former Governor-Generals, President, Union Ministers, the Speaker and Deputy Speaker of Parliament specified by the President under sub-section (4) of Section 20 of the Representation of the People Act, 1950; persons employed under the Central Government in posts outside India, the wives of persons falling under any of these three categories, and persons under preventive detention, can only vote by postal ballot, and if the postal ballot papers returned by these voters reach the Returning Officer in time, that is, before 5 p.m. on the day prior to the counting day fixed in this behalf by the Returning Officer, they will be scrutinised and taken into account at the counting. Persons including polling agents but not candidates or their election agents who are on polling duty at polling stations other than those where they are entitled to vote can vote by postal ballot if they have applied at least seven days before the date of the poll, and obtained the permission of the Returning Officer concerned. Every postal ballot paper must be attested by an officer as specified in the rules and must be returned to the Returning Officer by pre-paid post or messenger.

Electoral Rolls

Before I proceed to describe our polling arrangements in detail, it will be useful if I indicate briefly how our electoral rolls for the State Assembly and House of the People have been prepared. There is a distinct, self-contained part of the roll for each small village and for each block or ward

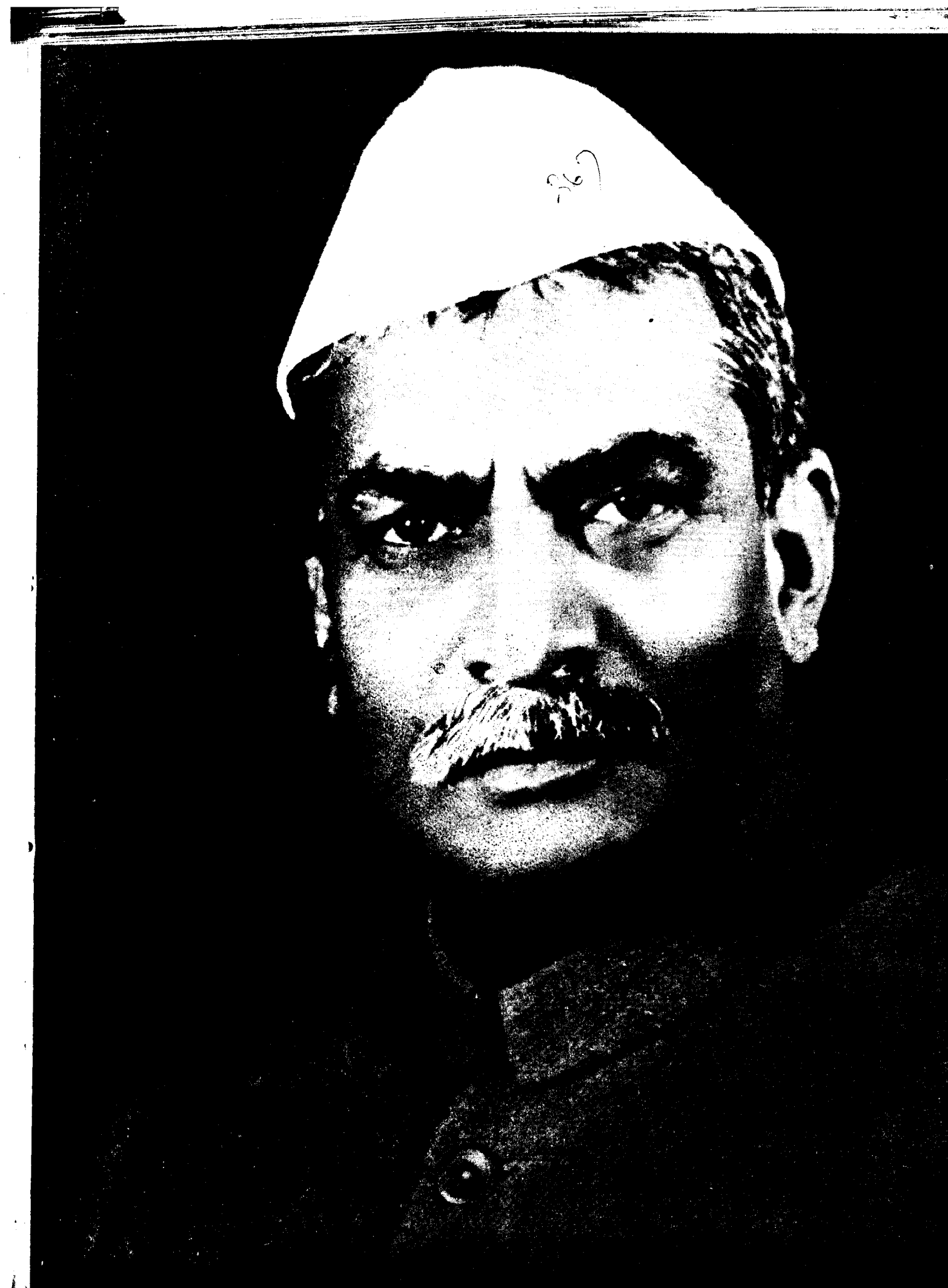
of large village and towns. Each voter's name is found in the part relating to the local area where he acted, resided or had otherwise the residential qualification during the qualifying period. There is a separate line in the electoral roll for each voter, with seven entries. The first entry is the voter's serial number; the second the voter's house number; the third the voter's name; the fourth the name of the voter's husband, if she is a married woman; the fifth the name of the voter's father or karnavan, in other cases; the sixth entry will specify the voter's sex; the seventh entry the voter's caste or tribe, as the case may be; while the eighth entry gives the voter's age as recorded at the time of enumeration.

Polling Time

In his own interest, each candidate should request his supporters to come to the booth early and vote. The polling hours for the forthcoming elections will be from 7 a.m. to 12 noon and 1 p.m. to 5 p.m. In order to facilitate quick voting, the candidate should give each voter who is promised or seems likely to support him, a small plain slip of paper with just two figures recorded on it thus, 2-205—to indicate that the voter's serial number is 205 in the second unit of local area attached to his booth. As each booth will have very few units attached to it, the candidates and their agents will have no difficulty in entering these figures. These number slips will enable the Assistant Presiding Officer to locate quickly, in

Aid to Voters

In his "Guide for Candidates", the Chief Electoral Officer, Madras, has suggested that each candidate should, in his own interest and in order to facilitate quick polling, arrange to give each voter, who has promised or is likely to support him, a small plain slip of paper giving particulars regarding his place of residence and serial number in the electoral roll where he has been registered as a voter. It has since been decided that all the particulars suggested in the Guide are not necessary and that the slip should contain only two figures as follows: "2-205", where 205 is the serial number of the voter in the electoral roll of the local unit where he has been registered, and 2 means that this unit is the second of the units of the voters in which have been allotted to the booth in question. As there will be only a very few local units attached to each booth, there will be no difficulty in giving the first figure, also, the number being determined from the order in which the rolls of the units allotted to the booth have been arranged in the electoral roll for the constituency. No particulars beyond two figures above should be entered on these number slips. The Official Guides posted at the polling stations will supply these number slips to those voters who have not already received them from the candidates or their agents or have lost them.



Despite of the continuous draught since 1950, as many 10,235 trees were planted on Government and District roads in 1950-51 and 16,890 are now surviving. During the current year it is proposed to plant 20,000 trees.

The problem of avenue theft still continues to be a great one. As the result of a special drive to round up thieves, in the course of the last 18 months more than 100 cases of avenue theft were detected and dealt with. In reaches where the crime was rampant raids were also conducted with success. In one such instance whole-sale cuttings with about 20 persons engaged in the crime were noticed and ten of them were caught red handed with about four tons of cut branches. The case is still going on.

Experimental Works

Apart from the execution of capital schemes and day-to-day maintenance works, attention is being devoted to research and experimental works as well. The following are among the experimental works :—

The Great Northern Trunk Road runs on high embankment in mile 32 to 33. Conventional revetment, being very costly would not have been quite safe, for the particular soil. This reach is being lined with cement slabs, with only 10 per cent cement. Considerable economy has been effected by this method. The results are very encouraging.

Recycled sand has been used extensively with good results for patch-work and for surface dressing.

Granite metal chips costing Rs. 180 per unit, make patch-work very costly and unsatisfactory, when the skin only is worn out of the old black top surface. Sand available locally costs less than Rs. 10 per unit and sand patch-work has been done with great success. It has been tried as a surface dressing also with good results. This method lead to all round economy and also ensured smooth riding surface.

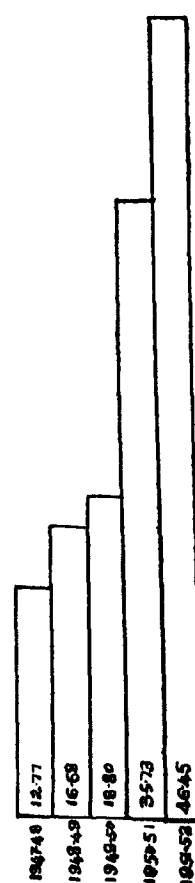
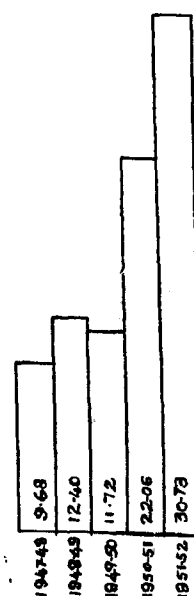
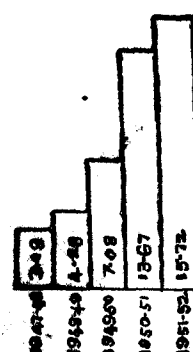
Gulleys in portions of roads in embankment have been a great problem. Various experiments are being conducted with cheap type of edge protection, shaping of slopes to parabolic shape, turving of slopes, etc., with interesting results.

Another type of culverts with mass concrete (unreinforced) laid around old bitumen drums have been evolved. They are cheaper than the conventional type of culverts or pipe culverts, and are suitable where there is no facility for skilled workmanship.

Experiments have also been tried in the matter of cheap designs for District Board buildings. The original type design with the conventional type of heavy roofing and roof timbers, was costing Rs. 7,500 for a shed of 54' x 16'. The type design evolved with light asbestos sheet roofing and considerable economy in roof timbers and reduction in the load on foundations costs only Rs. 4,500 for the same plinth area.

With the amount sanctioned for one new block and renovating an old one, one new block has been constructed and two old blocks were renovated in this manner, at Uttiramerur.

*Expenditure on Government Roads and District Board Works
(in Lakhs of Rupees).*





In spite of the continuous draught since 1950, as many 26,235 trees were planted on Government and District roads in 1950-51 and 16,890 are now surviving. During the current year it is proposed to plant 20,000 trees.

The problem of avenue theft still continues to be a great one. As the result of a special drive to remove the sprouts in the course of the last 18 months, hundreds of cases of avenue theft were reported. Candidates with. In reaches where the criminal constituencies should also conducted with success, *two ballot papers will be cuttings with above should put them into two different were noticed and being to their choice of candidates, and about four not both the ballot papers into the same box.*

Challenged Votes

If a voter claims to be a particular voter which, in fact, is not, any candidate or his election agent or polling agent can challenge him, that is, he must declare and undertake before the Assistant Presiding Officer to prove that the person is not the voter he claims to be. But the Assistant Presiding Officer will take no action in respect of any challenge, unless a sum of Rs. 10 is deposited with him in cash on the spot for each challenge. If the deposit is made, the Presiding Officer or the Assistant Presiding Officer may ask the voter to produce evidence of his identity, and also make a summary enquiry with the assistance of the village officer or official of the local body who has been deputed to assist him in identifying the voters. The Assistant Presiding Officer may also put leading questions to the voter—he can easily do so with reference to the entries in the electoral roll relating to other voters residing in or near the place of residence claimed by the voter—to satisfy himself as to the voter's identity. After such inquiry, the Presiding officer or the Assistant Presiding Officer who conducts it, is not satisfied as to the identity of the voter, he will refuse to supply any ballot paper or papers to him and he will be asked to leave the booth, apart from any action, that may be taken after the polling day to prosecute him for committing the offence of personation. If, on the other hand, the Presiding Officer or the Assistant Presiding Officer is satisfied that the challenge is not correct, the voter will be given his ballot paper or papers and allowed to vote in the normal way. In such a case, the Presiding Officer should also consider whether the challenge made was frivolous and not made in good faith, and if he has come to that conclusion, he must direct the deposit of Rs. 10 to be paid to the Government and his order in this respect be final. Even in cases where no forfeiture is thus effected, the deposit will not be returned until after the day of the poll.

Tendered Vote

It is also important that candidates should note that, though the election in an Assembly constituency and corresponding Parliamentary constituency are held separately in the same booth, they are in fact, two elections. This is why there are two separate compartments, separate polling clerks, separate papers, etc. But the identification of the voter and the tendering of the vote should be completed before the voter is given his ballot paper or papers for the Assembly voting compartment where he will vote first before voting in the Parliamentary constituency. A tendered vote in the Assembly Constituency, that is, the case of a voter who has already come to the booth and voted in his name in that constituency, and then tendered a vote in the Parliamentary constituency, the unfortunate voter will be taken

Granite metal chips costing Rs. 150 per unit, make patch-work very costly and unsatisfactory, when the skin only is worn on top of the patch. Sand available locally.

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into the voting compartment, first into the Assembly voting compartment and then into the Parliamentary voting compartment and then the Presiding Officer or Assistant Presiding Officer will ask him confidentially as to the candidate or candidates for whom he desires to vote, and will himself record the voter's choice on a special form called the tendered ballot paper which will be kept in a separate packet and not counted at all. But a challenge should be treated as a challenge only for the particular constituency where the challenging candidate is standing for election. If a candidate belonging to the other constituency wants to challenge the same voter, he must challenge again formally and deposit Rs. 10 for it.

Polling Arrangements

I shall now proceed to explain in detail our polling arrangements as they affect our voters. One of the provisions in our Election Law is that a voter can vote only at the place and in the manner prescribed under that Law. Hence the need for polling stations and booths. As a rule there will be separate booths for men and women voters and all the polling staff in booths set apart for gosha ladies will be women. We have provided for separate entrances and exits for each polling booth, so that there may be no room for any confusion. At the entrance to each polling station, there will be an official Guide wearing an armlet with the words "Official Guide" written on it in the regional language or languages. Near this Guide will be exhibited two large posters, separately for the Assembly and Parliamentary constituency, one indicating the particulars of voters allotted to each booth at the station, and the other showing the names of the candidates in the same order as in the final list of candidates notified by the Returning Officer, together with a description of the symbols allotted to them and samples of those symbols.

Method of voting by the Blind

A question has been raised as to the method of voting by the blind. In the case of voters who are blind, the procedure laid down in Rule 26 of the Representation of the People (Conduct of Elections and Election Petitions) Rules, 1951 will be strictly followed. The procedure is that, if owing to blindness or other infirmity, an elector is unable to read the symbol on the ballot box or is physically incapable of putting the ballot paper into the ballot box, the Presiding Officer or the Assistant Presiding Officer, will take the voter into the voting compartment, ascertain from him the candidate or candidates for whom he desires to vote, and put the ballot paper or papers in the ballot box or boxes accordingly. The officer will treat as an official secret the voters' choice of candidates, and will keep a brief record of each such instance without indicating the manner in which the votes have been cast. The voter's companion may enter the booth and go up to where the Assistant Presiding Officer is sitting, but cannot accompany the voter into the voting compartment.

PROGRAMMES

Official Guide

The Guide will inform the voters as they come to the polling station, as to which booth has been allotted to them and also give any other information they ask for in regard to the polling arrangements. But neither he nor any member of the polling staff can interfere in any way with the voter's choice of candidates or even ask him questions about it. They will promptly decline to discuss any such matter with any voter. The voter should take the route to the booth as indicated by the Official Guide, and where necessary, the route will also be found marked off clearly by means of ropes. There will also be Police constables helping the orderly entrance of voters into the booths and their exit therefrom, and the queue system will be strictly enforced. Not more than three voters will be allowed to enter the booth at a time. Before coming to the polling station, the voter, if he cannot give his exact serial number in the electoral roll, may accept from the candidate or an agent of the candidate whom he proposes to support, a small plain slip of paper just specifying his serial number in the part of the electoral roll relating to the local area where he has been registered as a voter and that part. The Official Guide will ask him whether he has such a slip with him; if not, he will ascertain his name and place of residence and write out and give the slip himself.

At the Booth

With this slip in his hand, the voter should enter his booth. The Assistant Presiding Officer who will be the first to confront him at the booth, will examine his left forefinger to see whether he has already been marked with indelible ink. If the marking has already been made, it will mean that the voter has already voted and he will be promptly ordered to leave the booth. If a person who has

Use of National Flags for Election Work Prohibited

It has been brought to the notice of the Government that some candidates are displaying the National Flag on their cars and at their election meetings. The Government desire to point out that such use of the National Flag is not only very improper and objectionable in itself, but that it is also a violation of the election law.

Under section 124 (5) of the Representation of the People Act, 1951, the use of the National Flag or the National emblem for the furtherance of the prospects of a candidate's election is a corrupt practice, and under section 100 (2) (a) of the same Act, the election will be declared void if it is published before the Election Tribunal that the election of a returned candidate has been procured or induced, or that the result of the election has been materially affected by the use of the National Flag.

THat the National Flag should form the subject of controversy in disputes before Election Tribunals, and should be of concern to every patriotic citizen are requested also, candidates and their supporters are requested to refrain from using the National Flag in election campaigns, for any purpose connected with the election.

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been already marked with indelible ink applies for ballot paper or papers, he will be liable to be arrested on the spot and prosecuted for personation. If the voter has not been marked with the indelible ink, the Assistant Presiding Officer will take the number slip from him, look up the entries in the electoral rolls relating to him, and ask him about his name or his or her father's or her husband's name as the case may be, and also any other particulars which he considers necessary to satisfy himself as to the identity of the voter. In doubtful cases, the Assistant Presiding Officer will read the relevant entries in the electoral roll and ask the voter pointedly whether he is the voter so registered and whether he has already voted in the constituency at the election and also in any other constituency of the same category, if it is a general election. The voter will not be allowed to vote unless he says "Yes" in answer to the first question and "No" in reply to any other question.

If the Assistant Presiding Officer is satisfied as to the voter's identity, he will instruct the marking clerk sitting by his side to mark the voter with indelible ink on his left forefinger. Women voters will be marked only by women. The marking with the indelible ink will last for many days after the election, and cannot be obliterated by applying any chemical whatsoever or by other means. The object of this marking is to prevent the same person from voting twice at an election.

Immediately after the voter is so marked, the polling clerk sitting by the side of the Assistant Presiding Officer will hand over an identification card to the voter along with the ballot paper or papers for the Assembly constituency. The ballot papers will be small in size just like a rupee note. They will have a very intricate design and have been made forgery-proof. The ballot papers can easily be put into the ballot boxes, but the identification card will be very much larger in size and cannot be put in any ballot box.

Voting Compartment

The voter equipped with his identification card and ballot paper or papers for the Assembly constituency should then move to the first voting compartment where he will have been earmarked for the Assembly constituency. He should hand over his identification card to the polling clerk whom he will find standing outside the compartment. Then enter the compartment. As he enters the compartment, he will find the ballot boxes of the various candidates arranged in the same order as the poster which he saw near the Official Guide. As he faces the boxes to vote, he will find an exact copy of the same poster giving the names of the candidates and their symbols hung up in the compartment just behind the ballot boxes. This poster in the voting compartment will help him to refresh his memory, if necessary, of the symbols allotted to the various candidates at the election. On the front vertical face of each ballot box, the voter will find a printed copy of the symbol pasted, so that he can make no mistake in the box in which he should put his ballot paper. The symbol of each candidate will be written in his own letters in the regional language or language of the constituency. Then put his ballot paper or papers into the box according to his choice among the candidates. This compartment will be without any representation of the candidates.

Public Health and Municipal Councils

By SRI A. B. SHETTY, Minister for Health

The Chairmen of our municipalities deserve to be congratulated for doing such organised work and seeking to promote the interests of local administration. The municipal services affect the lives of the inhabitants of towns in many ways and perhaps to a more intimate degree than even the work of the Central and State Legislatures. Good government at the top depends to a great extent on good administration in local bodies. During the past few decades there has been considerable movement of population from rural areas to towns. Our towns are growing in size and population. The conditions created by the World War have accelerated the drift to towns. In the ten years between 1941 and 1951 the population in municipal areas has increased by 42.8 per cent as against an increase of 14.4 per cent in the whole State.

Twelve per cent of our people are now living in towns and cities. To a constantly increasing extent we are becoming a nation of town dwellers. There is now a general recognition that a town or a city is an important factor in the associated lives of its citizens and the ways in which its common affairs are administered have therefore become questions of growing interest and importance. The physical form of a town or a city reflects in many ways the material and cultural level of its citizens. Towns are the seats of administration. They are the centres of education, trade and industry. Most of the leadership are drawn from the men of education and wealth who make their abode there. Towns, therefore, play a very important part in the national life of a country.

Our towns are badly built. They have grown in a haphazard way without any planning. The housing conditions are most unsatisfactory. Slums and overcrowding make the situation worse, particularly in the industrial areas. There is lack of protected water-supply and drainage facilities are hardly available. The roads in most cases are narrow and dusty. The major cause for the poor physical development and chronic ill-health of our people is, undoubtedly, faulty nutrition. The rapid increase in our population is widening the gap between the available quantity of food supply and the number of people to be fed.

Progress in England

We can draw many lessons and derive much inspiration from the history of municipal progress in England during the last hundred years. A century ago their industrial towns were unplanned, dirty and unfit for human habitation. There was frightful overcrowding and epidemic diseases were rampant. A century of city government has effected a revolution in sanitation, health, education and the amenities of life. Practically all their important cities are having today excellent roads, good drainage, adequate supply of pure water and proper systems of public cleansing. Steady and sustained progress has been made in the provision of good and cheap houses. The

From the speech delivered at the Third Annual Conference of the Chamber of Municipal Chairmen on 20th July 1952, Madras.

public health measures taken there have practically eliminated the common epidemic diseases, reduced death rates and increased the average expectation of life.

The ill-health and premature death so common among our people offers a striking contrast to the high standards of health and length of life enjoyed by the people in many of the western countries. The low level of health in our country may be traced mainly to unhealthy conditions of living, improper nutrition, inadequacy of health services and lack of education. Besides improving environmental conditions, the cities of England have developed the personal health services to a great extent during the last few decades. These personal health services may be said to embrace the seven ages of man from the cradle to the grave. There is first the Maternity and Child Welfare service; next comes the School Medical service; then there are the protective services which look to the prevention and treatment of infectious diseases including tuberculosis and venereal diseases, and the maintenance of a pure food supply.

Finally, they have instituted schemes of insurance against sickness, unemployment, old age, etc. As a result of these health services people are enabled to live to a good old age. Throughout the western world a new phenomenon has appeared—the rapidly growing percentage of older people in the total population. The problem there is how to keep older men and women healthy and fit and employed in useful work which will give them financial security. The problem here is how to check the great torrent of unwanted babies, protect those that are born and provide for them education and employment.

Water-supply and Drainage

The health services that our municipalities provide are neither so extensive nor so efficient as those of western cities. We are far behind them even in regard to the provision of basic sanitary services, such as protected water-supply and drainage which are of vital importance to public health. Only 52 out of 98 municipal towns are at present having protected water-supplies. Some of these water-supply schemes are in need of additions and improvements. The position in regard to drainage schemes is even more unsatisfactory, since only three of our cities, namely, Madras, Madurai and Ooty, have underground sewerage systems and 13 other municipal towns are having partial drainage schemes. Forty-one municipal and other urban water-supply schemes and 11 drainage schemes were under execution in 1951-52 and Rs. 64 lakhs were given as grant and loan during this period. With the reorganisation of the Sanitary Engineering Branch in 1949-50 it has become possible to show better progress in the execution of these works.

It has been said in the welcome address that the Government do not now pursue a uniform policy in respect of different municipal councils regarding the aid they give for water-supply and drainage schemes. The old policy of giving half-grant and half-loan has been revised for good reasons. According to the present policy which is in force since 1949, Government aid varies according to the financial

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If he takes too long or attempts to do any mischief, the Assistant Presiding Officer can enter the voting compartment without any warning to him, and do what he considers necessary to enforce the Election Law in regard to polling. It is a criminal offence for a voter to put into a ballot box anything other than the ballot paper or papers which he has been given by the polling clerk. The Election Law prescribes also prosecution and drastic penalties for tampering with ballot boxes and interfering with any election arrangements at a polling station.

Parliamentary Election

As soon as the voter emerges from the Assembly voting compartment, the peon standing outside that compartment will return to him his identification card, and with that card in his hand, the voter should proceed to the table where he will find the polling clerk for the Parliamentary election. The voter should immediately surrender his identification card to this clerk, and unless he does so, he will not get his ballot paper or papers for the Parliamentary constituency. This polling clerk will in any case recover the identification card from the voter. On so recovering the Assembly identification card, the polling clerk will mark the copy of the electoral roll for the Parliamentary election, fill in the Parliamentary identification card for the voter, but hand over to him only his ballot paper or papers for the Parliamentary constituency.

With nothing in his hand except the ballot paper or papers given to him by the polling clerk for the Parliamentary election, the voter should then enter the separate voting compartment earmarked for that election, vote by putting his ballot paper or papers into the ballot box or boxes according to his choice among the candidates and then leave the booth without any delay whatsoever. The arrangement in this compartment will be exactly the same as in the Assembly voting compartment. Thanks to the symbols pasted on the ballot boxes, even the most ignorant voter can have no difficulty in determining the ballot box or boxes into which he should put his ballot paper or papers.

If a person takes or attempts to take a ballot paper out of a polling booth, or wilfully aids or abets the doing of such act, he can be arrested on the spot and prosecuted and punished. If the Presiding Officer has reason to believe that a person is committing or has committed this offence, he can have the person arrested on the spot and used, and any ballot paper found on such search will be taken away and kept in safe custody.

In a single-member constituency, the voter will get only one ballot paper and he will have no difficulty. But in a two-member constituency, he will get two ballot papers, bearing the same serial number, but distinguished from the other only by the presence of the English letter 'A' to the number. The voter will put these two ballot papers in two different boxes according to his choice among the candidates. If he puts both the papers in one and the same box, he will be treated as only one vote for the candidate if the two ballot papers are found.

Voting Hours

Arrangements made for facilitating qu.

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explained, it is found possible to poll easily 1,000 voters at each booth during nine hours' actual polling. The Government have, therefore, fixed the polling hours for the forthcoming elections from 7 a.m. to 12 noon and again from 1 p.m. to 5 p.m. on the polling day, with just one hour's interval for lunch. This will enable the voters to vote while there is still sufficient natural light in the voting compartment and also facilitate the implementation of an important change that has been made in the Election Law in regard to voters who have arrived at the polling station by the closing hour, viz., 5 p.m. but have been unable to vote by then owing to the rush of voters. The voter will not only help the Election authorities, but also ensure his own voting and his support to his candidate by coming to the polling booth very early and voting. He will, therefore, be well-advised to come as early as possible to the polling station, preferably in the forenoon itself, and not put off his visit to the polling station till late in the evening. If he comes late, he may run the risk of being unable to vote at all. This is because, on the stroke of the closing hour, viz., 5 p.m., the polling station will be closed, and no voters will be admitted into the booths thereafter.

But our new Election Law, however, allows a special indulgence in favour of voters who have arrived at the polling station by 5 p.m. but have not been able to enter the booth owing to the rush of voters. On the stroke of 5 p.m. the Presiding Officer of the polling station will come out with the polling and marking clerks, and with their assistance and that of the Official Guide, he will distribute to each waiting voter small plain slip of paper with nothing but his initials written on it. The waiting voters who have arrived at the polling station by 5 p.m.—the police will keep out later arrivals—will be asked to stand in separate queues near their respective booth and receive these slips. As soon as the slips have thus been distributed to all the waiting voters, particulars of the places of residence of these voters and their serial numbers in the electoral list will be ascertained from them and recorded on the slips. Thereafter, the voters who have thus received their initialled number slips from the Presiding Officer will be admitted into their respective booths and allowed to vote in exactly the same manner as in the case of voters who arrived much earlier and who were able to vote on their voting by 5 p.m. Subject to the special indulgence, no further ballot papers will be issued after the closing hour.

Personation

The offence of personation, viz., claiming to be a voter whether that voter is alive or dead, is a serious offence and a voter who attempts it will run the risk of being prosecuted and punished severely. Village Officers and local persons who can easily identify voters from their agents, and such a person will also therefore run the risk of being challenged and exposed on the spot to public disgrace at the polling station will be prosecuted and punished. If a voter has himself been a victim of personation by another person, he should report the same to the Assistant P.M. In such a case, the Presiding Officer will take the necessary steps to ascertain from him the name of the person who attempted to vote in his name.

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tendered ballot papers will be kept in a separate packet set apart for the purpose and will not be counted.

Secrecy of Ballot

A voter who comes into a polling booth should really come only after making up his mind to vote, so that he may not waste his own time and that of others; but if he takes the ballot paper and then decides not to vote, he should immediately hand it over to the Assistant Presiding Officer for being cancelled. As I have already said, if he attempts to walk away with the ballot paper unused, he will be arrested on the spot and the ballot paper will be taken away from him. On the other hand, if he leaves the ballot paper at the polling station without putting it into a ballot box,

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it will also be taken by the Assistant Presiding Officer and cancelled, with the result that the voter will have lost his vote and his candidate deprived of the benefit of it. The most fundamental requirement of democratic elections is of course the secrecy of the ballot. It is most important to remember that a ballot paper will be rejected at the time of the counting of the votes if it bears any mark or writing by which the voter can be identified. The voter will thus not only be revealing himself by making official such mark or writing, but will also lose his vote. On the official and strict instructions have been issued and will be enforced to ensure the secrecy of the ballot. It will be a good thing for the voter also to maintain the secrecy and not let anyone know for whom he has voted.

Only the ballot papers authorised for use at a particular polling booth will be taken into account at the counting. If the Returning Officer is satisfied that what he finds in a ballot box is a spurious ballot paper or that it has been so damaged or mutilated that its identity as a genuine ballot paper cannot be established, he must reject it. The voter must not therefore fold his ballot paper or do anything with it, except to hold it at the top along its width (smaller side) and to drop it down its length into the ballot box through the slit in the box. At every booth, arrangements will be made to ensure that no one from anywhere can see the voter putting his ballot paper into the ballot box. The voter will be allowed to enter a voting compartment with another voter still inside it.) There will thus be no safeguard provided for preserving the secrecy of the ballot that the voter may vote without any fear or apprehension of anyone discovering as to which candidate he has voted for.

(By Courtesy A.I.R., Madras)

Five-Years of Progress

This handy pocket-sized book, printed on high quality antique paper and bound with art card, is an attractively got-up production designed to tell the people the progress and achievements in Madras State during the five-years, 1946-51.

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THE DIRECTOR OF INFORMATION AND PUBLICITY,

GOVERNMENT OF MADRAS,
FORT ST. GEORGE, MADRAS-9.

Registered Practitioners of Indigenous Medicine

Orders regarding wound and drunkenness certificates

The Government have clarified the legal position of 'A' class practitioners of indigenous medicine, in respect of the issue of wound certificates and drunkenness certificates of medico-legal importance.

The Government point out that there is no provision of law, which requires that wound certificates and drunkenness certificates should be issued only by practitioners registered under the Madras Medical Registration Act or under any other statute, and that 'A' class practitioners of indigenous medicine are not prohibited under the law from issuing wound certificates or drunkenness certificates to be produced in courts.

The Government have ordered that practitioners of indigenous medicine, who do not indicate their qualifications, e.g., 'L.I.M.' after their names, but merely sign themselves as 'registered medical practitioners' should note the word (Ind.) after the expression 'registered medical practitioner' or call themselves as 'registered practitioners of indigenous medicine'.

This action has been taken on representations from the L.I.M. Association.

Campaign Against Corruption

During the quarter ending 31st March 1952, 37 persons were found guilty and suitably punished. The punishments awarded against seven persons were slight, and the following thirty persons were awarded severe punishments :—

One Assistant Engineer, P.W.D. (Compulsorily retired); One Tahsildar (Dismissed); One Inspector of Police (Compulsorily retired); One Supervisor (Highways Department) (Dismissed); One Health Inspector (Compulsorily retired); One Assistant Public Prosecutor (Dismissed); One Deputy Tahsildar (Dismissed); One Loans Deputy Tahsildar (Dismissed); One Sub-Inspector of Police (Dismissed); One Probationary Sub-Inspector of Police (Dismissed); One Excise Sub-Inspector (Compulsorily retired); One Special Revenue Inspector for Wells (Removed from Service); One Lower Division Clerk (Dismissed); Two Field Surveyors (Dismissed); One Head Constable (Dismissed); Seven Police Constables (Dismissed); One Police Constable (Removed from service); Three Prohibition Constables (Removed from service); One Attender (Removed from service); One Temporary Prohibition Guard (Dismissed); One Peon (Discharged from service).

The total number of cases pending at the end of March 1952 was 241.

capacity of the municipality. Municipalities are to contribute to the scheme up to the limit of their taxable capacity and Government give the balance of the amount required for it. If bigger municipalities are thus found to be in a position to finance the schemes from their own funds, they become ineligible for Government grants. But such municipalities are allowed to execute their schemes in advance without waiting for their turn in the priority list.

This new policy will release the pressure by richer municipalities on State funds and make it easier for the poorer municipalities to get the Government grants and loans they need. Water-supply and drainage schemes are now taken up in accordance with the priority list whatever may be the financial resources of the municipality in question, and financial assistance is given to the extent necessary in each case. The period of repayment of the loans sanctioned to the municipalities has been extended up to 40 years instead of 20 or 30 years as it was formerly. It is but just and proper that municipalities which can find enough finance for these schemes from local taxation should not seek Government aid which means a burden on the general taxpayer.

Plans for the Future

The water-supply and drainage schemes which have to be taken up hereafter in municipal towns may cost at least Rs. 50 crores. We shall have to speed up the present procedure and secure more funds if we are to finish this programme within a reasonable period of time. The installation of a water-supply and drainage scheme in any

town will effect a definite improvement in public health and reduce the expenditure now incurred on health work in that area.

The maintenance of the water-supply system should be entrusted to a central organisation of the Sanitary Engineering Department so that it may be efficiently run. A reasonable dividend can be earned on the capital invested on the water-supply system and a reserve fund built up for future repairs and expansions. The suggestion that has been made to tap private capital or to get the funds of concerns like the insurance companies to finance these schemes is worth pursuing, since the resources of Government are limited.

Safe Food Supply

Adulteration of foods, especially milk, ghee and oils, is becoming a more common practice. Fifty per cent of the samples sent for analysis are found adulterated. Proposals have been made to open regional laboratories in different centres of the State so that more food samples can be got analysed. It is also necessary to make legislative provision for dealing more severely with offenders. India's Health Minister, Srimathi Rajkumari Amrit Kaur, announced in a radio broadcast recently that a drastic Food Adulteration Bill would be brought into Parliament during the next session. This will be a welcome measure.

The municipal authorities have to take more stringent action against the sale of food exposed to dust and flies. The recently published Hotel Sanitation Committee Report has drawn attention to the grossly insanitary conditions under which food and drink are prepared and sold in catering establishments, such as hotels, tea shops, aerated water and ice-cream stalls. Stricter sanitary control will have to be exercised over such establishments so as to ensure proper sterilization of utensils and better personal hygiene in "Food Handlers." The Committee enjoins upon municipal councils to build 'Model Restaurants' so that private enterprise may copy them.

Town-Planning

The question of town-planning is now recognized to be a matter of great and growing importance. The object of town-planning is to transform the physical environment in order to create suitable conditions for healthful living. In the United Kingdom planning control is not a matter of mere local concern in a town or city. It has been extended to the countryside and made a matter of supreme national concern. Though the Town-Planning Act was passed so long ago as 1920 and is now in force in all our municipal towns, we have made but little progress in planning work so far. In most cases it is confined to one or two schemes for certain extension areas of the town. Under Section 8 of the Town-Planning Act every town has to prepare and submit to Government a General Town-Planning Scheme or what is called a "Master Plan" covering its whole area and also the lands round about it. No municipality has as yet prepared such a Master Plan. A few municipalities like Madurai, Coimbatore and Mangalore have done the preliminary work required for this purpose.

A correct physical survey map of the town is quite essential for any planning work. Municipal councils which have not yet had a full town survey made and councils where the town surveys are old and out of date should take steps to have up-to-date surveys made. The paucity of qualified persons for employment as town-planning

Army's Role in Relieving Drought Distress

The public are no doubt aware that the help of the Army was sought to relieve water scarcity in the Rayalaseema Districts which have suffered from severe drought conditions for the last five years. With the improvement in the seasonal conditions there, the army units have been requisitioned to deepen wells in drought-affected areas in Ramanathapuram, Salem, Coimbatore, Palni Taluk of Madurai District and Tirumayam Taluk of Tiruchirappalli District. The units were requisitioned not with a view to concentrate work solely in their hands but only to help the civilian authorities in cases where beds of wells are so rocky as to render it very difficult for civil staff to take up the work of blasting.

The work of the Army is dependent on the equipment available to them and hence the help they can give is necessarily restricted. The Army is obviously unnecessary where the type of terrain presents no difficulty for deepening. It must also be noted that the Army does not drill borewells. Their method of operation is to drill holes in the rock bed of dry wells either by hand or by using air compressors, insert safe charges of explosives and blast the rock without damaging the well walls.

In these circumstances, it is highly necessary that the resources and energy of the Army units should not be frittered away by being given work which can be tackled by the civilian department responsible, whether by the Collectors or by the Local Boards concerned. These must continue to deepen wells in their respective jurisdictions with their own resources of material, manpower and money. It is only where wells to be deepened present technical difficulties beyond their own resources that the Army should be required to help.

Collectors in the affected districts have been asked to select wells according to this criterion. Collectors of districts where distress has been recognised, i.e., where land revenue remissions have been granted by Government, have already been empowered to deepen drinking water wells at the expense of the Government in cases where this is the only method by which drinking water could be supplied. This authorization is for the calendar year 1952.

staff is one of the main impediments to the progress of this work. If degree or licentiate courses in town-planning and allied subjects are instituted in our Engineering colleges, it will meet the difficulty experienced at present. The bigger municipalities can depute some suitable candidate for foreign training in town-planning work. Town-planning schemes are often put off on the ground of want of finance. A scheme is normally expected to be self-supporting, unless it involves costly improvement of already built up areas. The development of an area as planned out under a scheme is carried out by the owners of lands themselves. The municipal council has to provide facilities for such development and it can recover its portion of the cost of the scheme by levy of betterment.

A well conceived and executed town-planning scheme, would even help to augment the municipal revenues. Seventy municipalities are maintaining the Town-planning Fund Account as required under the Act. But very few of them have a reasonably good balance account. The amendment of the Town-planning Act is under examination at present with a view to give effect to such of the recommendations of the Town-planning Committee as have been accepted by Government.

The Housing Problem

The task of town improvement by slum clearance, re-planning of insanitary and congested areas and the provision of hygienic dwellings in healthy surroundings, particularly for the low income groups, should be regarded as a problem of major importance which municipal authorities have to tackle. The conditions under which the poorer people live in our towns and cities in single room tenements and in back-to-back houses packed too closely together are unwholesome and demoralising in the extreme. Housing shortage has become more acute on account of the growth of population in towns due to war conditions. It has resulted in over-crowding even in the quarters of the middle-class people. The improvement of housing conditions should be given a high priority among the schemes for the welfare of the people. It will require vast sums of money.

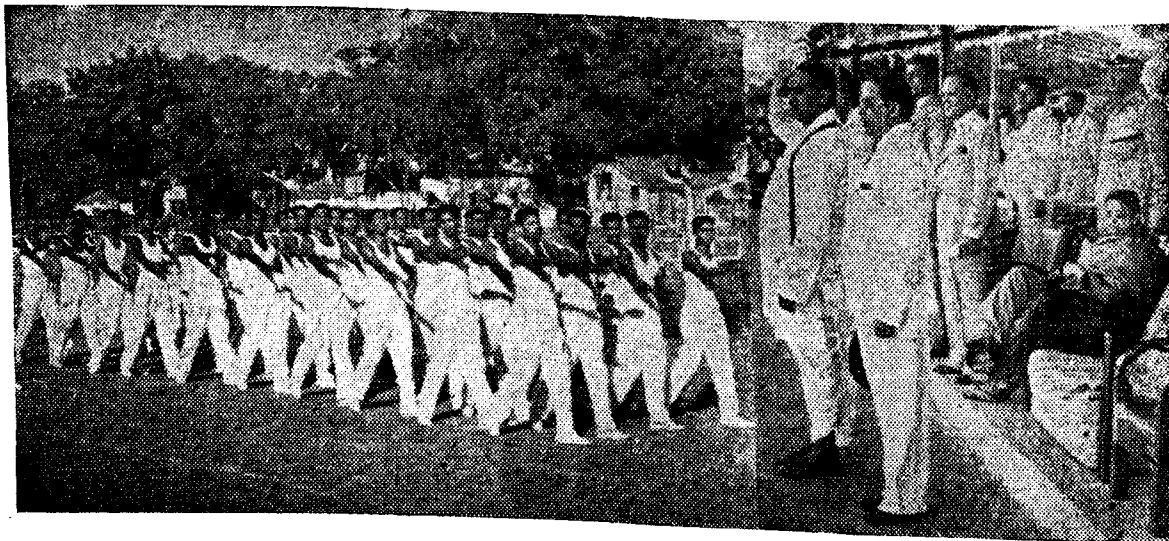
Government, local authorities, co-operative organisations, Railway and industrial concerns have each to do their share in this work. There are about 296 co-operative housing societies in urban areas. Loans to the extent of Rs. 71.61 lakhs were disbursed to them in 1951-52. The provision of housing for scavengers and sweepers is an urgent need which many of our municipalities have yet to meet.

Parks and Playgrounds

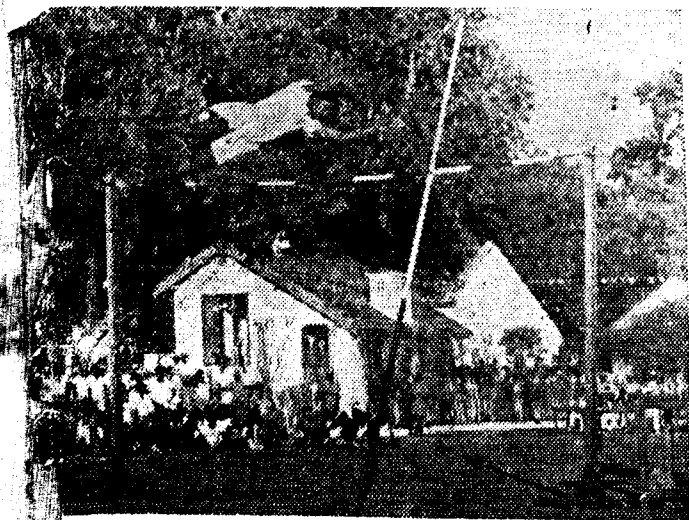
The need for providing recreation areas and facilities by means of parks, playgrounds and open spaces as a part of the City Plan is now fully recognised. Nearly all our towns and cities lack in adequate provision of such recreation and cities lack in adequate provision of such recreation space. These parks and playgrounds should be evenly distributed in the different parts of the town. Where the individual dwellings have no open spaces about them and there is over-crowding, there is need for a greater recreation space per capita.

Municipal authorities will do well to acquire large stretches of land in advance outside their boundaries so that they may control and plan the future development of suburban areas. The Madras Town-planning Enquiry Committee has rightly stressed the need for educating the

general public on the subject of town-planning and its great importance for the welfare of the community. The successful enforcement of planning regulations and restrictions depends on the support and co-operation of the people. It is, therefore, necessary that we should conduct publicity campaigns and arouse interest in matters relating to town-planning.



POLICE SPORTS AT VELLORE.—The annual Sports and Tattoo of the Police Forces in the State took place on December 6, 1951 at the Grounds of the Police Training College, Vellore. Hon'ble Sri P. S. Kumarasami Raja, Chief Minister, presided on the occasion. Here he is seen taking the salute at the March-past.



Thrilling incident in the pole-jump competition at the sports.

Winners in the various sports events with their trophies.



Corruption Among Government Servants Punishments Awarded

During the month of July 1951, corruption among Government servants was brought to notice against 277 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 ten persons and they were suitably punished. Of these, three persons were awarded minor punishments. The names and designations of the seven persons who were awarded severe punishments are as follows:—

G. A. Lawrence, temporary Forest Guard, Chingleput Division, and Muthuswamy, temporary Prohibition Guard (discharged from service); Muthumanbu, Head Constable, Ramanathapuram district, Madhavanunni Moosad, Constable, Malabar district, N. Rajamani Ayyar, temporary clerk, Sub-Collector's Office, Nagapattinam, and Devasikamany Ayyangar, Deputy Tahsildar, and Wells, Tirunelveli district (dismissed), Sowdegar for Sayeed Rahman, officiating Deputy Superintendent of Police, Sivaganga (compulsorily retired).

Proceedings against 255 persons were pending at the end of the month.

Health of the People

The main objective of the Government of Madras in the field of Health is to introduce measures which would help the prevention of attacks of diseases and ravages of epidemics and to provide within easy reach of every section of the population medical relief facilities.

A realistic approach to the problem has been made by taking up first as a priority item, the training of medical and public health personnel. Progress made in this direction can be assessed from the fact that while only 252 students were reading in the Medical colleges in this State during the year 1945-46 the present number (for the year 1951-52) has risen to 330. The Pharmacology Department of the Madras Medical College has been reorganised. Besides training medical personnel in modern medicine, steps are also taken to enlarge and improve the training facilities available at the College and School of Indigenous Medicine. A new five-year course (G.C.I.M.) to train persons to the degree standard is now being held in the College of Indigenous Medicine. It was decided to have one standard of education in Indigenous Medicine, viz., G.C.I.M. and consequently the L.I.M. course was abolished with effect from the academic year 1952-53. To equip select medical men of outstanding ability for filling teaching, research and other important posts in the State, the Government have deputed some of them for advanced training abroad. More than 30 medical officers have so far been deputed by this Government for specialising in certain specified subjects. A few officers have been deputed abroad under W.H.O. and Rockefeller Foundation Fellowships and under the Commonwealth Technical Co-operation Scheme.

Post-graduate courses are provided in the different Medical colleges of this State for training candidates for M.D., M.S. and B.S.Sc. degree, as well as for Diplomas in Gynaecology, Obstetrics, Ophthalmology, Oto-Rhino-Laryngology, Tuberculosis, Clinical Science, etc. Another important measure of the Government is the upgrading of the Obstetrics and Gynaecology, Anatomy and Venereal Diseases departments of the Medical colleges as All-India Centre of Post-Graduate Teaching and Research.

Training of Nurses

There is no gainsaying the fact that the number of trained nurses available in the hospitals is thoroughly inadequate. There are at present 12 training centres for nurses in the State (eight complete training centres and four partial training centres) and 750 candidates are undergoing training in them. A School of Nursing is attached to the Government General Hospital, Madras, with the idea of imparting training to the newly selected candidates. 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. In order to provide nurses with a better type of basic training and to enable them to acquire first-hand knowledge about nursing in foreign countries, five nurses were sent to the United Kingdom. They have been admitted to some of the best English hospitals where they will have opportunities of widening their knowledge about their profession.

Three of these nurses have completed their training and have returned to India.

Thus, it is hoped, in course of time Madras State will have not only sufficient number of trained medical men and health personnel, but also will have a reservoir of trained teachers and research workers in different branches of Medicines.

Primary Centres

Of all the projects taken up for expanding medical relief the one relating to the establishment of Primary Centres, is the most important one. Taking the village as the primary unit, it is proposed to set up so many dispensaries that no village is more than five miles away from its most convenient centre. In densely inhabited areas the population factor will be considered along with the distance factor, and a dispensary is to be provided for every ten to twelve thousand people.

Every Primary Centre will have six beds, four maternity and emergency and two isolation. Owing to financial stringency much leeway has not been made in this matter. Government decided to open 150 Primary Centres and 25 Taluk Centres in the first quinquennium, the opening of these centres being spread over the first five-year period at the rate of 30 Primary Centres and five Taluk Group Centres in a year. The opening of the first batch of 30 Primary Centres and five Taluk Centres was taken up in 1948-49 and in the subsequent years the proposal had to be deferred in view of acute financial stringency. Actually, however, only 24 Primary Centres are working.

Hospitals

All these Primary Centres are to be grouped and supervised by the appropriate Taluk Headquarters Hospital. It is proposed to enlarge these hospitals so that they contain 50 beds in normal areas and 100 beds in thickly populated areas. Originally it was planned to reconstruct 40 Taluk Headquarters Hospitals during the first five years, but owing to the need for economy the programme could not be adhered to.

The administration of Taluk Headquarters Hospitals will be supported by a well-equipped District Headquarters Hospital in each district. Today all districts have each an Headquarters Hospital. The District Headquarters Hospitals are being reorganised by providing them with a first-class laboratory X-ray department, special departments for Tuberculosis, Leprosy, Venereal Diseases and Eye diseases. Facilities for training nurses, maternity assistants and compounders are proposed to be provided in them. It is also proposed to employ adequate staff, that is each District Hospital will have a Surgical Specialist, a Specialist in Medicine, a Gynaecologist, a Radiologist and Specialist in Electro-Therapeutics, an Ophthalmic Surgeon, an Ear-Nose-Throat Specialist, a Venereal and Skin Specialist, a Dental Surgeon and an efficient nursing staff.

Combating Epidemics

In combating epidemics a new departure has been made by the Government by initiating preventive measures, including disinfection of sources of infection.

inoculations, well in advance of an actual outbreak of the epidemic, anticipated on the basis of seasonal conditions and past experience of epidemics in the area. There is every reason to hope that this new policy of dealing with epidemics will prove effective.

The destructive disease that deprive the State of hundreds and thousands of lives are Malaria, Cholera, Plague, Small-pox, T.B., Leprosy and Cancer.

Malaria is pre-eminently a rural disease and tends to be worst in the rush seasons of agriculture. The disease takes heavy toll of life and naturally Government took up the question of fighting this disease and arresting it on a war-footing. A well-equipped Central Malaria Bureau was set up in 1946 with a laboratory and museum under an Assistant Director of Public Health. Four regional units, each unit controlling six districts, with necessary entomological and field staff started functioning soon after. Malaria surveys were conducted and schemes for malaria control was taken up as and when the surveys were complete. Much progress was recorded during the last four years. Thirty-seven anti-malarial schemes including District Board and Municipal Schemes, partly financed by Government, have been inaugurated in the various endemic malarial tracts of the State. With the collaboration of the World Health Organization, anti-malarial work is being carried on successfully in Ernad and Walluvanad Taluks of Malabar. The various anti-malarial schemes now under implementation cover an area of 9,800 square miles of the State and directly benefit a population of 19 lakhs.

Relentless Battle

Cholera is another disease against which another campaign is being carried on. Cholera usually occurs in epidemic form of varying magnitude and has been sweeping the countryside periodically. It is true that protected water-supply and adequate environmental sanitation will root out and liquidate this disease. But unfortunately due to the immensity of the problem and the financial implication it might involve, taking up of large scale programmes for immediate implementation is not possible. However, all precautions are taken and an epidemic reserve of Health Inspectors are kept and moved to places wherever there are indications of an impending epidemic outbreak. Effective preventive measures are taken at all fairs and festivals at which large numbers of pilgrims gather.

Other destructive diseases against which a relentless battle is being fought, are plague and smallpox and the dread bowel complaints of enterics and dysentery. Most of these scourges and especially the enteric fever and dysentery, are mainly due to bad sanitation and lack of protected water-supply. Hence the problem of protected water-supply if tackled successfully would root out many of these diseases. The Government on their part were not slow to realise the importance of water-supply. Since the work of providing schemes for the entire population of the State would exceed Rs. 100 crores, a workable twenty-year plan for urban areas and ten-year plan for rural areas were formulated and a beginning has been made for municipal areas with a five-year programme which would cost the Government Rs. 3.52 crores. As a result of the steps taken by Government 53 out of 93 municipalities have now protected water-supply schemes.

Mother and Child

Another problem in the field of public health tackled on a very well-organised footing is the maternal and infant mortality. In fact, Madras can boast of being the only State in India which has a Public Health Act having provisions for maternity and child care. There are over 512 Maternity and Child Health Centres spread over the State. The rural areas which need more help of this type are not left out and nearly half the number of such Health Centres is situated in rural areas.

The Maternity and Child Health Centres are very popular and thousands of mother flock in for care and supervision of pre-natal and intra-natal care. The young infants and mothers are taken care of during the puerperal period.

The treatment of cancer is at present concentrated in the institutions in the City of Madras. This means many people have to travel long distances. By the time they come to the City for treatment, in majority of cases it becomes too late a stage for cure. The Government have hence decided upon the decentralization of the facilities available for cancer treatment and also the provision at all the important hospitals in the State of diagnostic clinics.

The essential features of the scheme for the control of T.B. are: B.C.G. vaccination, opening of T.B. clinics and institutional treatment. B.C.G. vaccination introduces a certain number of attenuated strains of bovine tubercular bacilli into the layers of the skin so that it induces a certain amount of resistance to tubercle bacilli without producing any appreciable evidence of disease in the individual. There are 38 T.B. hospitals, clinics and sanatoria dealing with the disease and 171,342 persons are attended to yearly.

Leprosy Work

Greater efforts are being taken towards the control and treatment of leprosy in the State. The Government have taken over the management of the Lady Willingdon Leprosy Sanatorium, Tirumani, the Silver Jubilee Children's Clinic, Saidapet, and the Ettapur Children's Leprosy Sanatorium and have assumed the entire responsibility for the development of leprosy work in the State, leaving only the propaganda and publicity part of the work to the Madras Branch of the Hindu Kush Nivaran Sangh.

Underlying all these aspects of public health is the problem of nutrition. Far too large a proportion of India's citizens are ill nourished and worse still is the case of the people in rice-eating areas like Madras. More than 30 per cent of the diseases from which the people of Madras suffer may be directly or indirectly attributed to malnutrition. In spite of financial stringency, the Government have bestowed some attention to this problem also. The Nutrition Bureau of this State has been reorganised. A promising beginning has been made and three regional units have been set up for concentrated propaganda and demonstration and supply of deficient items of food in their respective regions. Clinical studies of diseases of nutritional origin have also been undertaken.

A scheme has been sanctioned for arranging a training course in scientific nutrition, for the health staff and lay persons like wardens of hostels.

Students' Ward in T.B. Sanatorium at Tambaram

is public enemy No. 1. It is a dire disease with a dreadful toll of human life. This scourge in our State as throughout India. Tuberculosis mortality is 62,000 per annum. In simple terms it magnifies that every 10 minutes one among us die of Tuberculosis. It has been said that the existence of this disease is inversely proportional to the economic and social progress of our people. Thus Tuberculosis is a socio-economic problem and it is the duty of every citizen to evince interest and contribute his mite towards the control of this disease.

In the campaign against this disease in Madras State, a noteworthy step was taken on December 10, 1951 when the Hon. Rajkumari Amrit Kaur, India's Health Minister, inaugurated the University Students' Ward at the Government T.B. Sanatorium, Tambaram. The ward is provided with 20 beds, the first of its kind to be established in Asia, is donated by the World University Service. The W.U.S. has contributed Rs. 50,000 for the construction of this ward.

The W.U.S. is the new name of a familiar organisation—the World University Service. The aims of the W.U.S. as indicated in its statutes are to encourage and support all efforts on the parts of students and Professors and others to better the material conditions of life and to develop the cultural means of action inside the Universities and institutions of higher learning, so that they may be the rural centres of national and international life. In 1947, the W.U.S. first entered into the South East Asia. In the 4 years of its existence here, a programme of financial aid to needy students, supply of text-books to individual students, to College and W.U.S. libraries, supply of text-books, pens and other stationery articles to students and Students Co-operatives, free medical aid, supply of drugs like Streptomycin and hospitalisation of T.B. students, as well as providing hostel accommodation,

was carried through. Student health has always been of vital concern to the W.U.S.

In 1949, the W.U.S. contributed a sum of Rs. 50,000 for a ward of 20 beds for University Students and it is now ready for occupation. Staff and equipment have been sanctioned and students from all over India will be admitted into the ward.

The history of the Tambaram Sanatorium records the progress of the Anti T.B. campaign in Madras State. The Sanatorium was first established by Dr. Muthu in the early thirties to accommodate only 12 private patients. In 1937 the Government acquired the Sanatorium and since then it has functioned as Government institution with 40 beds. In 1938, the Lady Linlithgow Ward of 10 beds was opened. In 1939 construction of an X-ray block was sanctioned. Though the war years impeded development, in 1947 the Government sanctioned Rs. 75,000 for the construction of 12 wards of 18 beds each. In 1948 the Government sanctioned Rs. 1,96,000 for the construction of an up-to-date Operation Theatre, Laboratory and Administration block. The average number of patients per day is 385. The staff of the Government T.B. Sanatorium consists of 1 Civil Surgeon, 11 Medical Officers, 48 nurses, 12 Ministerial Staff and 150 hospital workers. The wards in this Sanatorium are divided into General wards (310), Special wards (24), Semi-Special wards (24) and cottages (30). The General wards are divided into Surgical, Medical, Mass Radiography and convalescent wards. In view of the importance of pediatric Tuberculosis, a children's ward of 12 beds was opened recently. For the convenience of patients, Ear, Nose, Throat, Eye, Dental and Rectal clinics have also been opened lately. Diversional and occupational therapy such as knitting, gardening, spinning, typing, painting, etc., are being introduced for which Red Cross Social Workers visit this institution twice a week.



Hon. Srimathi Amrit Kaur, Minister for Government of India, recently declared the University students' special ward at T.B. Tuberculosis Sanatorium. Here she is seen organising the function.

Broadcasts For Schools

By Dr. M. V. KRISHNA RAO, Minister for Education

Today* All-India Radio begin their educational broadcasts for the thirteenth year in succession. The broadcasts when they were first started, consisted of just five broadcasts a week, one each in Tamil and Telugu and the rest in English. Today there are in all fourteen broadcasts a week in each, of Tamil and Telugu, graded for elementary, middle and high schools and one broadcast a week in English. (*July 7, 1952.)

In July 1949, that is ten years after the starting of these broadcasts, a common plan was evolved for the entire region and the school broadcasts of Madras, Tiruchirappalli and Vijayawada were integrated. Today there are over 500 schools which include these broadcasts in their curriculum. Government have recognised as a craft training the organization by Secondary School teachers of listening classes.

If these broadcasts are to serve the purpose for which they are intended and educational institutions are to derive the maximum benefit from them, it will require close collaboration between the staff of listening schools and All-India Radio.

The schedules are prepared in consultation with leaving educationists and follow the syllabus prescribed for the various standards. I invite all teachers in schools, who have included these broadcasts in their curriculum, to write to the Station Director, All-India Radio, after every broadcast, giving suggestions for improvement. The Government are doing their part by distributing radio sets at concessional prices and maintaining them at their expense. The Government have also issued instructions to publishers of text-books, to publish with suitable modifications, the texts of talks broadcast on various subjects in a book-form and so provide suitable material.

FOR U.K. RALLY: Cadets Carl Peter Ireland and Anand Gopinath of the Third Madras Air Squadron, National Cadet Corps, who participated in the Air Training Corps Rally arranged by the Air Ministry in the United Kingdom. During their stay in London they were guests of the Royal Air Force.



It is something of which we may justly be proud, in that school broadcasts are best organised in our State and the number of schools listening into these broadcasts is the greatest. I suggest to school managements to take initiative by securing from their own resources receivers, with a view to provide adequate listening facilities to their students and to help in reaching the target early, of one set for every school. Government on their part will render all possible help in this regard. It is our hope that the number of schools listening to these broadcasts will pass the 1,000 mark by the end of this academic year.

A.I.R., as I already pointed out, can only broadcast talks by experts and with the help of pupils themselves, present subjects in an interesting manner, say the story of Shivaji, as a play, but it can never replace the teacher. It is the teacher who is in direct contact with his pupils and it is his part which is perhaps the most important. To get the most out of these broadcasts, the teacher must first go through the pamphlets on Educational Broadcasts published by A.I.R. every quarter, and from them choose those particular broadcasts that he considers suitable for his class.

I will give you an example. Today's broadcast for the Elementary Schools has a talk on 'Precious Stones,' 'The Story of Arjuna's Penance' and 'Physical Exercise.' Let us say the teacher decides to listen into the last item. You may ask how the physical exercise lesson can be broadcast in the radio? The answer is that it is not just teaching of exercise but teaching rudiments of rhythmic movement also. The teacher in charge of the class listens along with his pupils to the instructions of drill given on the air. All exercises taught, except the warming-up ones

(Continued on page 43)

Adult Education and Social Service

By SRI S. B. P. PATTABHIRAMA RAO, Minister for Rural Welfare

Our social problems are peculiarly our own and they are multifarious in character. Some are the outcome of our cultural and traditional background and old custom, some are the result of ignorance, illiteracy and indifference to one's own health and welfare. There is any amount of scope for social service in our country.

What is Social Service? It is service rendered voluntarily to help people to help themselves. The giver should approach the work in a spirit of humility and not in any patronising way and the main idea should be to make the recipient self-dependent in due course. The social worker must not be conscious of the fact that he is doing some free service; rather, he should feel that it is his duty to do so and that an opportunity has occurred itself to him to discharge his duty by his brethren and sisters.

Primary Qualifications

Anybody and everybody cannot do useful social service. One may be anxious to serve but he must, if he should succeed, possess certain qualifications besides being anxious or keen. One must be self-disciplined and must not mind occasional bad treatment, initial failures, slow results and unhelpful attitude and want of co-operation on the part of the people.

Voluntary spirit is the lifeblood of democracy. A large part of the strength of British democracy consists in the great and the wide capacity of the people for voluntary associations for anything that seems to need doing in a collective way. It is part of the British tradition to hold that it is often better for the State to help people do a job of social service for themselves with the grants on public money, rather than do it for them on an official basis.

Adult Education

Adult education is a modern phenomenon in social development. It is a compensative measure to give adults an opportunity to make up for what was denied to them in their youth. Adult education is not merely literacy, it aims at training the adult not only in three R's but also provides facilities to enlarge and improve his mental make-up. The instruction given to an adult should touch the life of the adult at every stage and help him to improve his knowledge about his own occupation and of things around him. The adult should gain a general knowledge in the rudiments of rural economics, co-operation, health, hygiene and civics.

If ignorance should be fought and the adult education campaign should succeed, the voluntary service of selfless workers is most essential. The problem is so vast, 85 per cent of our millions are illiterate, and it is so difficult that unless the Education Department of the State, the local bodies, the various educational institutions and voluntary organizations co-operate in every way possible, not much of a success can be expected.

Speech delivered by the Minister for Rural Welfare at 6-30 p.m. on the 16th June 1952 in the Valedictory Function of the Social Education Camp at Tirukachur, run by the Seva Samaj of the Government Arts College, Madras.

Aids in the Campaign

Experience has shown that it is difficult to create sufficient interest in the adults to become literate and to gain more knowledge. To sustain the interest first created in an adult, it is still more difficult. Consequently the attendance at Adult Education Centres is sometimes discouraging. Even visual aids, music and tea have only succeeded in maintaining interest in the initial stages. If, therefore, our campaign against illiteracy and for the education of the adult is to succeed we have to think of certain changes in the existing methods of approach to this problem.

In towns and cities it may be possible for employers of large labour to conduct adult educational classes just before or after or even during their scheduled hours of work and make attendance at such classes compulsory. They can also hold out as an inducement promotions to those who improve their skill and technical knowledge by regular attendance at educational classes.

Labour unions which spend so much time in agitating for the welfare of the labourers do not seem to have given serious thought to the problem of adult education. If they sincerely take up this work, there are greater chances of success of this campaign.

Problem in the Village

In villages, the problem is more difficult than in towns. We can tackle adults only in their hamlets or colonies. If the headmen and others who are more prominent in the colony could be roped in first, then the movement will gain momentum and succeed.

Co-operative societies which are fairly widespread in villages can do some useful work in this campaign of adult education. Co-operative education in England and elsewhere covers a much wider field than in our country. If each society runs an adult education centre employing specially trained instructors and if the social workers in the village support the movement, there is a chance of adult education campaign spreading more widely and rapidly than at present. Most of the co-operative societies can maintain adult education centres from out of their own funds and Government assistance, such as it is, may be limited to other voluntary organizations running adult education centres.

Use of Oil Engines to Tide over Power Shortage

Owing to cuts in the supply of electric power, many owners of factories, workshops and work places have applied for permission and licence for the installation and the use of oil engines to tide over the power shortage. The Government have carefully examined the matter and consider that in places where the cuts in the supply of electric power operate, permission and licence may be granted by local bodies and their executive authorities to the owners of factories, workshops, and work places for the installation and working of oil engines to tide over the period of power cuts, provided that the factories, etc., are situated in non-residential areas.

Tanjore Combats Tuberculosis

Mahatma Gandhi Memorial Sanatorium Opened

Thanks to the philanthropy and public spirit of the people of the district, Tanjore today has a large and up-to-date tuberculosis sanatorium, manned by specialists and equipped with modern appliances. The sanatorium, named after Mahatma Gandhi, was opened recently by Hon'ble Sri P. S. Kumaraswami Raja, Chief Minister, who underlined the importance of the occasion when he declared: "The opening of T.B. sanatoria like the one here at Sengipatti meets an urgent need."

The interesting history behind the implementing of the Sengipatti scheme records a worthy account of private charity and Governmental co-operation. Towards the end of 1947, the then Collector of Tanjore, Mr. H. C. M. McLaughlin, revived the defunct District Health Association for the main purpose of establishing a tuberculosis sanatorium in Tanjore District. A vigorous campaign was launched for the collection of funds.

Srimathi Nagasubbammal, wife of the late Sri M. S. Ramaswami Aiyar (retired Deputy Superintendent of Police, Madurai) made an endowment of 50 acres of wet lands in Siddamalli Melpathi village near Nidamangalam, fetching an annual income of Rs. 6,000; she also made an additional gift of Rs. 25,000. By the commendable efforts of successive Collectors, public contributions amounting to Rs. 5.5 lakhs were collected. The Government of India have included this Sanatorium in the list of institutions, donations to which would be exempt from income-tax.

The Government readily sanctioned the proposal of the Special Officer of the Tanjore District Board to divert Rs. 10 lakhs from its surplus funds for the capital cost and Rs. 50,000 a year from its revenues for maintenance. For locating the sanatorium the Government alienated a big block of about 500 acres in Sengipatti and Palayapatti villages of Tanjore taluk, situated at a distance of 17 miles from Tanjore and eight miles from Budalur railway station.

The foundation stone was laid by the H.E. Lady Nye on June 16, 1948. After the clearance of bushes, preparation of the site and boring of two deep wells, construction work was started in March 1949.

So far construction work has been done and equipment provided to the extent of Rs. 19.5 lakhs under the following

main-heads: Building—Rs. 8.0 lakhs;
Rs. 0.50 lakh; Water-supply—Rs. 0.75 l.
and Hospital Equipment—Rs. 1.25 lakhs.

Two bore-wells, an overhead tank, some staff quarters, kitchen block, the main hospital, two general wards can accommodate 40 beds each and 20 special wards for the paying patients have been completed and provided with sanitary fittings, electricity and water-supply. The construction of one more general ward and eight special wards is in progress. The latest type of Philips X-ray apparatus and up-to-date surgical instruments have been provided. The services of a Specialist have been secured as Medical Superintendent of the Sanatorium.

It is estimated that a further sum of Rs. 2 lakhs will be needed to complete the remaining buildings, equip them and provide the necessary amenities. As advised by the Government, a sum of Rs. 5 lakhs out of the Rs. 10 lakh reserve, so that the interest might be utilised for the maintenance of the Sanatorium. With the extensive facilities around it, the excellent water-supply and other natural facilities, the Sanatorium has immense potentialities for future expansion and development.

In the course of his opening address, Sri P. S. Kumaraswami Raja, Chief Minister, pointed out that since the Government had a variety of commitments, it was the duty of the public to come forward to finance such urgently needed institutions like this sanatoria. After praising the philanthropy and large-heartedness of the people of the district who had contributed to the building of the Sanatorium, the Chief Minister declared that Government for their part would be willing to assist, if others come forward to build such institutions.

Hon'ble Sri M. Bhaktavatsalam, Minister for Public Works, who also addressed the gathering at the opening ceremony, emphasised that the relief of the sick was one of the greatest services that one could render. The Public Works Minister commended the great efforts of the people of Tanjore district in building an ideal institution like the Sanatorium, and appealed to all the wealthy citizens of the district to make further liberal contributions in order to enlarge its work.

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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 houses and let us build for the future of our children and our country."

—GANDHIJI

For ages the bane of India has been the neglect of women and Harijans. The long line of Indian reformers have been fighting for their emancipation for centuries together. It was Gandhiji who focussed the attention of the public to this great injustice done to a section of society and it was given to the Madras Government to have given a glorious lead to other States by working out a great plan for the Women's Welfare and thus bringing into reality the cherished dream of the Father of the Nation.

There is a growing realization that whatever may be the opportunities of new openings for a modern young woman, her ultimate and her privileged place is the 'hearth', for unless the houses are built strong and run on right lines society will not progress. The Government's plan is to help the woman primarily to build a perfect home by educating her about the needs of a happy home and her importance in society. The aim of the plan is the promotion of the welfare of families in all its aspects through educational, preventive and protective services with a view to raise the standard of living.

Work at Community Centres

Women workers trained specially in tackling problems concerning women, attend to the welfare work. In the selection of workers particular care is exercised to ensure that only most suited individuals with aptitude for social work are chosen. At the Community Service Centres scattered all over the State training is imparted to the workers in subjects relating to the welfare of women and children, and handicrafts as well. The Centres are situated in convenient places easily reached by women of the locality. A cordial atmosphere of cheer and friendship prevails at these Centres where women gather to engage themselves either in learning useful crafts or hearing some talks from experienced lecturers about home keeping, child welfare etc. At these Centres women are advised as to how best they could adjust their family income and if need be, supplement it by taking up some useful craft, Tailoring, soap-making, tape-weaving, making fancy

WOMEN'S WELFARE ANNUAL DAY: The Annual Day Celebration of the Training Institutes and Service Home of the Department of Women's Welfare was held on the evening of 14th July, 1952, at the Museum Theatre, Egmore. Sri C. Subrahmanyam, Minister for Finance, presided over the function and Sri S. B. P. Pattabhirama Rao, Minister for Rural Welfare, delivered a speech. An exhibition displaying useful articles produced by the trainees and students was got up on the occasion. Here, Sri Subrahmanyam and Sri Pattabhirama Rao are seen inspecting some of the exhibits.



articles of household utility from waste products, making preserves, pickles, syrups, etc., are some of the crafts taught at these Centres. The finished products are sold and wages are paid to the members.

Another important activity of the Women's Welfare Department is the house-to-house visits and investigation conducted by women workers. Houses in selected localities are visited and family conditions are surveyed. The workers render all possible assistance by way of advice to womenfolk to keep their homes clean and healthy, and by way of instruction in the care of children and in the matter of spending the income. During the house-to-house visits families' special problems are noted for "family-care-study" and concentrated attention is paid for rendering any solid help.

Service Homes for Destitute Women

The problem of engaging usefully the deserted wives, widows and destitute women, is being solved by the Service Homes run by the Women's Welfare Department. General education and special training are given to the inmates for three years. The children of the inmates are also admitted so that, at least these children could have a better start in their life. The training for these destitute women includes instruction in the three R's, science and social subjects. Hindi, First Aid, home nursing, spinning, cutting and sewing, simple handicrafts are the other subjects taught.

To help women living in urban areas who are anxious to learn a trade to eke out their livelihood, the Department of Women's Welfare are running Industrial Training Centres. At these Centres training is imparted at present in profitable trades as tailoring, hand weaving, knitting, glass beads and chalk-making, etc. The strength of the Industrial Centre run in the City is 64 of whom 48 are scholarship-holders.

Today women's welfare work is carried on through 74 branches of which 53 are in rural areas, and 167 centres.

The intense activity, the lively atmosphere and the great enthusiasm one sees at these Centres, give the hope that the Government are carrying on the welfare work in the right direction. With the education of the women in home-making, the homes will prosper and with this prosperity of the homes the nation's future is inseparably linked.

Harijan Welfare

Free Education to Harijans

At a conference called by Dr. M. V. Krishna Rao, Minister for Education, at the Secretariat on July 8, 1952, the question of payment of compensation for loss of fee income in educational institutions and renewal of scholarships to Harijans was considered.

Sri D. Sanjeeviah, Minister for Co-operation, Sri J. Sivashanmugham Pillai, Speaker, Madras Legislative Assembly, Secretaries to Government in the Education and the Rural Welfare Departments, the Director of Public Instruction, and the Director of Harijan Welfare were present.

It was decided that the Director of Public Instruction should issue a circular to all colleges and other public educational institutions in the State to the effect that all Harijan students should be admitted, as was done last year, subject to their eligibility for fee concession under the provision of Rule 92 of the Madras Educational Rules, without requiring them to pay the fees before admission.

The conference also decided that steps should be taken to reimburse the managements of educational institutions at the end of each quarter, instead of at the close of the academic year, as at present, for the loss of fee income sustained by them. The management of institutions should be required to send before the end of the quarter necessary particulars to facilitate the payment of the compensation in time.

It was also decided that the Director of Harijan Welfare should assure the managements of all educational institutions by a circular in respect of students, studying in such institutions, who were recipients of scholarships from the Harijan Welfare Department, that the scholarships will be continued subject to the renewal rules and that the managements of hostels should thereupon admit such students, without asking them to pay the caution deposit, special fees, etc.

The Director of Public Instruction was also instructed to follow up this circular and instruct all Heads of Institutions and wardens of hostels to admit the students in the hostels on the guarantee given by the Director of Harijan Welfare.

The campaign against untouchability is the main plank in the policy platform of the Madras Government. The canker of untouchability was eating into the very vitals of Hinduism. Once again it was Madras which responded to the clarion call of Gandhiji in stopping and rooting out from our society this disease of untouchability.

Although for over 30 years, the Madras Government have been trying their best to improve the lot of the Harijans and other backward communities, yet it was only after the declaration of Independence that the real problem was faced and something tangible was done. The Madras Removal of Civil Disabilities Act passed soon after the assumption of power by the chosen representatives of the people removes all disabilities imposed on Harijans by social custom and usage. Another Act—the Madras Temple Entry Authorization Act—was also placed on the statute book in 1947. Under this Act all public temples in the State were thrown open to Harijans for worship.

The backwardness and degradation of the Harijans and other backward classes may be traced to illiteracy and ignorance prevailing among them. Special attention has been paid by Government to this great task of educating thousands of Harijan boys and girls. A lot of difficulties arose in the initial stages. Harijan parents really desired their children to receive good education but they hesitated to send them to school for fear of harassment from villagers, schoolmasters and others who were mostly Caste Hindus. Hence a number of schools solely intended for Harijan children had to be opened in Harijan colonies. Mere starting of schools would be of no avail if not followed up by efforts to remove most of the other causes which prevented the Harijan boys and girls from going to school.

The economic backwardness of the parent who cannot afford to give even a good meal for the school-going child, leave alone his inability to get the child books, etc., is another cause for the large percentage of illiteracy anything. To solve this problem the Government are giving boarding grants to private hostels and institutions which accommodate Harijan pupils studying in schools and colleges. Mid-day meals are supplied to the children of Harijan and backward communities. Residential and non-residential scholarships are granted to Harijan pupils.

Provision of House-sites

Another and more important part of the activities of the Government towards the amelioration of the Harijans relates to the efforts of the Government in providing house-sites for homeless Harijans. The Government have granted house-sites for Harijans at the rate of three cents in wet and five cents in dry areas per family and where lands at the disposal of Government are not available, acquisitions of private lands have been ordered. The entire cost of such acquisition is borne by Government in all cases unless the Harijan family which benefits by the acquisition is rich enough to afford meeting the cost. Besides house-sites, lands are being assigned to poor and deserving Harijans.

Special attention is also paid to the construction of wells, pathways, latrines, etc., in Harijan colonies. The organization of co-operative societies is also benefiting Harijans to a great extent.

Every effort is being made to strive for the speedy amelioration of the Harijans. In each District an officer

has been deputed to specially attend to all work connected with Harijan welfare. Much progress has been made and for a proper assessment of the success of these measures we must turn to the Harijans themselves and watch their life. The political consciousness that is dawning on them, the education that is fast spreading among them, their becoming alive to civic rights as drawing water from the common well, etc., are indices of the measure of success that Government's activities have attained.

Steps to Augment Fish Production

How to Breed Good Species

By SRI V. D. SPURGEON

(Continued from the previous issue)

Brackish Water Varieties

The Buckingham canal with varied depth and connections with Bay of Bengal at various points serves as a medium for inland fisheries of brackish water species. The following marine and estuarine fish that lend themselves admirably for life in changed condition in fresh-water are selected and transplanted to enrich inland fisheries.

Culture. (Telugu "Moyya".)

at genus locally known as "Moyya" is represented by two species in this canal. Of these only, *Mugil dussu-* and *Mugil oeur* are abundant and economically important. In fresh water they grow to 1 to 1½ feet per year of one year.

Therefore, are stout coastal fishes frequently ascending
rivers and backwaters largely between November to
February. Due to their capacity to acclimatisation, non-
duvaceous nature and rapidity of growth, and the availa-
bility of fry in large numbers, mullets constitute the best
fish for inland culture in Circars. For natural
acclimatisation ideal conditions are available at Wooll-
a. With these natural facilities thousands of mullets
were gradually acclimatised to fresh-water and trans-
ferred by the author in all the tanks in Nellore and
Tropus surriets.

The younger identification of the species of *Mugil* is an collection include to mullet stocking as all species do not fish are of same size. *Mugil dussumieri* and *Mugil oyar* are below rock, the Northern Circars. In view of easy availability, outwit the numbers these two species could be used to a rocks and ruma pond culture in Andhra Desa.

Fish of 1 species identification the *Mugil* fry present water at as in the infant stages all the species look out heavy, minute distinguishing characters. However, Nevada in K species can be picked out from the rest with the

Early 1,000 *Entrll.* Dull greenish above. Outer edge of

abundant in the fin with an oblique deep blue band across

method being h

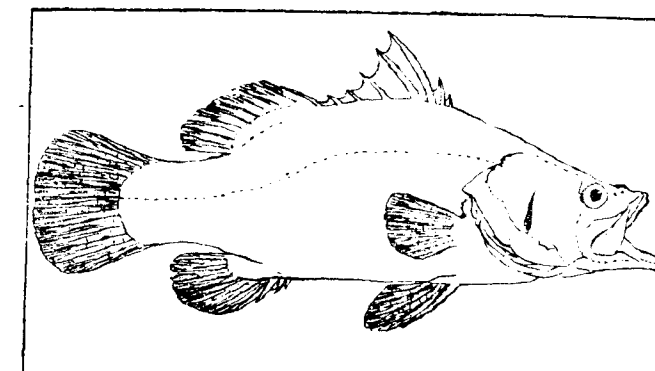
water. It is the completely fresh

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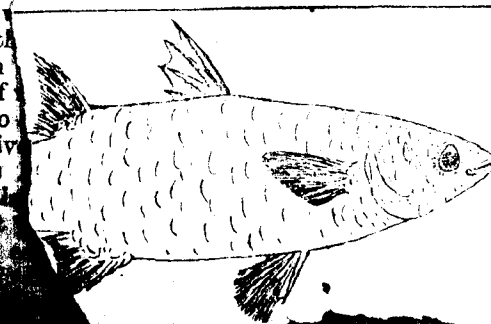
Lates calcarifer.

From November to end of February, mullet fingerlings constantly stream into and move in thick shoals, up and down the canal and creeks adjoining it. With first shower of rains, mullets seem to spawn in off-shore belt. (A statement based on the indirect evidence that gravid mullets are not caught either in the canal, or river mouths, or estuaries or in the inshore area).

By late rains in November and thereafter the storm water from the low-lying areas at Thummalapenta and Woollapaliem get flooded. The flood empties itself through small streams into the Buckingham Canal. This onrush of freshets stipulates the ascent of more and more of mullet fry. This is proved by the bumper catches often noted in between showers of fair intensity. Fishermen, who are alive to this natural phenomenon lose no chance to harvest Nature's crop. Fishing is done with such a thoroughness that it will not fail to impress any one, that the valuable fishery would be sadly exterminated before long.

Collections of mullets are by two ways. At Thummala-penta, the fisher-folk employ a hand shore-sein-drag-net with the mouth extending throughout the entire length and kept distended by means of mouth-sticks tied at regular intervals. The meshes vary but often $\frac{1}{4}$ " mesh proves efficient in the eyes of the fishermen.

At Woollapallem the mode of capture is indigenous and most destructive. Fishermen set up small wicker-baskets (covered with small twigs and foliage) at the terminus of a small stream that has free access from the canal. Swarms of mullets that ascend four days after the spring tides round about full and new moon periods, from November to February make a suicidal jump against the current of fresh-water into the baskets and later find themselves inextricably trapped within the spread twigs and foliage. This onslaught would be non-stop basket loads of these helpless fry would be soon on the way to markets. At the instance of the author the S. has stopped this harmful practice and has itself taken



Rural Development

"My idea of village Swaraj is that it is a complete republic, independent of its neighbours for its vital wants, and yet inter-dependent for many others in which dependency is a necessity. Thus every village's just concern will 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 is more land available, it will grow useful money crops, thus excluding ganja, tobacco, opium and the like. The village will maintain a village theatre, school and public hall. It will have its own water-works ensuring clean supply. This can be done through controlled wells and tanks. Education will be compulsory up to the final basic course. As far as possible, every activity will be conducted on the co-operative basis. There will be no castes, such as we have today, with their graded untouchability."

—GANDHIJI

The Rural Welfare Scheme of the Madras Government attempts to translate into reality this dream of Gandhiji. It is a new and promising activity of the Government. The chief aim has been the improvement of the living conditions in the villages and creating in the villagers an active and intelligent interest in their problems and making them self-confident and self-reliant. Greater emphasis is laid on the improvement of the economic and sanitary conditions, for the main object of the scheme is the organization of the villages for a happier, fuller and more prosperous life in which the individual villager will have the opportunity to develop both as an individual and as a unit of a well-integrated society. The programme as a whole is viewed from the community angle and the villagers themselves are encouraged to work for the objective of improving their lot. The Government's role in the implementation of the programme is that a catalytic agent; and it does nothing more than teaching, guiding and encouraging villagers to make their village a happier place to live in.

The Rural Welfare Programme was first launched in 34 firkas in the State during the last quarter of 1946 and is being extended year after year to additional firkas. The welfare programme envisages the development of agriculture and village industries, improvement of sanitation, health and housing, and organization of village education and village culture.

Agriculture

The need for giving priority for growing food crops is greatly emphasised in the Rural Welfare Programme. The villagers are taught the use of night-soil, farmyard and green manure, bonemeal and how to prevent soil erosion, reclamation of waste lands, afforestation and tree-planting. By supplying seeds free of cost, the villagers are encouraged to cultivate subsidiary food crops like sweet potato and tapioca and vegetables. They are also encouraged to prepare compost manure. The other concessions and help rendered by the Government in the selected firkas include the hiring of pumpsets or their sale on hire-purchase system, on a priority basis. Improved seeds of paddy, millets and pulses are distributed at considerably reduced rates. Green manure crop seeds, sulphate of ammonia and phosphatic manure are all supplied at subsidised rates. Agricultural implements are sold to poor cultivators in the selected firkas at half rates. Whatever concession might



HELPING HAND: Sri S. K. Dey, Community Projects Administrator, lends a helping hand at Muruganeri (Madurai District) by joining in the digging in a self-help campaign.

be given, the cultivator does not go in for them unless he is fully convinced of the efficacy of improved methods. A number of demonstration plots were laid out on farmers' fields.

High priority is given in the selected firkas to the execution of repairs and improvements to the irrigation sources. Old wells and tanks are repaired, supply channels excavated, sluices improved. Three irrigation schemes at a cost of over Rs. 1,13,000 were completed.

Rural electrification is another subject which received the special attention of the Government. Rural electrification schemes costing Rs. 87 lakhs have so far been sanctioned to supply power for lifting water from wells, and for domestic purposes. One hundred and fifteen villages in the selected firkas get the supply of electricity.

Another problem tackled in the villages under the Rural Welfare Programme is Village Livestock Improvement. A scheme aiming at concentrated livestock improvement in the villages is under implementation in four selected firkas. In another three selected firkas the problem of augmenting the production of improved breeds of poultry and eggs is being tackled.

Torch of Learning

Much of the neglect and the sickening conditions prevailing in the villages may be attributed to the illiteracy in which the villagers are steeped in. When once the torch of learning is lit in these desolate patches of this State, better conditions of living are sure to follow. This has been amply proved by the fact that in the selected firkas where literacy centres, and reading rooms, there is life and the villagers in those places go about their work with greater understanding than they ever did before. First preference is being given to selected firkas and centres in the matter of location of the Basic training schools and in training teachers. Reading rooms are built and libraries opened

The figures below will convince one about the substantial progress achieved in this direction. Up to the end of 1951, 347 elementary schools, 530 night schools, 408 adult centres, 40 Basic education schools and 16 Basic training schools were started; 161 school buildings were constructed, 25 central libraries, 270 reading rooms and 625 branch libraries were newly started and 150 old reading rooms were revived; 243 radio sets were installed and 53 radio houses built.

Sanitation and Health

The teaching of the hygienic value of personal habits of cleanliness and group cleanliness in the selected firkas by the Rural Welfare staff has brought about the desired changes in the villages who have now taken upon themselves the task of making the villages clean and tidy. In the health propaganda carried on by the Rural Welfare staff emphasis is always laid on prevention rather than cure by the adoption of simple rules of hygiene. One hundred dispensaries, maternity and child-welfare centres have been



WELL WORK: Sri S. K. Dey inspects a well work accomplished by the Harijans of Chinnachettulotti.

opened in the selected firkas for the benefit of the sick, nursing mothers and children.

As another cause for the backwardness of the villages may be cited the lack of good rural roads. The Government bestow special attention to the improvement of village communications. So far 568 miles of roads have been laid, 116 miles of roads improved and 111 miles of cart-tracks, village rasthas and foot-paths were formed. Three hundred and twenty-nine culverts and 120 road dams were constructed.

Revival of Village Industries

With a view to revive the dying village industries, the Government have sanctioned the Village Industries Scheme. Under this scheme, important labour saving tools and implements to the value of Rs. 6 lakhs have been supplied to the artisans, and raw materials costing Rs. 12 lakhs have been sold to them through co-operative societies at cost price, and model centres for village industries have been established. So far more than 2,000 artisans have been supplied with free tools and implements at a

cost of over Rs. 2 lakhs. Besides these industries over 40,000 families are engaged in spinning and weaving khadi in the eight Intensive Khadi Centres.

The Rural Welfare Programme also envisages the provision of houses for the homeless poor. The Government are encouraging the acquisition of house-sites for the purpose of building houses for the poor.

Considerable progress has been made in regard to co-operative activities in the firkas selected for Rural Welfare work. There are 2,337 villages in selected firkas and so far 2,103 villages have already been served by co-operative societies. As an experimental measure 70 full-fledged multi-purpose co-operative societies have been organised in three firkas.

Planning for Rural Industrialization

The Rural Industrialization Co-ordination Committee, constituted under Sri M. Viswesvarayya's Rural Industrialization Scheme, in Nellore Taluk, met in Nellore on July 5, 1952, with Sri M. T. Raju, Director of Industries and Commerce, as the Chairman. The Village Group Committees of Pederu, Indukurpet and Mypad presented reports of survey of their group areas for existing cottage and small-scale industries, the raw materials and other resources available in the areas and prepared development plans for industrialising their areas.

These plans were discussed in detail at the meeting of the Co-ordination Committee and were approved with certain modifications. Apart from the local efforts and contributions that will be made by the Village Group, the Co-ordination Committee has requested the Government for technical and financial assistance on a small scale.

Treatment of Non-Infectious Cases

The Medical Officer of the Engineering College Dispensary, Kakinada, has been permitted to treat cases of non-infectious type coming from villages adjacent to the College of Engineering.



COTTAGE INDUSTRIES: Going round the Cottage Industries Section at Kallupatty, while Sri V. Achuthan Nair, Rural Welfare Officer, explains the working of the magan chula.

Visit of the Chinese Cultural Delegation to Madras

This State had the privilege of welcoming in the month of November 1951 the Chinese Cultural Delegation—a group of distinguished Chinese consisting of well-known scientists, philosophers, economists and exponents of fine arts. The delegation headed by H.E. Ting-Si-Lin, Vice-Minister of Cultural Affairs and Physicists, the Social group headed by Chen-Chen-Toh, a writer of distinction and Head of Bureau of Libraries, Museums and Archaeology, arrived first on November 21, 1951.

A reception was arranged in their honour at the University where Dr. A. Lakshmanaswamy Mudaliar, Vice-Chancellor of the Madras University, welcomed them.

Speaking on this occasion, the Vice-Chancellor said that it was a unique privilege to welcome the distinguished guests representing all aspects of academic life. He said he could remember no other occasion when such a combination of talents of a high order graced the University with their presence. When they looked into the history of the World, said the Vice Chancellor, they would find that the first great Ambassadors that came out from any country were Savants. A real approach to unity and understanding had been furthered not so much by politicians who came, as by cultural missions and by Savants. He expressed the hope that the delegation, by personal contact, would understand "what we are, what we have been, what we stand for, what we hope for, and what we expect other countries to think of us and know of us."

Mr. Cheng Chen-Toh, Leader of the group, while thanking the University for the magnificent reception, expressed the hope that the members of the delegation would derive encouragement and inspiration by their contacts with men who had achieved greatness in various fields. He said, that they in Madras would have a good deal to teach them in their task of consolidating and

further developing the cultural relations that long existed between the two countries. He observed that there had been good friendship between India and China thousands of years and that ample evidence of cultural inter-course between the two countries could be found in history. He added that it was for the purpose of strengthening their traditional relations that the delegation was sent out to their great country. He concluded "the enthusiasm with which you receive us gives us the assurance that we shall be able to accomplish our task."

The delegation was given a Civic Reception, today, by the Mayor. The party also visited Mahabalipuram and Madurai during their stay. H. E. The Governor also gave a dinner in honour of the delegation.

An attractively got-up Souvenir was also presented to the Members of the Delegation. The Souvenir contained short sketches on the history of Sino-Indian friendship from ancient times, particularly about the contact with the South, notes on the architectural and archaeological glory, and the places of interest, and the main literary works. The progressive activities of the State Government were also indicated in it.

The members of the delegation also attended the Museum Centenary Celebration on 27th November, went round the various galleries along with the Minister who inaugurated the Celebration.

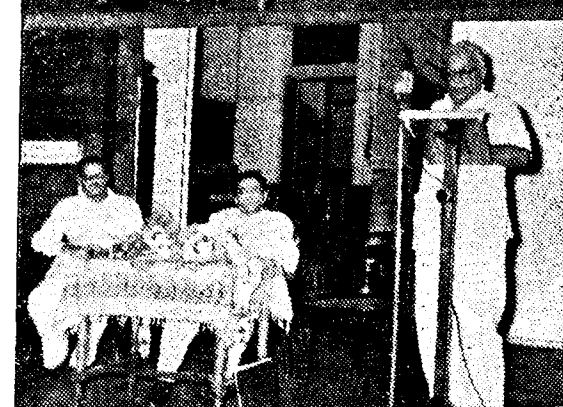
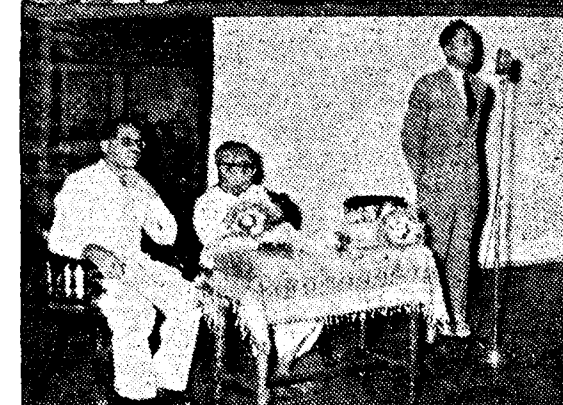
Training College for Kurnool

The Government have approved the proposal for starting of a Training College at Kurnool, with a School attached to it, with effect from July 1, 1952. The Training College will be located in the building, presently occupied by the Osmania College Comm. at Kurnool.

Tanjore N.G.O.'s Undertake Rural Reconstruction Work

An enthusiastic band of about 15 volunteers of the Tanjore Non-Gazetted Government Officers' Association went on an excursion to Kathiranatham village away from Tanjore, on 2nd December 1951 in co-operation with Grama Sevaks and the Demon-Maistry of the Firka undertook village sanitation and tree-planting in the village. The villagers took a great deal of interest and joined the volunteers in cleaning, vegetable gardening and tree-planting. An informal meeting was held when the village volunteers exchanged reciprocal thanks-giving. The excursion ended with a pooja in the local Kalaswami Temple.

On the suggestions given by the volunteers, the Government have promised to make arrangements for opening a school for the benefit of their children who are now at a distance of two miles to Mariammankoil School. The volunteers undertake monthly mass cleaning of the streets. Sangam was also formed.



A series of interesting lectures were arranged in connection with the Madras Museum Centenary celebration. Photo shows (Top Left) Dr. N. K. Panikkar speaking on "Fisheries Research and Museum"; (Top Right) Sri T. N. Ramachandran speaking on "Museums of United Kingdom and India"; (Centre Left) Sri G. Venkatachalam, speaking on "Two thousand years of Indian Painting"; (Centre Right) Dr. T. S. Sadasivam on "Some aspects of Soil borne diseases of Crop plants"; (Bottom Left) Dr. T. S. Agarwala on "North Indian Painting"; (Bottom Right) Sri S. V. Ramamurthi speaking on "Indian Sculpture and Culture" and view of a section of the crowd.



Cheng Chen-Toh, leader of the Cultural group speaking at the reception arranged by the Vice-Chancellor of the Madras University.

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 during May 1952 is given below :—

Madurai District.—During the month under review, 73 charkhas were distributed and 7,566 hanks were produced. Fifty-two compost pits were dug, ten acres of waste land were brought under tractor ploughing, 3,300 Sesbania seedlings and 65 trees were planted. Mr. Howard Sochurer, representative of *Life Magazine*, U.S.A., and Sri S. K. Dey, Administrator of Community Projects, Government of India, visited this area and were impressed by the enthusiasm and self-reliance of the villagers.

Tanjore District.—During the month, 63 charkhas were repaired; 756 hanks of yarn were produced under the Extensive Khadi Scheme. One hundred and six manure pits were dug; 96 manure pits were rectified; 72 compost pits were laid; and 297½ tons of compost manure was produced. Fourteen insanitary pits were filled up and 65 trenches and Wardha type latrines were constructed. Eighty-seven trees were planted; 21 mass meetings, 74 bhajanas, prayers and congregation spinnings were conducted.

Bellary District.—Forty-six sanitary drives were conducted, 463 books were distributed and nine compost pits were formed. A demonstration to show how to grow the Moosambi by modern methods, and 26 charkha demonstrations were conducted. Four charkhas were distributed; 100 y. rds of yarn was spun.

Tiruchirappalli District.—In Vengalam and Valikandapuram firkas 32 charkhas were distributed. Eight hundred and twenty-one chittams were collected and khadi for Rs. 135 were sold to the spinners and others.

In the Vellakoil centre, 21 public meetings were held; nine bhajanas were conducted and five mass spinning demonstrations were organised. Twenty-seven soak pits were constructed; 24 compost pits were opened and 16 manure pits were rectified. Seven Grama Seva Samajams were organised.

In Musiri firka, 1,167 hanks of yarn were collected; khadi to the value of Rs. 143-8-3 was supplied to spinners and 43 charkhas were introduced during the month. Twelve compost pits were prepared. Mhote wheel demonstration was conducted in four places. Tools were distributed to eight village artisans free of cost and raw materials to the value of Rs. 1,000 were distributed to artisans and members. An adult education school was opened.

Chittoor District.—During the month, six charkhas were introduced; 20 trees were planted and 950 books were distributed; 149 cattle were attended to and 92 were castrated; 25 compost pits were dug.

West Godavari District.—In Dendulur firka, 14 irrigation wells were supplied with electricity. Harijan Day was celebrated and inter-communal dining and social dramas were organised.

North Arcot District.—Sanitation work was done by the Rural Welfare staff in 82 villages and 67 cherries. Twenty-five trench latrines and 73 compost pits were dug. Thirty-eight charkhas were introduced under the Extensive Khadi Scheme and 732 hanks of khadi were

produced during the month. Twenty-two old wells were deepened in the Rural Welfare area and five Grama Seva Sanghams were registered under the Societies Registration Act.

South Kanara District.—In Kumbala firka, 3½ acres of waste lands were terraced and made fit for cultivation. Twenty-nine green manure nurseries were raised. One branch library was opened at Narayanamangalam. Three houses were constructed in the Koraga Colony costing nearly Rs. 3,000 from public donations. D.D.T. spraying was done in Kumbadaje. Eleven charkhas and 14 beehives were distributed.

In Manjeswar firka 1.60 acres of waste lands were brought under cultivation. Three hundred and seventy-eight pounds of improved paddy seeds were distributed and 15 green manure nurseries were raised. One flushout and a Wardha type latrine were constructed. Thirty-two charkhas and two beehives were introduced.

In Mulki firka, 1.15 acres of land were brought under cultivation. Three hundred and seventy-six pounds of improved strains of paddy seeds were supplied. Nine green manure nurseries were raised. Four flushout latrines were constructed, 34 charkhas and six beehives were introduced.

South Arcot District.—In Kadambuliur firka, 35 compost pits were dug; 18 trench latrines and three community latrines were put up during the month. Three charkhas were introduced and 702 hanks of yarn was produced.

In Chinnasalem centre, five public meetings were conducted. A sum of Rs. 71 was disbursed as compost subsidy to the ryots. A spinning competition was conducted. Books, slates, charts and lanterns were distributed to adult education centres.

The Nilgiris District.—During the month, 51 compost pits were opened; 12 manure pits were dug and a sum of Rs. 170 was paid to the ryots as subsidy for compost making. Thirty-two pounds of Samai seeds and eight pounds of new strains of wheat were supplied to the ryots in Kundah firka.

Tirunelveli District.—Forty-eight compost pits were dug; 21 charkhas were sold and 1,297 hanks of yarn was spun during the month. Tools to the value of Rs. 5,845 have been supplied free of cost to the artisans.

Ramanathapuram District.—Ten charkhas were introduced. Khadi to the value of Rs. 33-2-3 was exchanged for hanks with the self-spinners. Twenty-five compost pits were dug; 19 sweeping campaigns and 26 propaganda meetings were conducted.

East Godavari District.—During this month, 21 model compost pits were dug and 98 were set right. Ninety-six tons of manure was taken to the field and 42 manure heaps were removed. Twelve charkhas were sold; 47 charkhas were repaired; 683 hanks of yarn was collected and 74 yards of cloth was woven.

Krishna District.—In Kurnool firka, 63 manure pits were set right; two insanitary pits were levelled; 21 compost pits were dug and 17 pits were filled up. Seven

(Continued on page 35)

The Public and P & T Facilities

The vast majority of the public of this country do not know of the existence of a large number of special facilities provided by the P & T Department. Instances of such facilities, some of which were being very rarely utilised, were detailed by Major C. V. Rajan, Postmaster-General, Madras, while discussing the progress of the Department in Madras Circle at a quarterly meeting of the P & T Advisory Committee, Madras. The meeting which was presided over by Major Rajan was attended, among others, by Janab Sibghathulla, Mayor of Madras, Mr. Ian Cummings, representative of the Madras Chamber of Commerce, and Sri L. Srinivasan, representative of the Indian Chamber of Commerce.

Beginning, at the request of the members of the Committee, with an enumeration of the special amenities, Sri C. V. Rajan said: The Mobile Post-Office is a special feature of the City. It works in a specially fitted motor van and stops for half an hour daily at selected centres between 5 p.m. and 8-30 p.m. The places of halt are Ripon Buildings, Rattan Bazaar, Marina (opposite to Presidency College), Mylapore and T. Nagar. Special arrangements exist for the despatch of letters posted in the Mobile Post-Office to the mail trains from each of the above points except at T. Nagar. The timing at T. Nagar, however, is such that it is not possible to send the postings to the mail trains, but they are taken to the airport. Postings at all the centres connect the air-mail despatch days of the week, including Sundays and Post-Office holidays. No late fee is necessary on the articles posted in it.

Special Night Clearances of Letter Boxes

While the street letter boxes in the City are cleared four times a day, those located in the post-offices proper are cleared specially twice during the nights by despatch riders using motor-cycles, once between 6-30 p.m. and 8-30 p.m. to connect the Night Airmail Service at 11 p.m. and again between 10-30 p.m. and midnight to connect the early morning air services. No late fee is necessary on these postings.

In addition to the Mobile Post-Office and the special night clearances referred to above, the Madras G.P.O. and the Mount Road P.O. specially observe extended working hours from 8 a.m. to 8-30 p.m. on all days of the week including Sundays but excluding Post-Office holidays. They transact all classes of business except money orders and insured articles during the extended hours. Special arrangements have been made to connect the postings in these offices both with the outgoing mail trains and the night Air Service. No late fee is necessary on postings in these two offices even on Sundays.

Delivery on Sundays

There is still some misapprehension in this matter. On Sundays delivery of mails has been suspended in all offices. In certain selected offices, however (there are 96 offices in the Madras Circle), only Express Delivery articles prepaid with an additional fee of annas two in addition to the ordinary postage, are delivered. Offices not so selected

for the purpose are *not* authorised to deliver even Express Delivery articles on Sundays. A complete list of post-offices in the whole of India which are authorised to deliver Express Delivery articles on Sundays is available in all post-offices for reference. The public are requested to make sure before posting Express Delivery letters intended for delivery on Sundays, that facilities for their delivery are available at destination. Express Delivery articles posted for offices other than the authorised ones will result in their not being delivered at all on Sundays.

Special arrangements have been made for the posting of late-fee articles on Sundays in certain selected post-offices and in all departmental telegraph offices and R.M.S. Offices. Late-fee articles posted in these selected offices should bear an additional fee of half-an-anna besides the ordinary postage. The late-fee in respect of postings made in R.M.S. Offices will, however, be one anna per article.

Articles posted on Sundays in the selected offices should always bear late-fee as otherwise they would not be despatched.

Identity Cards

Identity cards issued to travellers by the P & T Department are neat to carry and are very useful to people who are frequently on tour and who cannot be conveniently identified by the local postmen. These are available at all important Post-Offices at a cost of one rupee. The cards are valid for three years. A photograph should be supplied by the applicant to be affixed in the card.

In the case of large offices and firms, pre-payment of postage by impressions of franking machines is recommended. This saves labour in accounting for the stamps and in fixing them on each article. Licence for the use of franking machines can be obtained from the Head of the Circle. The machines which are available in the market must be purchased by the applicant himself.

Cheques drawn on banks who have furnished a guarantee on behalf of the drawer, are accepted in P & T transactions provided the amount is not less than Rs. 20. Pay orders from a local bank can, however, be accepted without a guarantee by prior approval.

Private telegrams relating to human life involved in accidents, death, etc., are charged at inland express rates but are given precedence in transmission over urgent and express messages.

Greetings telegrams for festive or congratulatory occasions are accepted at a reduced rate, the minimum charge being annas eight for 'ordinary' and Re. 1 for 'express.' The list of stock phrases is available at all telegraph offices. Greetings telegrams are also accepted by telephone for onward transmission. They are delivered at destination in specially designed pictorial forms and envelopes. *De Luxe* greetings telegrams may also be sent by a person using his own text in the message. Greetings telegram forms and envelopes are also available for sale in all Government Telegraph Offices at a cost of annas two a form and an envelope, and they can be sent by ordinary post on payment of two annas as postage.

delivered by learned scholars who had made original contributions to their respective subjects by painstaking study and researches. All the lectures were highly instructive to laymen and specialists alike. Appreciating the value of such lectures, the Hon'ble Sri M. Bhaktavasalam, Minister for Public Works, who presided over one of the functions, suggested that these lectures may be made a regular periodical feature of the Museum activities. The lecturers and the subjects were: Dr. N. K. Panikkar, Chief Research Officer, Central Marine Fisheries Research Station, Mandapam—"Fisheries Research and Museum"; Dr. V. S. Agarwala, Professor of Indian History, Benares Hindu University—"North Indian Painting"; Sri T. N. Ramachandran, Superintendent, Department of Archaeology, Eastern Circle, Calcutta—"Museums of United Kingdom and India"; Sri G. Venkatachalam, Art Critic and Author—"Two thousand years of Indian Painting"; Prof. A. Ananthanarayana Ayyar, Principal, Stanley Medical College, "The Problem of the pedigree of Man"; Dr. T. S. Sadasivan, Botany Laboratory, University of Madras, "Some aspects of soil-borne diseases of crop plants" and Sir S. V. Ramamurthi—"Indian Sculpture and Culture".

The Museum Exhibits

The Zoological galleries.—The largest and probably the most reputed and valuable of the exhibits in the Zoological section is the gigantic skeleton of the Great Indian Fin-Whale (*Balaenoptera indica*) suspended from the centre of the ceiling in the Hall of general exhibits at the commencement of the Zoological galleries. The whale from which this skeleton was prepared was a fair-sized specimen measuring over 60 feet in length and was washed ashore in Mangalore in 1874.

Among the other notable skeleton exhibits in the Museum, the huge skeletons of the Indian elephant and their skulls and tusks of solid ivory attract much attention.

Although the Museum is primarily devoted to specimens of South Indian Fauna, it can still boast of a small complement of animals from foreign countries. Among these, the Orang-Utan, Tapir, Cassowary and the Kangaroo are perhaps the most outstanding ones. A large male specimen of the remarkable Anthropoid Ape, the Orang-Utan, stares grimly at the visitor as he enters the general gallery in which the skeleton of a whale is exhibited.

Anthropology.—The earliest notable collection of this Museum is that collected by J. W. Brecks and others and catalogued by R. B. Foote, the pioneer pre-historian of India. This includes exotic-looking specimens of tiered pottery, grotesque animal and human figurines (with the buffalo predominant), ornaments of iron, bronze and even gold, cylindrical beads of agate and etched beads of carnelian.

The next outstanding collection of Stone Age and Iron Age antiquities of India was also collected by R. B. Foote. This collection is unique in being the only pioneer collection of pre-historic antiquities of this country. Its value is further enhanced by being highly representative of the Stone Age and Iron Age cultures of India.

The third important collection includes antiquities obtained from two of the earliest of excavations conducted in South India by the Archaeological Survey of India. One of these is the urn burial site at Adichanallur in Tirunelveli district.

Numismatic collections.—The earliest Indian coin represented in the Museum Cabinet is the *Parana* or the Punch-marked coin as it is called in English. The term punch-marked is used to distinguish it from the "die-struck" coin. A die covers the whole or a very large part of the face of a coin, but a punch covers only a small portion of its surface. These punch-marked coins have been classified as pre-Mauryan, Mauryan and Post-Mauryan. The silver punch-marked coins generally weigh 56 grains.

Of South Indian coins, the Museum has the coins of Cheras, the Pandyas, the Cholas, the Western and Eastern Chalukyas, the Rashtrakutas, the Kakatiyas, the Yadavas, the Hoysalas and of more recent time of Vijayanagar and Mysore Kings.

The Museum also has a very fine collection of Mughal, gold, silver and copper coins.

A very rare find was recently acquired from Dowlaiswaram, a place very near Rajahmundry. The find consisted of 127 gold coins, 49 of which belong to the Eastern Chalukyan ruler, Rajah Rajah I, and the rest to his son, Kulothunga Chola.

Archaeology and Art.—The art connoisseur has a variegated feast before his eyes when he enters this Section. The collections of the section may be grouped as follows, each group being important and interesting in its own way: 1. Bronze figures, 2. Specimens of sculpture and architectural pieces, 3. Paintings, 4. Inscriptions and 5. Handicrafts and works of art.

By far the best known objects of the Section are the metal figures. There are over 800 of them in the Museum of which about 85 are Buddhist, about a dozen Jain and the rest Hindu. This Museum is perhaps the only institution in the whole world where such a large collection of metal figures is assembled under a single roof.

The collection of early Buddhist sculptures includes the large group of sculptures from a ruined stupa at Amaravathi, a few fragments of sculpture from Jaggayyapeta, a few sculptured friezes belonging to a stupa at Goli. The total number of these sculptures is about 300. The Amaravathi sculptures are of interest as they are in at least four distinctive styles showing the development of the art in South India.

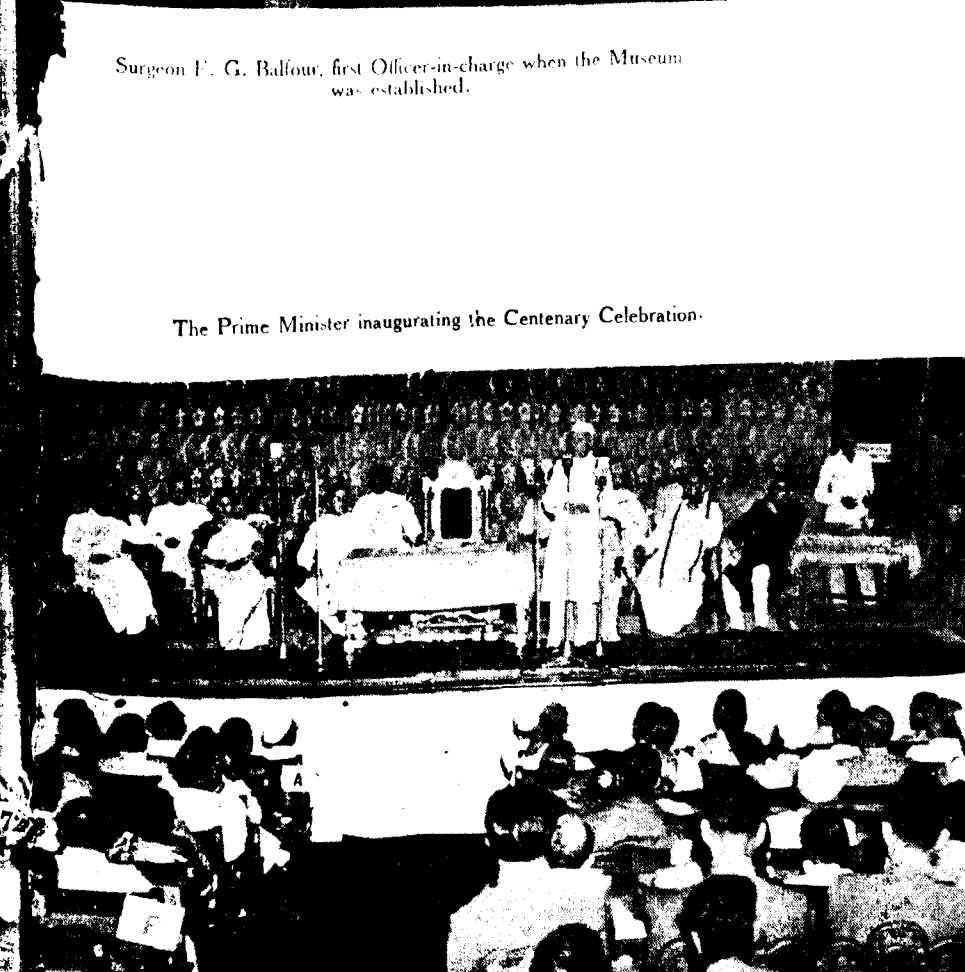
There are about 300 paintings in the Section. A good number of them are in the Tanjore style, characterised by delicate brush work and realistic touches.

Botany and Geology.—Topics in the Botany galleries of the Museum fall under (a) Systematic Botany, (b) Economic Botany, (c) Ecological Botany, and (d) Miscellaneous collections (meaning other branches of the subject, that are not covered by the preceding three heads).

The public galleries of the Geology section are devoted to (a) General Geology, (b) Stratigraphy, (c) Minerals, (d) Rocks, (e) Economic Geology, (f) Special isolated collections and (g) Index collections. Under General Geology are illustrated the structural details and the surface architecture of the earth. The photograph of the earth from 100 miles up, the plaster model showing the internal structure of the earth, and the contour model of the Madras and Chingleput districts are admired by most people.



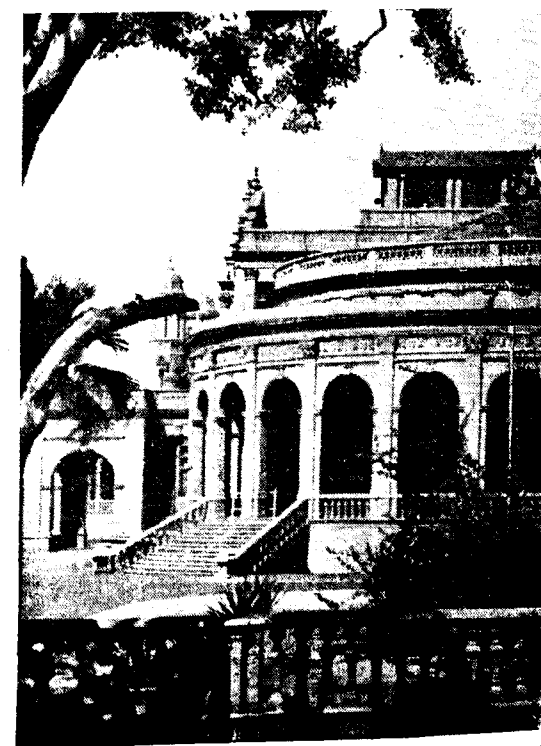
Surgeon F. G. Balfour, first Officer-in-charge when the Museum was established.



The Prime Minister inaugurating the Centenary Celebration.

THE MADRAS GOVERNMENT MUSEUM was inaugurated by Sri Jawaharlal Nehru, the 1951. Starting in 1851, with the collections, the Madras Literary Society as its nucleus, this Museum has its existence.

Front view of the



Special Exhibition



Phonogram Service

The phonogram service is available for telephone subscribers in all important towns. Under this system telegrams could be transmitted over the phone to the telegraph offices. Similarly, telegrams received to subscribers could also be telephoned from the telegraph office by prior arrangement or if the telephone number is given in the address. In the City of Madras telegrams are accepted over the phone free of charge. In other places a fee of two annas is charged for each message.

Local telegrams are accepted for delivery in the local delivery area at the rate of six annas for eight words or less for ordinary and twelve annas for express telegrams. Greetings telegrams can also be sent as local telegrams.

A messenger service exists for inward particular person calls at Public Call Offices where there is sufficient demand for this. Under this system, a messenger is sent to inform the particular person wanted that there is a trunk call for him. A fee of eight annas is charged for this service on each call, in addition to the usual charges.

All post-offices sell pocket P & T Guides priced at anna one each and lists of trunk call rates at the same price. The ceiling rate for the maximum distance is Rs. 12 and half of that rate is levied between 6 and 8 hours and 21 hours to midnight. One-third rate is charged for trunk calls between 00 hours and 6 hours. Thus, for a call say from Madras to Delhi or Shillong between 00 hours and 6 hours, the charge will be only Rs. 4 for three minutes.

Public can assist

In conclusion, the Postmaster-General said that it has always been the constant endeavour of the Department to provide the public with ever-increasing facilities. He appealed for co-operation from the public and added that the post-offices would be able to serve them more efficiently if a few but essential details are carefully borne in mind. He laid stress on the need for correct addressing and pointed out that in Madras City alone as many as 6,000 articles were daily received badly addressed. These letters kept floating from one post-office to another before reaching their correct destination. The problem would be greatly solved by the mention of the zonal number of the post-office concerned wherever the zonal numbering system is in force, e.g., at Madras, Bangalore, Kozhikode and Mangalore. The omission of post-box numbers constituted another serious handicap. The mention of post-box numbers would minimise the labour of the sorters considerably and would at the same time greatly accelerate delivery of the mail.

The Postmaster-General also pointed out that address on articles from one linguistic area to another should preferably be written in English. He estimated that nearly 3,000 articles addressed in local languages travelled to Madras daily only for the purpose of translation. There is another point in which the business community could contribute a lot to the efficient sorting of mails. This is by spreading out their postings over the whole day. As it is, nearly 70 per cent of the letters posted in a day came to the post-office late in the evening with the result that the sorting staff have to rush through the work of sorting within the last one hour or so.

Ration Scales in Fair Price Shops

The scale of rice ration in fair price shops functioning in the Municipal areas after the abolition of rationing will continue to be 7 oz., until further orders so that the consumers may not find any difficulty until free market availability is established. This was made clear in the orders issued by the Government, on June 7, 1952. This note is issued to correct the impression created by reports in certain newspapers that the scale will be reduced to 5 oz. from 6th July 1952. This is completely wrong. Government will watch the situation and reduce the scale only if there is plenty of free market availability of rice and it becomes unnecessary to issue as much as 7 oz.

Collection of Loans Postponed

The Government have postponed the collection of loan instalments and summary recovery of loans to Fasli 1362 in the villages in Sulerpet Taluk, Nellore District, and the seven villages in Pellur Taluk, Guntur District, which are affected by adverse seasonal conditions.

The Government now direct that summary recovery of subsidies granted under all the well subsidy schemes be postponed to the kist season of Fasli 1362 in the villages referred to above.

The Government have already postponed the collection of instalments for loans to Fasli 1362 in Dharapuram Taluk of Coimbatore District, which is affected by adverse seasonal conditions. The Government now direct that summary recovery of subsidies granted under all the Well Subsidy Schemes be postponed to the kist season of Fasli 1362 in Dharapuram Taluk, Coimbatore District.

Road Works Sanctioned

Grants not exceeding Rs. 1,19,000 and Rs. 73,250 have been sanctioned in the current year for the Nellore and Coimbatore District Boards respectively for executing road works.

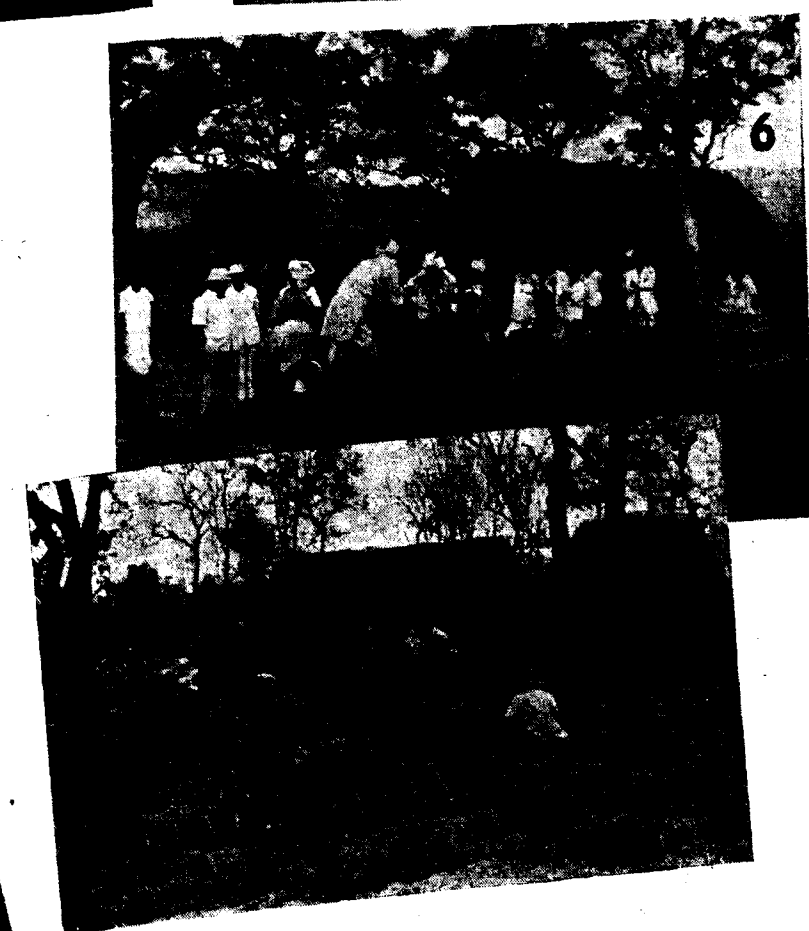
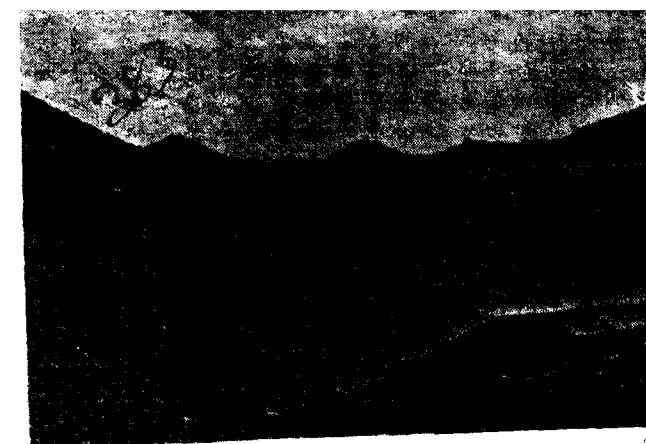
This action has been taken in order to provide relief to the unemployed agricultural labourers, who are affected by adverse seasonal conditions in the districts.

Concessional Rates in Railway for Despatch of Gift Grains

The Railway Board have extended up to October 31, 1952, the grant of concession of half the existing rates by goods trains plus full terminals and other charges for consignments of gift grains, despatched for the relief of the people in scarcity areas in Madras.

Tamil Drama Banned

The Government have banned the staging in any public place in the State of the Tamil drama *Vibhishanan* or *Marumalarchi*.



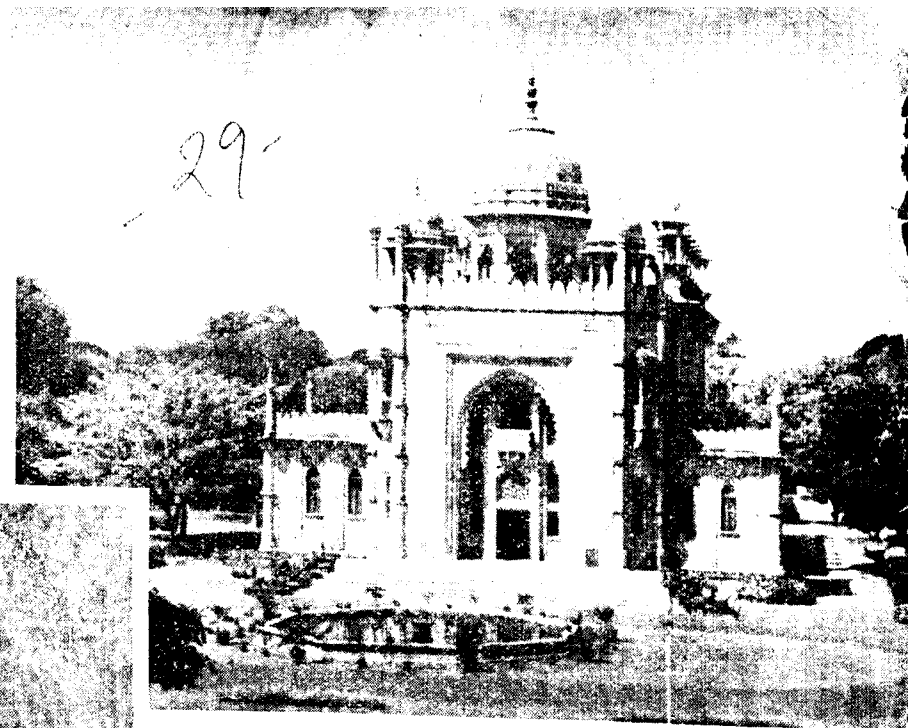
RAYALASEEMA RELIEF: 1. Totally dry in March 1952, this open well in Thippayapalem village was deepened under the Rural Water Supply Scheme and was filled by rains by the third week of May.

2. The Cumbum Tank surplusing after the heavy July rains.

CHELAMA FODDER OPERATIONS: 3. The fodder press is filled with hill grass. 4. The lid is adjusted. 5. The lid is cranked down. 6. The bale is then fastened with bamboo skin tape or wire. 7. Stacks of hill grass in the fodder depot with bales ready for transport to famine affected areas.

THE NATIONAL ART GALLERY

Sponsored by the Government, the Art Gallery was opened by the Prime Minister, on November 27, 1951.



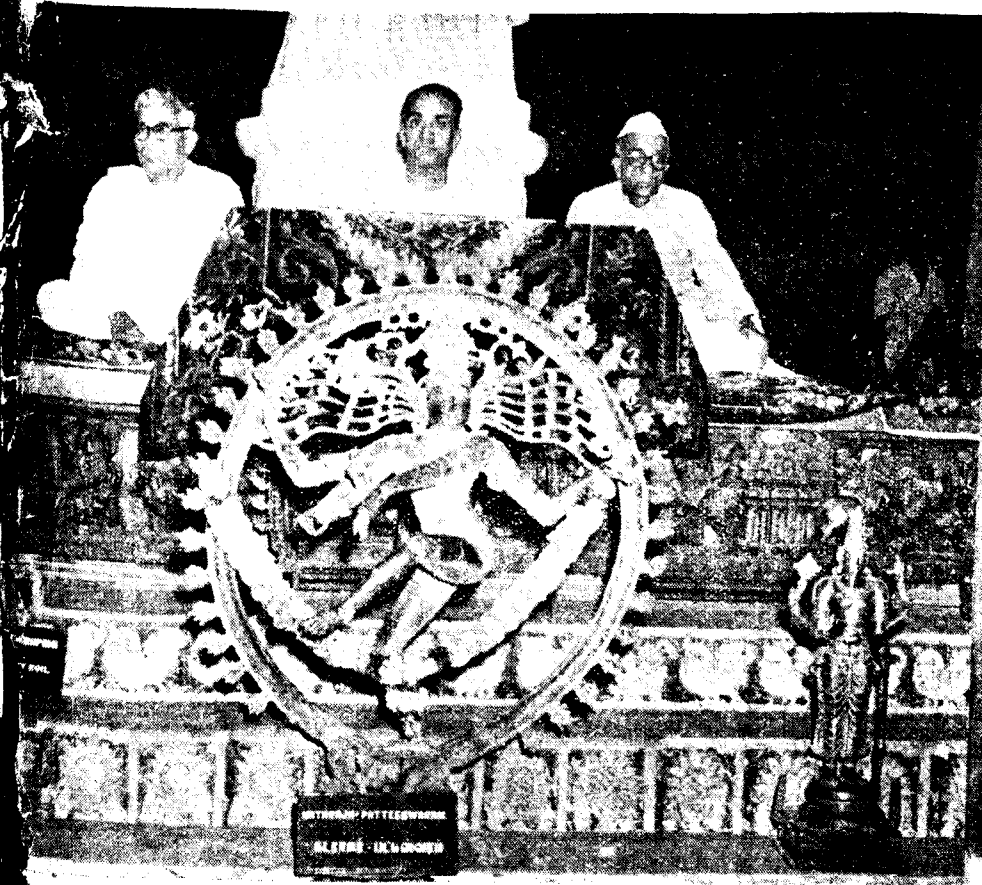
Victoria Memorial Institute where the National Art Gallery is housed.



A portrait study—one of the Mughal Paintings in the Art Gallery.



Krishna with Gopis—An old Rajasthani painting kept in the Art Gallery.



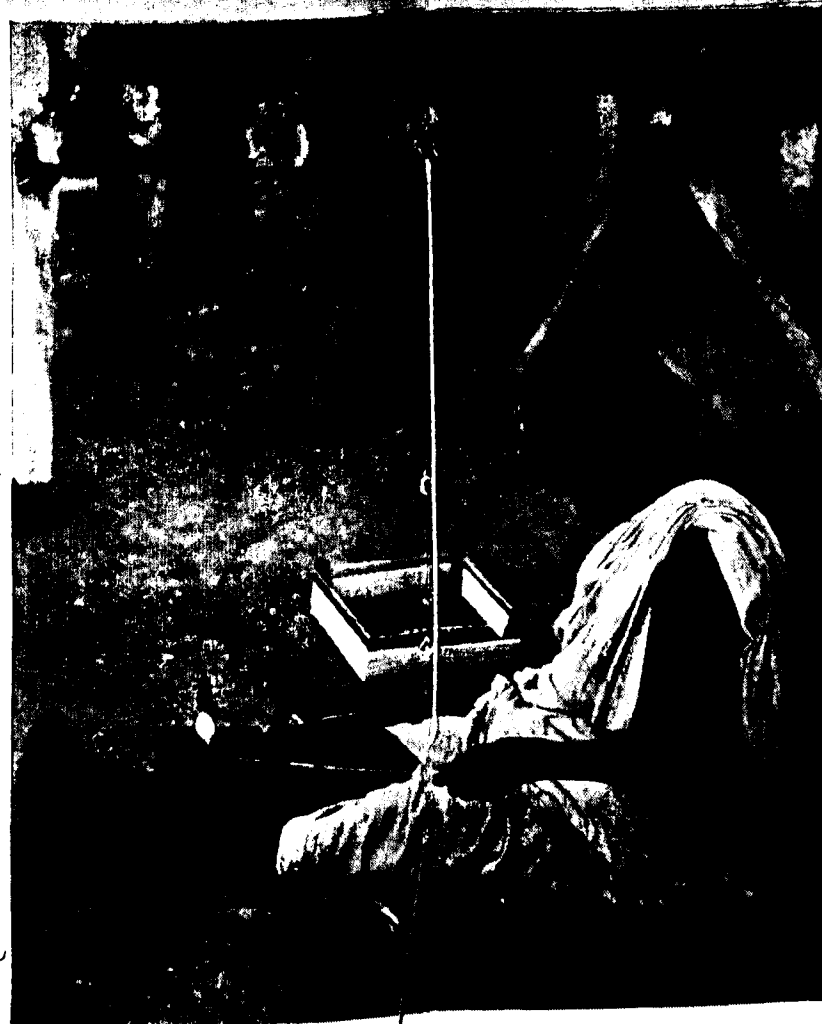
Tanjore Art Gallery was inaugurated by Hon'ble Sri M. Bhaktavatsalam. Hon'ble Sri P. S. Kumarswami Raja, Chief Minister, presided on the occasion. Photo shows the inaugural function, some of the exhibits, and Hon'ble the Chief Minister going round the gallery.





RURAL RECONSTRUCTION

The Rural Development Scheme in Madras State aims at enriching village life by encouraging villagers to improve their living conditions and habits by self-help and mutual co-operation. The villagers learn better methods of agriculture and handicrafts, useful leisure hour occupations like spinning, healthy habits like sanitation and personal cleanliness, improved techniques of farming as pedigree breeding, and oil milling.



Above (left) : At the charkha. The entire family spins at home.

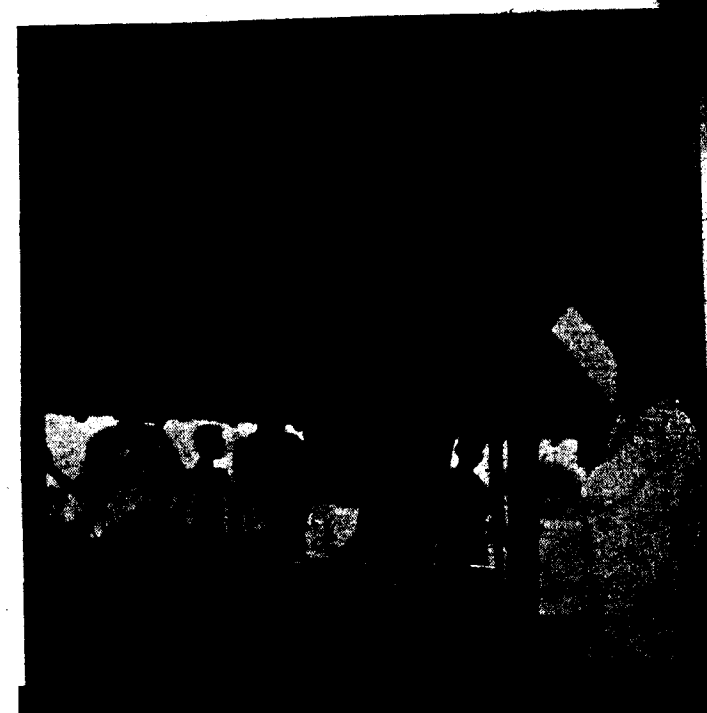
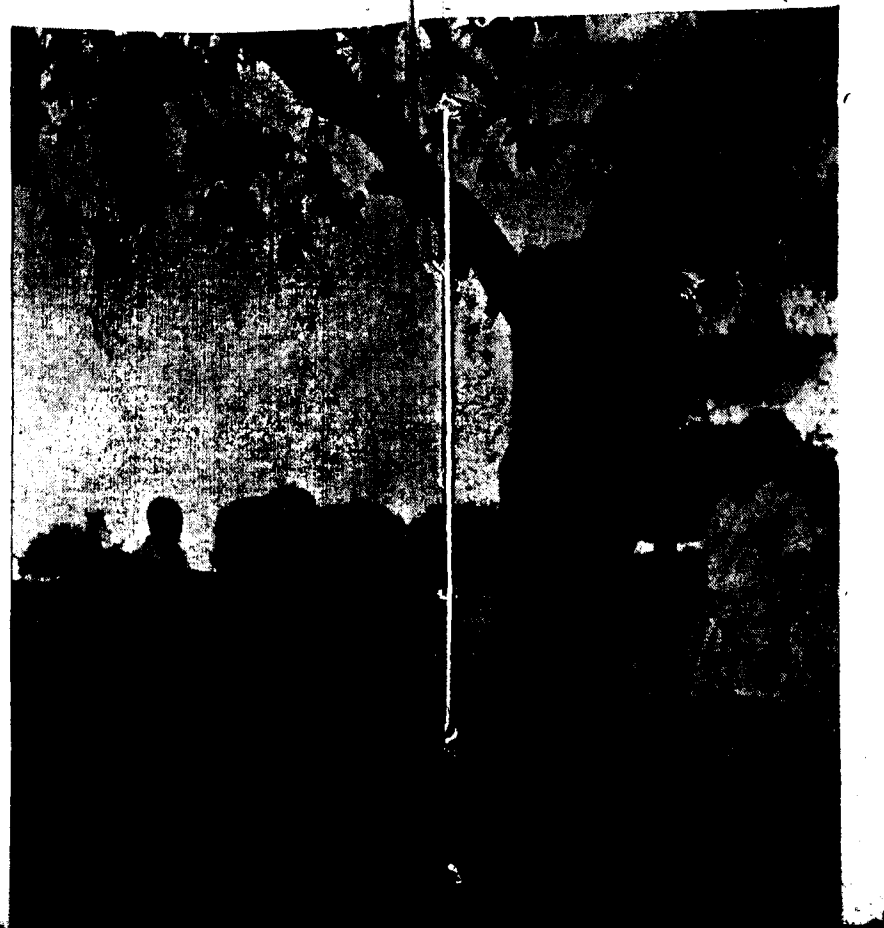
(centre) : Age is no handicap with the charkha.

(right) : This well was built by villagers co-operating at the work, the Government grant covering only a part of the cost.

Below (left) : Washing and bathing are done at specially built enclosures. The Harijans of Chinnachittulotti built this well.

(centre) : Pedigree bulls are needed to raise village stock. This Kangayam bull was bought by the Melakottai Co-operative Society.

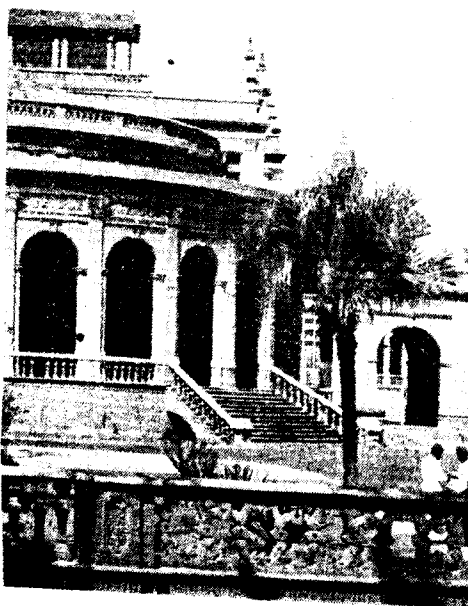
(right) : A ghani designed for economy and efficiency, built at the Kallupatti Village Industrial School.



JM CENTENARY CELEBRATION

Prime Minister of India on November 27. ly geological, numbering about 1,100 of the atution had completed 100 years of useful

acum Building.



Entrance Hall.



One of the exhibits in the Archaeological Section.

Sri Jawaharlal Nehru studying the exhibits.



HIGHWAYS

of a total length of 2,034 miles, only 936 miles are d and 215 miles were proposed to be metalled ent War and Development. Thus there is very e way be made in the matter of providing salmetated roads in the District. At present, the bct roads maintained by the District Board ne euphemistically called metalled, while several district roads are not even gravelled. Village in black cotton soil areas are in bad condition, the provision of a hard base is costly and mainte- trollet consists in making impassable stretches application of sand.

Exem, Vriddachalam and Chidambaram taluks, y of granite metal for main roads and the be transported by rail. A stone crusher Oosen installed at Padur and is working for the for cars. As it is difficult to secure wagons in the collection of materials owing to sugarcane it is hoped to increase production of this s to solve the problem of Rail transport once

Traffic Intensity

Volume of traffic, its composition and direction of esential data for the design and subsequent of a road. An outstanding feature revealed es, is the fact that since 1946, the total e traffic on all roads has increased appreciably pre-war figures. This increase is observed to be ader motor vehicles than bullock carts as the method of transport is proving more popular. ven this increase in motor vehicles were marked ase of vehicles of 3 to 5 tons and over 5 tons. Thus e road surfaces are now called upon to bear the heavy ded trucks and buses to a much greater extent than fore the war. It is therefore evident that better types road surfaces have to be provided for sections with eavy traffic, if the road surfaces are to be in fair condition.

The traffic intensity in the National Highways from adras to Trichy is over 1,500 tons up to Cuddalore from e North and further south it tails down to 500 or 600 ns only.

The traffic intensity on Provincial Highways is 500 to 600 ns only, except on the Cuddalore-Chittoor road. The st 10 miles of this road falls within the sugarcane area d carries a traffic of 1,500 tons and a length of 16 miles continuation is an access road to the Head Quarters e district from several taluks in the interior and arries a traffic of 2,000 tons per day.

On the other Government roads, the traffic intensity s only between 500-1,000 tons per day.

District Board roads, there is only one major district adras to Trichy. Anicut road which carries a ns. The rest of the major District Roads carry a traffic

and Black Top Surfaces

cement concrete or bitumen treated nital cost specific the former,

Bitumen surfacing is being done under mainnance specially in built-up areas of towns and villages these areas have to be made dustproof. The Madras richy National Highways is black topped for a length of 2 miles from the North and this is being gradually extended to Villupuram and further south. Portions of other to as as Chidambaram, Vriddachalam, Ulundurpet and Tindivnam have already been provided with black topping suface and the work is being continued every year. The stal length of black-top roads now is 48 miles and a furier length of 75 miles have been proposed to be compleed, in two years.

There is at present only 8 miles of cement concrete road, three miles out of which are near Nellikuppam Sugar Factory. Further work in this area is in progress and ultimately the first 10 miles of the Cuddalore-Chittoor Provincial Highways will be a cement concrete road 18' 0" wide. The road from Chidambaram to Bhuvanagiri has been cement-concreted and nearly completed recently and the total length is 4 miles. There is a proposal to provide cement concrete pavement for miles 10/16 of the Cuddalore-Chittoor road as this stretch already carries more than 2,000 tons traffic and is bound to increase in the future.

Major Bridges

South Arcot district is affected by monsoons in the Bay of Bengal and the consequent high floods have carried away many bridges in the past. All of these have been reconstructed except two—one across the Coleroon which is the boundary between the South Arcot and Tanjore District and the other across Pambai River near Villupuram. These two are however now in progress.

Under the Vipan Scheme of Road Development, out of 18 bridges proposed, only 9 were taken up and completed. The Post-War Road Development Scheme, which has now superseded the Vipan Scheme, provides for the construction of 17 major bridges at a cost of Rs. 38 lakhs. Besides this, one bridge is also proposed under the Road Development Fund Programme financed by the Government of India on the Tyagadurgam-Manalurpet road.

Two bridges, one over Coleroon and another at Gingee, estimated to cost Rs. 26 lakhs and Rs. 98,500 respectively are in progress and 5 other works are under investigation

Minor Bridges and Culverts

The numerous smaller water courses form bottlenecks the communications system and call equally for brid and culverts. The Post-War Road Development Plan provides for the construction of minor bridges costin Rs. 25 lakhs. Under the Five-Year Plan 19 works have been taken up for execution and 8 works have be completed.

Administration

The roads in the district, as all over the State, are div into 4 groups for purposes of administration, viz., Go ment, District Board, Municipal and Panchayat. The National Highways are financed by the Governme of India but administered by the State. The Sta Government finances Provincial Highways and a major District roads, ulad, to com and finan



Tapping a palm tree for
a, sweet toddy.

Brisk sales at a neera parlour.

Leather tanning by a mem-
of the Gandhiniketan Co-
native Village Industries
society.

Carpentry Section at
Gandhiniketan.

Timber being sold to artisan-
bers of the Dendulur Multi-
ose Co-operative Society.



PROHIBITION

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MADRAS INFORMATION

Ameliorative Activities

Progress of ameliorative activities in connexion with the prohibition campaign in Madras State during the month of May 1952 is given below :—

SOUTH KANARA DISTRICT: Mangalore.—During the month of May 1952, five co-operative societies were registered and three societies were started on work.

The S.K.C.C.W. Stores sold through its retail depots 17 tons 1,332½ lb. of ammonium sulphate and 1,428 lb. of superphosphate. The primary societies sold 1 ton 316 lb. of ammonium sulphate and 84 lb. of superphosphate during the month.

The Central Stores also sold 612 lb. of M.S. Flats, 8 tons and 1,494 lb. of M.S. Rounds, 201 lb. of Octagonal steel bars and 247 lb. of M.S. Squares.

Thrift.—The thrift collections effected during the month amounted to Rs. 11,228-9-0.

Harijan Welfare.—The Central Banks issued a loan of Rs. 750 to one Harijan Society during the month. The Special Co-operative Inspectors, Mangalore and Udipi, visited 17 and 8 societies respectively during the month. Harijan Day was celebrated at four centres, viz., Cheranthipet, Kilpadi, Haleangady and Puttur in Udipi Taluk on 30th May 1952. Collections to the tune of Rs. 428-2-0 were effected by the two Special Co-operative Inspectors during their visit to the societies.

Kasargod Circle.—During the month, the Kanhangad Co-operative Milk Supply Society which was organized previously was registered. A rural credit society was organized at Kinanur II village in the Nileshwar Centre during the month of May 1952.

KURNOOL DISTRICT.—The total number of societies at the end of the month of May 1952 was 439. The target fixed by the Government in this respect has already been reached and the percentage is 54.08. In 19 societies, 169 members were admitted and a sum of Rs. 172 was collected towards share capital from the new members. The percentage of villages served by rural credit societies in the district is 54.08 and the percentage of population served is 8.15 as against 54.08 and 8.07 in the previous month.

Borrowings.—Under the scheme of cheap loans, eight societies (rural credit) borrowed a sum of Rs. 20,415 under short-term loans and 12 societies borrowed a sum of Rs. 29,650 under M.T. loans. There is on the last date of the month a sum of Rs. 10,87,912 outstanding against rural credit societies.

Multipurpose activities.—In one society controlled commodities to the tune of Rs. 176-9-0 were purchased and distributed to 75 members. In three societies, social and recreational activities were introduced and 32 members were benefited to the extent of Rs. 17-8-0. Fifteen members were benefited in one society in encouraging cottage industries to the extent of Rs. 30.

Post-sanction loans.—Five societies were selected for the introduction of the scheme for post-sanction loans. During the month no loan was sanctioned.

Pump-set loans.—During the month one society applied for a loan of Rs. 3,000 for the purchase of a pump-set. One

loan amounting to Rs. 3,500 was sanctioned by the bank to another society during the month, but no amount was disbursed.

WEST GODAVARI DISTRICT.—During the month of May 1952, the Special Senior Inspectors for Jaggery Societies issued 285 licences to ex-tappers, bringing the total number of licences issued up to the end of the month to 8,559 in 138 out of 141 jaggery societies for manufacturing palmyra jaggery.

South Circle.—Propaganda for thrift was continued to be made by Central Bank staff. A sum of Rs. 393 was collected under thrift deposit through hundi boxes. A sum of Rs. 393 was collected under thrift deposit through hundi boxes. The propaganda van was on tour for 26 days in Salem Circle and visited 19 villages and exhibited in these villages.

BELLARY DISTRICT.—During the month of May 1952, fifteen credit societies were registered and with this the total number of societies in the district comes to 399. The construction of godowns in the four societies in the district was progressed. The community hall of the Grama Sangam at Halaharvi was inspected for the issue of final valuation certificate. The Alur Firka Cottage Industries Co-operative Federation sold cement, iron and steel and timber to the tune of Rs. 220-13-3, and the interest-free loan outstanding is Rs. 3,295.

NILGIRIS DISTRICT.—Thrift days were celebrated in two societies during the month of May 1952, and the amounts noted against each were collected.

	RS.	A.	P.
Thogalatty Co-operative Society ..	10	13	0
Kilkotagiri Co-operative Society ..	11	12	0
Total ..	22	9	0

During the month, the Minister for Agriculture visited the Ootacamund Co-operative Milk Supply Society and made suggestions for improving its working. He also visited the Nilgiris Co-operative Marketing Society.

CHITTOOR DISTRICT.—During the month of May 1952, two jaggery manufacturing co-operative societies were organized. The thirty jaggery societies working in the district produced and sold 398.20 maunds of jaggery worth Rs. 2,352-5-0 during the month. Thrift fund amounting to Rs. 13 was collected from the members of the jaggery societies during the month.

RAMANATHAPURAM DISTRICT.—The existing jaggery manufacturers' co-operative societies admitted during the month 84 members and collected Rs. 84 as additional share capital. At the end of the month there were 171 jaggery manufacturers' co-operative societies with 18,263 members and a paid-up share capital of Rs. 30,292.

Including the 401 licences for tapping of sweet juice and 403 permits for the sale of sweet juice issued during the month, the total number of licences and permits in force on 31st May 1952 were 6,327 and 2,981 respectively; 7,408 maunds of palmyra jaggery, valued at Rs. 29,939 were

Road Communication in South Arcot District

History

There are no roads in South Arcot district associated with the names of the Kings of olden times as in other districts in the South. Local traditions reveal however that the road from Manalurpet to Tyagadurgam and on to Assanur on the Madras-Trichy Road, was the route of the ancient Chola kings of Tanjore for pilgrimage trips to the famous temple at Tiruvannamalai in North Arcot district. But the road itself does not have the necessary adjuncts of such a holy tradition.

From the earliest times of the East India Company paucity of roads in the district topped the list of wants. The "least wretched" of the lines of communications at that time was the old Madras Road entering from Merkanam in the North and following the coast line to Chidambaram in the South. Even this was very sandy owing to its proximity to the sea; hence a new road passing through Tindivanam, Villupuram, Ulundurpet and Tholudur was formed.

In 1852, a programme of 400 miles of new constructions were undertaken chief of which were the Cuddalore-Salem road *Via* Vriddachalam and the Panruti Lower Anicut road *Via* Sethiathope Anicut. It is worthy of note that these constructions included the planting avenue trees by the sides of these roads also.

Mr. Maltby, the then Collector in 1853, had suggested a levy of one anna per kani of land for construction and repairs of roads and this is the nucleus from which the legislation for levying a separate "Road Cess" grew up and exists to this day.

Even after the road cess was levied and Local Boards were inaugurated there was not much development in the matter of communications and the total mileage gradually rose from about 550 in 1854 to 902 miles in 1905 and 1,194 miles in 1920. Subsequent to this with the enthusiasm displayed by the non-official Presidents of District Boards the mileage rose to 1,526 miles in 1932 and again to 2,059 miles in 1938.

Present Position

At present, there are 2,034 miles of roads in the district (excluding those handed over to the Public Works Department on 1st April 1946) of which only 1,299 miles are motorable. The area of this district is 5,218 square miles and this means 0.39 mile of road per square mile against the State average of 0.29 mile per square mile. The population of the district is 26.09 lakhs according to the 1941 census and the population served by mile of road is 1,295 as against the State average of 1,346. Hence while mileage in area basis is more than the State average the mileage on population basis is slightly less than the State average.

Classification of Roads

There are 86 miles of National Highways of all-India character and 1,153 miles of District Highways.

important towns. These District Roads are subdivided into "Major" and "Other" District Roads according to their relative importance. All the District Roads are eventually to be maintained at expense and the other District Roads by the Board.

The Post-War Road Development Plan provides for the addition of only 9 miles under Major and 174 miles under other District Roads.

In addition to the above classification there are roads, which are purely feeder roads to village roads. 658 miles of such roads and 759 miles more are to be formed under Post-War Road Development.

Rural Roads

The population of 26.09 lakhs in the district is distributed in 2,340 villages and towns. Out of this population, i.e., 60 per cent of the population live in 594 villages each of which has a population of less than 500 and above 75 per cent are already served by roads. The Post-War Development Plan aims at providing roads to the balance of 25 per cent also. This however does not contemplate provision of roads to villages with more than 500 population in view of the sheer magnitude of the scheme. Some of them however already lie in existing roads and many more will come within easy reach of new roads to be formed. The Post-War Road Development Plan proposes 942 miles more of new roads and this when fully implemented will give a total of 2,977 miles of roads serving villages in which 94 per cent of the population reside.

The first Five-Year Programme of the Post-War Road Development is in progress and 15 miles of new roads have been completed so far. All these formations are mostly of small lengths of less than five miles and of important long length of formation is envisaged, worthy of mention. Land acquisition presents great difficulties and it is hoped that the recent changes introduced in the procedure will result in solving this problem and quickening progress in the formation of new roads.

Surfacing of Roads—Metalled Roads

The soil in the District is not favourable to road-making. In Cuddalore and Villupuram taluks, the soil is sandy loam, which has to be stabilised with clay, to form a base for any surfacing to come on top. In the Chidambaram taluk which is a delta area, we have the double stage of unfavourable clay soil and sand. Practically the whole of the black cotton area and even Kallakurichi, Tindivanam and Gingee taluks have considerably large areas of loam.

Blasted granite is used for roads and even this is available only in small quantities.

CO-OPERATION

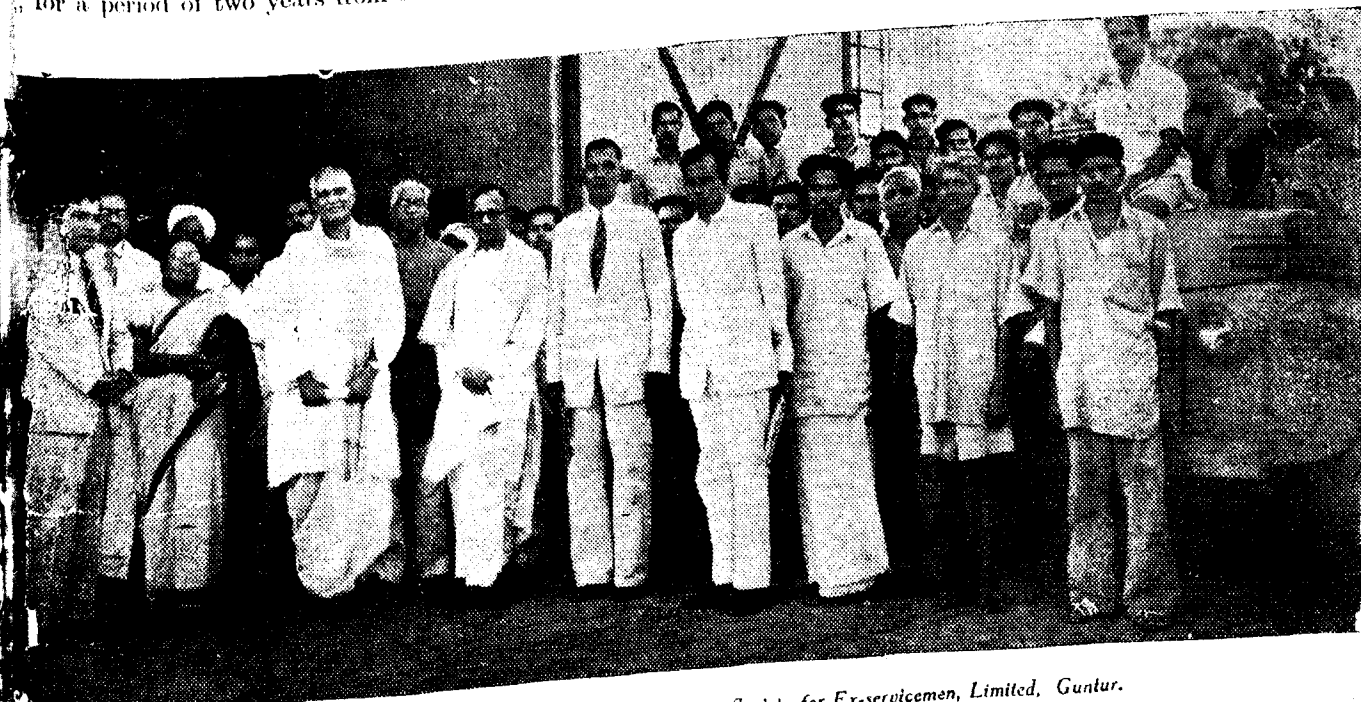
varieties of cloth manufactured by the B. & C. the Loyal Mills also to the Co-operatives. For procurement of mill cloth at the Bombay and Ahmedabad centres, it was proposed to appoint commission agents at these places to lift the cloth on behalf of the Co-operative sale Stores. The retail distribution of mill cloth will be entrusted to primary stores societies, Village co-operative societies, employees' societies, and purpose co-operative societies.

The co-operatives will commence working the scheme as from 1st October 1951, the Government issued orders exempting all allotments of quotas as made by the Director of Controlled Commodities, Madras.

Exemption from Entertainments Tax What Sabhas should Do?

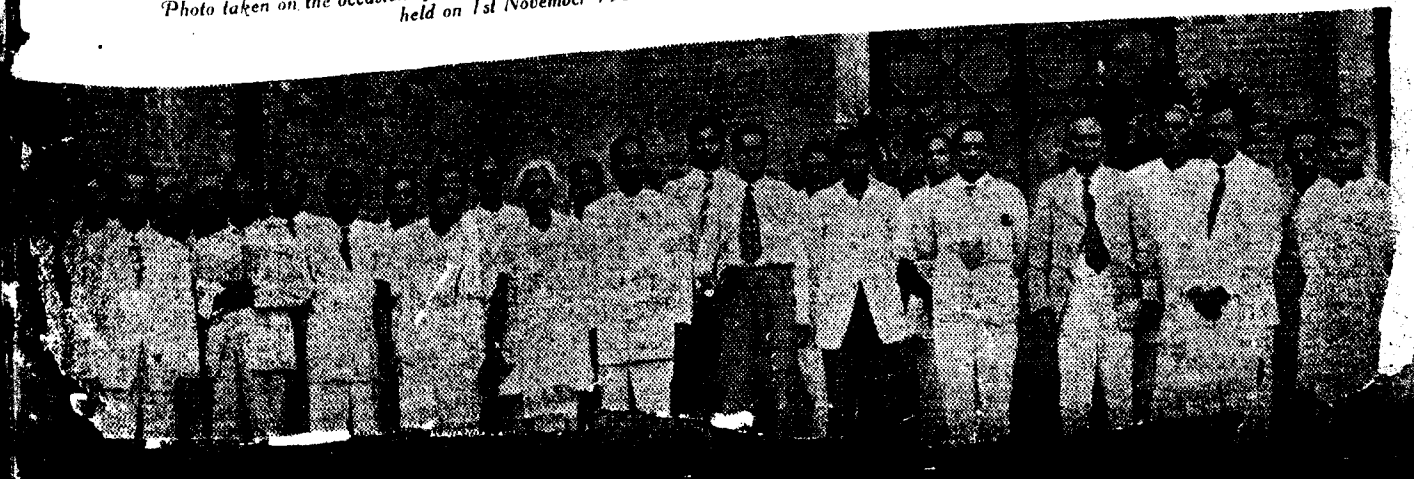
On October 1951, the Government issued orders exempting for a period of two years from November 1, 1951, all

music and dance performances and variety entertainments conducted by registered music Sabhas and similar Associations in this State. Several Sabhas and Associations have requested that their names be included in the list of registered and approved Sabhas and Institutions exempted from payment of entertainments tax. It is hereby made clear that no such list is at present maintained by the Government. All that is necessary for a registered Sabha or Association to do is to apply to the Deputy Commercial Tax Officer having jurisdiction over the area in which the Sabha is functioning, for a general exemption. The Deputy Commercial Tax Officer, will after such enquiry as is necessary, submit the application to the Commercial Tax Officer concerned who will pass orders on it. Once the Commercial Tax Officer exempts the Sabha generally, no specific exemption in respect of individual performances conducted by the Sabha from time to time is necessary. Such performances will be automatically exempt.



The Guntur District Co-operative Motor Transport Society for Ex-servicemen, Limited, Guntur. Hon. Sri Kala Venkata Rao paid a visit to the Society recently.

Photo taken on the occasion of the conference of the representatives of the Co-operative Wholesale Stores and the T.U.C.S. held on 1st November 1951 at the Senate House, Chempauk, Madras.



PROHIBITION

32

MADRAS INFORMATION

produced and the entire stock was disposed of for Rs. 25,065. The Palm Gur Instructors imparted training in the production of refined jaggery by the improved method at four centres and also conducted two demonstrations during the month, which were attended by 94 tappers.

Two multipurpose rural credit societies were registered during the month. The number of societies at the end of month rose to 538 consisting of 49,484 members with a share capital of Rs. 6,91,092. The villages covered by the societies were 1,331 and this works out to 55 per cent of the villages in the district. These societies are serving 17 per cent of the rural population.

A total number of 465 societies have changed their names to multipurpose rural co-operative credit societies and adopted the latest model by-laws prescribed by the Registrar to enable them to undertake one or more activities other than affording credit facilities to the members. The transactions under the multipurpose activities of the rural credit societies during the month amounted to Rs. 8,115-6-6.

TIRUNELVELI DISTRICT.—The Madras Government have permitted selling of neera to the public for consumption as beverage in Tirunelveli District. The sweet juice drawn from palm trees otherwise called neera is used as a beverage by labour classes and middle-class people. There are 217 jaggery societies working in this circle and the sweet juice drawn by many of the members is either converted into jaggery or sold to the public as sweet juice itself. The sweet juice is good for health and is a good food. The Co-operative Department which has arranged for the organization of these jaggery societies is also making efforts to arrange for the marketing of jaggery through these societies to fetch a better price for the members. Likewise, as an experimental measure, attempts were made to sell the sweet juice drawn by members of societies under hygienic conditions to public by opening neera stalls, wherever found possible.

WITH THE TAPPERS: Sri V. C. Palaniswami Gounder, Minister for Prohibition, talks to some of the tappers engaged in the tapping of date trees in the Government House Estate compound, Mount Road, Madras.



At present there are three neera stalls working in this circle. The Pettai Jaggery Society has opened a neera stall at Tirunelveli town and the Vannarpettai Jaggery Society has opened two neera stalls, one at Sindupondurai near Tirunelveli Junction and another near Palayamkottai market. These neera stalls get the supply of pure neera early in the morning by 6 a.m. drawn by members of societies direct from topes and it is sold to the public under hygienic conditions. These three neera stalls have been provided with utensils and articles required for the business out of a Government subsidy of Rs. 250 for each neera stall. The neera is purchased at annas 3 per Madras measure and sold at annas 4 per measure to the public.

The neera stall at Tirunelveli town run under the auspices of the Pettai Jaggery Co-operative Society has purchased 2,584 Madras measure of neera to the value of Rs. 484-8-0 from members and sold to the public for Rs. 646 during the last four months from February to May 1952.

About 12,000 persons have taken neera from this stall. Most of the people were ordinary labourers and small merchants of the locality. This jaggery society has 236 members on rolls with a paid-up share capital of Rs. 236 at the end of the month.

The neera stalls at Sindupondurai and at Palayamkottai market have purchased 2,399 Madras measure of neera to the value of Rs. 439-9-0 from members and sold to the public for Rs. 569-12-0 during the last four months from February 1952 during the current juice season. The jaggery society has 540 members on rolls with a paid-up share capital of Rs. 576 at the end of the month.

CHINGLEPUT DISTRICT.—The Perungolathur Multipurpose Rural Credit Society (G. 1,320) has prepared a scheme to show the vital role the co-operatives can play in the national planning provided they are given the facilities to help in the matter of contributing to the success of such planning. It is a small rural credit society with 120 members of whom 75 per cent own 148.78 acres

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TASTING NEERA: Recently the Minister for Prohibition, Sri V. C. Palaniswami Gounder, visited neera parlours in Madras City. Here he is seen tasting a glass of neera at one of the parlours.

of wet lands among them. The remaining 25 per cent do not own any wet lands but only dry lands. Most of the members belong to the depressed classes and their income from the dry lands is hardly sufficient to make both ends meet. They are always on the starvation line. The scheme prepared by the society was mainly to help this kind of people and the genesis of the scheme is as under.

Adjacent and close to the lands owned by members is a spread of land to the extent of 24.57 acres served by three wells each provided with oil-engine separately with all equipment like pumpsets, pipes, etc. The wells can supply sufficient water for 12 acres, 6 acres and 6 acres respectively to supplement the usual irrigation water from the tank. The block of land is owned by an absentee landlord and the society proposes to purchase the lands and the oil-engines with their accessories, and they want Government aid in the shape of a loan on the security of the lands, repayable in 20 years.

The members however have decided in the first instance to take the lands on lease and distribute the lands among 24 members at the rate of one acre each and thus demonstrate in a practical way the soundness of their theory advanced as to how by acquiring the lands from an absentee landlord and distributing them to the actual tillers not only the members would be benefited but they could also help in the Grow More Food Campaign.

The following figures worked out by a retired Deputy Director of Agriculture will go to show how the scheme would benefit the members of the co-operative society. The members who will take on the lands are all field labourers and the production costs will therefore be less by 40 per cent and the income as existing and as proposed are worked on that basis.

Existing income—	L.B.
First crop paddy at 1,250 lb. per acre for 24.57 acres	31,000
Second crop paddy at 1,375 lb. per acre for 10 acres	13,750
	44,750
Paddy straw from 35.57 acres at 1,500 lb. per acre	53,250
Proposed income—	
Paddy straw at 2,000 lb. per acre	50,000
Ragi straw, partly green, partly dry, at 3,000 lb. per acre	73,500
Total	123,500

A grain yield of over 75,000 lb. and cattle fodder of about 1.25 lakhs of lb. can be obtained in the place of 44,000 lb. and 53,000 lb. respectively. The surplus over the existing yield go to the members for their personal consumption and their livestock. As prices fluctuate according to the supply and demand the returns were not evaluated in terms of money but in terms of commodity.

Negotiations are being carried on between the absentee landlord and the Perungolathur M.R.C.S. in regard to the lease of lands and the Co-operative Department is trying to bring about settlement between them. When the scheme is put into operation a new aspect of the potentiality of co-operative effort will be on trial as a forerunner of such endeavours to be tried on a larger scale.

CHINGLEPUT CIRCLE.—During the month of May 1952 the Collector permitted the issue of licences to the members of 16 jaggery societies in Madurantakam, Chingleput, Kancheepuram and Sriperumbudur Taluks in the Chingleput Circle; 344 licences were issued to the members of these societies for the manufacture of jaggery; 115 new members were admitted to these societies during the month under report.

ANANTAPUR DISTRICT.—The milk supply unions at Gooty and Dharmavaram formed for the benefit of ex-tappers sold 6,918 Madras measure of milk for Rs. 6,233 during the month of May 1952. The Hindupur Firka Cottage Industries Federation formed with the main object of stocking raw materials required for the village artisans purchased raw materials for Rs. 7,720 and issued stocks to the artisans for Rs. 366 during the month.

There were 462 rural credit societies in the district at the end of the month. The percentage of the villages and of the population served by the rural credit societies in the district was 61.63 and 15.03 respectively at the beginning of the month and 61.63 and 15.15 at the end of the month and the targets fixed for the district are 50 and 30 respectively. The number of societies wherein multipurpose

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them to put by in the Thrift fund of the society a sum of Rs. 1,986 up to 30th June 1951, out of the wages earned.

Pannur Leather Works' Co-operative Society

Under the amelioration scheme, a cottage Industries Co-operative Society was formed at Pannur village in the Chittoor district, with a view to provide employment to the Harijans residing in the village. The society was registered on 23rd March 1949 and started on work on 25th March 1949. Twenty-two worker-members and 18 others have so far joined the society with a paid-up share capital of Rs. 2,530. The society supplies raw materials to the Harijans for making shoes and other leather goods and it also arranges for the marketing of the goods produced by the members. The following varieties of leather goods are produced by the society:—

Chappals.	Holdalls.
Kabul Shoes.	Leather bags.
Boots and shoes.	Canvas bags.
Money purses.	Pen racks.
Belts.	Suit-cases.

During 1949-50, the Society purchased raw materials for Rs. 2,743 and effected sales of finished goods to the extent of Rs. 3,984 and earned a net profit of Rs. 337. During 1950-51 raw materials worth Rs. 2,923 were purchased. The sales effected amounted to Rs. 2,309. The transactions resulted in a loss of Rs. 139. During the period from July to September 1951, the Society purchased raw materials worth Rs. 2,813, produced goods worth Rs. 3,150 and effected sales amounting to Rs. 2,119.

The Chittoor Central Bank has sanctioned a cash credit of Rs. 4,000. The amount outstanding in the cash credit



account at the end of September 1951 was Rs. 22. Government have sanctioned the following assistance to the society:

- A Junior Inspector at Government cost of the society. The Junior Inspector is continuing society from 16th February 1950.
- An ex-gratia grant of Rs. 2,000 to be credited to the share capital account of the worker members. share capital is non-refundable.
- The employment of a leather instructor for period of six months at Government cost. The leather instructor has been appointed recently.

With the appointment of the leather instructor, quality of the goods produced is likely to improve and goods produced by the society will command a better market.

Co-operatives and Mill Cloth Distribution

In G.O. Ms. No. 4575, Development, dated 17th October 1951, Government accepted the proposals of the Director of Controlled Commodities for the reallocation of mill cloth quota to co-operatives in respect of the Bombay and Ahmedabad centres. In order to formulate the arrangements in this behalf a conference of the representatives of the Co-operative Wholesale Stores and the Tri-Co-operative Society was held on 1st November 1951 at the Senate House, Chepauk, Madras, under the presidency of Sri J. C. Ryan, Registrar of Co-operative Societies, Madras. The conference resolved to work the scheme of procurement and distribution of mill cloth sanctioned by the Government and to request Government to arrange for the supply

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were 339 members on roll with a paid-up share capital of Rs. 7,234.

The society has amended its by-law converting itself into a Multi-purpose Co-operative Credit Society. The Central Bank issued Rs. 11,500 on 6th June 1951 as short-term loan to the society and a major portion of it, was disbursed for purchase of manures. The society has a reserve fund of Rs. 8,682-4-0.

Along with the development of credit business it has undertaken non-credit activities also. The society has undertaken the supply of manures. The transactions of manures from 1st July to 30th September 1951 are as follows:—

Year and month.	Name of the commodity.	Purchase.			Sales.		
		RS.	A.	P.	RS.	A.	P.
July 1951.	Ammonia	1,874	9	0	3,366	9	0
August	Superphosphate	1,393	7	0	751	2	0
September	Ammonia	8,410	14	6	8,256	8	0
	Superphosphate	836	1	0	568	12	0
	Ammonia	..	..	..	227	5	9
	Superphosphate	..	..	..	..	..	..
		12,514	15	6	13,170	14	9

Kunnathur

The Kunnathur Ex-tappers Weavers' Co-operative Society in Sriperumbudur taluk in Chingleput district was registered on 1st June 1949 and started on work on 9th June 1949 to find employment for the ex-toddy tappers who were out of employment in Chingleput district. Kunnathur is situated about 4 miles from Poonamallee on the Poonamallee-Porur-Kancheepuram Road. There are already three weavers' societies working in the area which is a weaving centre producing mostly lungies. The ex-toddy tappers had some knowledge of weaving and it was therefore thought fit to organise a weavers' society there for their benefit. The object of the society is to supply yarn to the members, pay them wages for converting yarn to finished goods, and arrange for the marketing of goods to the best advantage of the society. For this purpose the society is competent to borrow from the Coimbatore Bank of the district.

There were 20 members with a paid-up share capital of Rs. 1,000 at the time of starting. Soon the society became popular and at the end of the year 1950-51, i.e., 30th June 1951, there were 98 members with a paid-up share capital of Rs. 5,085. The society borrowed Rs. 2,000 from the Co-operative Central Bank, Kancheepuram, on 1st September 1949 as a short-term loan and was able to pay it before 9th April 1951. It has invested Rs. 1,000 in shares in the Central Bank, Rs. 500 in the Madras Co-operative Spinning Mills, Guntakal, and Rs. 50 in the Madras State Co-operative Bank, Limited, Madras.

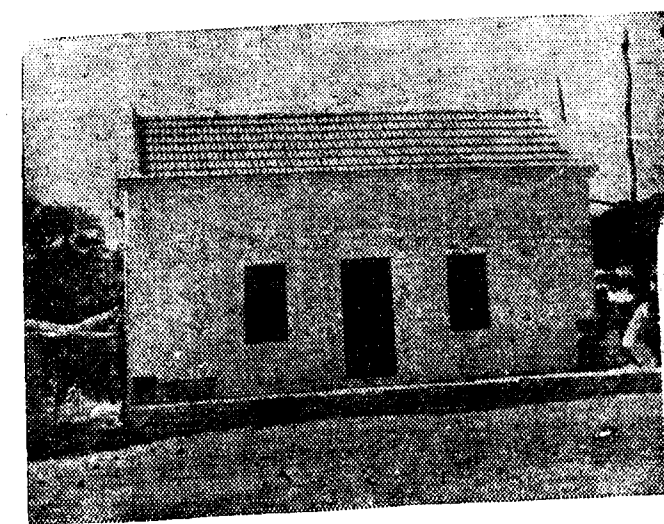
There was appreciable growth also in the business of the society. The ex-toddy tappers evinced keen interest in weaving and competed successfully with the professional weavers in the area in the production of fine lungi pieces. On the date of starting 50 looms were admitted in the society and the number of looms increased with the increase in membership. Thus there were 111 looms working in the society on 30th June 1951. The society was given a monthly allotment of 30 bundles of 80s yarn for the 50 looms by the Madras State Handloom Weaver's Co-operative Society to start with. Soon its permanent allotment

increased to 83 bundles of 90s and 26 bundles of 60s with an increase in looms. The members weave different patterns of lungies of 4½ yards in length and 29" in width for which a weaver is paid a wage of Rs. 4-8-0. A weaver can weave this in two days. On this basis he gets Rs. 2-4-0 per day. Due to the slump in the lungi market and shortage of yarn, a weaver member gets work only for 12 to 15 days a month. The quality of the goods produced by the ex-toddy tappers weavers is now good and they are exported by the merchants to Burma, Ceylon, Indonesia and other foreign markets. The business done by the society in the co-operative year 1950-51 was as follows (1st July 1950 to 30th June 1951):—

	RS.
The value of opening stock of yarn	1,694
The value of yarn purchased	29,778
Dyeing charges paid	2,745
Incidental charges incurred	93
Value of goods at the beginning of the year.	166
Value of stock sold	74,100
The value of closing stock	4,220
Wages paid to members	33,023

The society maintained three clerks and one watchman and incurred Rs. 2,370 during the year by way of establishment and contingent charges. It earned a net profit of Rs. 10,368 during the year. The profit of the society is not yet distributed. It has provision in its by-laws to set apart 40 per cent of the net profits to Reserve Fund; to pay not exceeding 6½ per cent as dividend on the paid-up share capital of members; to pay such amount as may be decided by the General body of members as bonus to members based either on wages paid or value of goods supplied and honorarium to directors not exceeding 20 per cent of the profits, and to allocate sums to such funds as Wages Equalization Fund, Common Good Fund, Building Fund, etc., as approved by the General body of members out of its profits.

During the short period of two years of its existence, the society has done useful work in ameliorating the condition of the ex-tappers. Besides providing employment and living wages to the members, it has enabled



Reading Room put up by the Baireddipalle Multi-purpose Co-operative Society.

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activities were improved rose from 295 to 297 at the end of the month; 1,667 members were benefited by these societies and a sum of Rs. 7,335 was involved in their transactions.

A sum of Rs. 50,200 to rural credit societies and a sum of Rs. 39,500 to marketing societies were disbursed during the month under the cheap loans scheme.

Seventeen Harijans underwent training in the manufacture of palmyra and date products at the training centre run by the Gooty Palmyra and Date Products Workers' Co-operative Society. Nine members attained proficiency in the art. The society purchased raw materials (36 head-loads of leaves) for Rs. 45 and supplied them to the trainees. During the month, the society manufactured 40 date mats. Sales effected during the month mounted to Rs. 11-14-0.

SOUTH ARCOT DISTRICT—Tirukkoyilur Circle.—There were 25 jaggery-manufacturing co-operative societies in Tirukkoyilur Circle. A society was organised at Pannayangal in April 1952 and since registered. There were 890 members with a paid-up share capital of Rs. 890. During palmyra tapping season 586 licences for the tapping of palmyra sweet juice for the manufacture of jaggery have been issued up to the end of May 1952. During the month 2,575 lb. of jaggery were produced, valued at Rs. 643-12-0. There is no difficulty in finding a market for the jaggery produced. The entire quantity has been sold out. There is no accumulation of stock. The ex-tappers have all been provided with employment. There is no agitation for employment.

Milk Supply Co-operative Societies.—The Milk Supply Co-operative Societies at Kaveripakkam, Semmanangur and Tiruvannainallur started for the benefit of the ex-tappers are having normal business. The production and sale of these societies are indicated below:—

Serial number and name of the society.	Production.	Sale.
1 Kaveripakkam Milk Supply Co-operative Society.	1,714 M.M.	1,714 M.M.
2 Semmanangur Milk Supply Co-operative Society.	605 "	605 "
3 Tiruvannainallur Milk Co-operative Society.	1,100 "	1,077 "

The Semmanangur Milk Supply Co-operative Society is maintaining a breeding bull and this is the second year of maintenance; it rendered 54 services during the year.

Libraries.—The Eraiyur and Thaniyal Grama Sanghams are running libraries. The Velandi Co-operative Society and Alagramam Co-operative Society are also running libraries for the benefit of members and non-members.

Thrift.—The thrift scheme was explained in all the propaganda meetings held during the month and all the people were exhorted to save through hundi boxes. During the month of May 1952 a sum of Rs. 403-9-0 was saved in hundi boxes and a sum of Rs. 7,633-1-10 was saved through thrift savings and securing deposits.

Propaganda.—The Prohibition (Amelioration) propaganda van stationed at Kumbakonam toured in Tirukkoyilur Circle. The propaganda van was taken to 25 places

and the films were exhibited. Propaganda was carried on on co-operation, prohibition, rural uplift and adult education in those places. In all the places people were persuaded to join as members in the local co-operative societies and share the benefit of the movement.

MALABAR DISTRICT—South.—During the month of May four rural credit societies, viz., Kuthanur, Valluvambrem Pulamanthole and Aruyalur multipurpose co-operative societies were registered and six societies were started on work including the milk supply society and fishermen society. In the existing rural credit societies 494 new members were admitted and a paid-up share capital of Rs. 4,036 was collected. During the month three societies were revived and 17 members were newly admitted. The panchayats were also reconstituted in all these societies. They have applied for fresh loans.

The 38 jaggery societies working in the district have a membership of 13,126 including tappers and non-tappers with a paid-up share capital of Rs. 74,147. During the month four tapping licences were newly issued and 82 licences were cancelled. There were also 85 convictions for technical and non-technical offences. During the month 1,091 maunds and 15½ lb. of jaggery to the value of Rs. 4,175-3-0 were produced and 3,273 maunds and 13½ lb. were sold at a cost of Rs. 10,181, leaving a stock balance of 424 maunds and 20 lb. The sales were effected through the societies themselves.

The propaganda van toured in the circle and it visited four societies in Palghat Taluk and handloom goods belonging to the Kondumba Weavers' Co-operative Society worth Rs. 402-14-8 were sold to the public through the agency of these societies, which earned a total commission of Rs. 14-9-5.

MALABAR DISTRICT—North.—During the month of May 1952, Poilur and Manathana Multipurpose Co-operative Credit Societies were started on work; 179 members were admitted on the whole in all the societies and a sum of Rs. 5,829-0-0 was collected as share capital. A sum of Rs. 20-2-0 was collected as thrift savings through hundi boxes. Thrift days were celebrated in two societies. The jaggery production co-operative societies produced 1,775 maunds of jaggery and sold the same for Rs. 14,398. Thrift deposits amounted to Rs. 1,281.

NORTH ARCOT DISTRICT—Tiruvannamalai Circle.—During the month of May 1952, the Kalasapakkam Cottage Industries Federation purchased raw materials to the value of Rs. 163 making a total of Rs. 1,321 up to the end of the month, and issued raw materials to nine artisans during the month to the value of Rs. 89, bringing the total to Rs. 923 up to the end of the month.

At the general body meeting of the Wandiwash Stores, it was resolved to spend out of the Common Good Fund Rs. 150 for the purchase of a community cart to distribute drinking water in the villages where the water scarcity was acutely felt.

A sum of Rs. 5,000 was donated by the Kilkidungalur Weavers' Co-operative Society for the construction of a school building from its Common Good Fund.

To improve environmental hygiene in villages, the District Health Officer suggested the purchase of porcelain closets in five or six select centres. These closets will be

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Rural Welfare Activities

(Continued from page 28)

spinning demonstrations and two adult classes were conducted. One co-operative society was organised; 1,100 lb. of pillapesara seeds and 270 lb. of sunhemp seeds were sold to ryots. Four nurseries for tree planting were raised during the month.

In Yerragondapalem firka, 40 manure pits were set right and 12 pits were removed outside the villages. Thirty spinning demonstrations were conducted; 13 compost pits were set right and 12 pits were removed outside the villages; 91 hanks of yarn was spun during the month under review.

Guntur District.—During the month, one soak pit was constructed; four public gatherings were addressed; contour bunding and trenching work were done in 12 acres of land in Jamulapalam village; 28 acres of waste land was brought under cultivation. Twenty-three compost pits were formed and 140 tons of compost manure was carried to fields. Three vertical charkhas, 16 kisan charkhas, one box charkha and 12 taklies were introduced; 115 hanks of yarn was produced.

In Guravaredipalem centre, 28 agricultural implements were supplied to ryots. Twenty compost pits were dug; 50 were rectified and 100 tons of compost manure was prepared; 14 spinning demonstrations were conducted and 25,738 hanks of yarn was produced. The Co-operative Stores at Santhanuthalapad was converted into a multipurpose co-operative society.

Cuddapah District.—Under the Extensive Khadi Scheme, 26 new vertical charkhas were introduced; 44 spinning demonstrations were conducted and 1,040 yards of khadi cloth was produced during the month. Forty-five compost pits were dug; two trench latrines were constructed and 54 tons of manure was produced. Ploughing demonstrations were conducted with the improved types of iron-ploughs, and booklets on scientific methods of agriculture were distributed.

Rural Dispensaries

The Government have passed orders for the conversion of the Rural Dispensary of Modern Medicine at Madagupati in Ramanathapuram District into a Rural Dispensary of Indigenous Medicine.

The Government have sanctioned the opening of subsidised Rural Dispensaries of Indigenous Medicine at Ellamanda and Julakalu villages in Guntur District.

Parasite Breeding Stations Sanctioned

The Government have decided to establish two parasite breeding stations for the biological control of the block-headed caterpillar pest *Nephantis Serinopa* on coconut farms in this State. One station will be located at Razole in the East Godavari District and the other at Ponnani in the Malabar District for a period of two years. The expenditure on these stations will be shared between this Government and the Indian Central Coconut Committee.

This action has been taken at the instance of the Indian Central Coconut Committee.

stocked and sold to ryots in villages by multipurpose co-operative societies and the Health staff would assist in the construction of latrines (trench system). The Bank has agreed to finance them for the purchase and sale of porcelain closets.

TIRUCHIRAPPALLI DISTRICT—North Circle.—During May 1952 the total thrift collection from 568 hundi boxes in 91 credit societies amounted to Rs. 726-6-0.

Co-operative Activities.—Sixty-six new members were got admitted in the rural credit societies in this circle with a paid-up share capital of Rs. 1,916. During the month loans to the tune of Rs. 57,299 were disbursed to members of rural credit societies. Credit societies undertook multipurpose activities like supply of domestic requirements, agricultural implements and manure for the benefit of members.

Ameliorative Activities.—Five hundred and nine licences have so far been issued to ex-tapper members for drawing sweet juice from palmyra trees for the manufacture of jaggery. Three societies undertook social and recreational activities and 206 members benefitted.

In Cuddalore Circle permission has been given to issue licences to ex-tapper members of jaggery manufacturing co-operative societies to tap only sweet juice for the purpose of manufacturing palm jaggery. Apart from this, with a view to enable the ex-tappers to settle and lead better lives, milk supply societies have been started for their benefit in the villages of Alapakkam, Karaikadu, Milmoon, giladi and Porto Novo. Interest-free Government loans are issued to the members for the purchase of milch animals. Two such loans were granted to two ex-tapper members of the Karaikadu Milk Supply Society. Each was given Rs. 200. The members in these milk supply societies supplied 1,661 Madras measures of milk valued at Rs. 1,326 during May 1952. The milk produced by the societies at Alapakkam and Karaikadu is brought to Cuddalore and distributed to consumers through the Cuddalore Milk Supply Union. The milk produced by the other two societies is sold locally.

During the month of May 1952, training in the improved method of manufacturing jaggery was conducted in four centres by the Palm Gur Inspector, and seven ex-tapper members were trained. Demonstrations explaining the improved processes of jaggery manufacture were conducted and these were witnessed by 53 members of jaggery manufacturing co-operative societies and 37 others interested in the industry. As a result 226 maunds of jaggery valued at Rs. 1,414 were produced by the trainees while 25 maunds of jaggery were produced by the ex-tappers other than the trainees.

In G.O. No. 2726, Health, dated 3rd August 1951, Government approved a proposal for distributing neera (with iron) to anaemia patients as an experimental measure at the Headquarters Hospital, Cuddalore. On authorization from the Collector of South Arcot necessary licence and permits were issued to a member of a jaggery manufacturing co-operative society and the Resident Medical Officer of the Headquarters Hospital, Cuddalore. In May 1952, the licensee supplied 288 Madras measures of neera to the Hospital.

Multi-purpose Co-operative Societies

Kurungulam

Kurungulam Multi-purpose Co-operative Society is a new society having passed the first year of its working. It was registered on 2nd February 1950 and started work on 13th April 1950. Its area of operations comprise of the two revenue vattams of Kurungulam and Menangudi vattams. Its maximum borrowing power is Rs. 25,000. It owes Rs. 7,654 to the Co-operative Central Bank, Limited, Kumbakonam, under loans, besides the cash credit accommodation of Rs. 2,000 sanctioned by the Bank for prompt issue of short-term loans. There are 27 loans outstanding against members to the tune of Rs. 9,026. It has invested in shares Rs. 120 in Co-operative Central Bank, Limited, Kumbakonam, and Rs. 100 in the Tanjore Central Co-operative Stores, Limited, Tiruvarur. As it is only a year since the society was started, it has only Rs. 14-11-0 to the credit of its reserve fund.

During 1950-51, the society was doing multi-purpose activities also, besides credit. It dealt with the retail distribution of coffee seeds purchased from the Tanjore Central Co-operative Stores, Limited, Tiruvarur, and retail distribution of groundnut cakes and jaggery. The total transactions during 1950-51 under non-credit activities were Rs. 2,071-6-0. There was a gross profit of Rs. 85-10-0 in trade in 1950-51. Though it is only a year since the society was started, it has done well in all directions.

Baireddipalle

The Baireddipalle Multi-purpose Co-operative Rural Credit Society in Palmaner taluk of Chittoor district was

registered on 11th October 1920 and started work on 3rd March 1921. Its area of operations is confined to three main villages, viz., Baireddipalle, Kammappalle and Devadoddi including their hamlets. The society commenced work with 21 members with a paid-up share capital of Rs. 231. At present there are 346 members with a paid-up share capital of Rs. 6,809. The society has been providing credit facilities to the agriculturists. 235 members owe to the society under loans Rs. 53,577 out of which Rs. 4,540 are overdue. The Board of Directors are taking steps to recover the overdues. The society has been able to tap local deposits to the tune of Rs. 20,637-8-0; Rs. 21,891 has been borrowed from the Chittoor District Co-operative Central Bank.

Besides affording credit facilities to its members, the society took up multi-purpose activities also, such as supply of agricultural implements, introduction of Homesafe deposits, etc. With a Government subsidy of Rs. 3,750 and a Government loan of Rs. 2,300 sanctioned to the society, the long-felt need of a pucca godown has now been fulfilled by constructing a godown at a cost of Rs. 8,477. It was opened by the Deputy Commissioner of Prohibition (Amelioration) and Joint Registrar of Co-operative Societies, Madras, on 19th October 1951.

Pedamaddali

The society was registered on 18th January 1919 and started on its work on 6th February 1919. This is its 34th year of its working. It is situated in the Pame of procure revenue firka, Gudivada taluk. On 30th March 1951, the Government



Godown constructed by the Baireddipalle Co-operative Society (Chittoor district).

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	Visakhapatnam		

The Community Development Programme

The Community Development Programme will start approximately 55 projects of rural development located in selected areas in the several States of India.

The central object of a Community Development project is to secure the fullest development of the material and human resources of the area. The attainment of this object in rural areas demands urgent measures for a rapid increase in food and agricultural production. Work will also be undertaken for the promotion of education, for improvement in the health of the people, and for the introduction of new skills and occupations so that the programme as a whole can lift the rural community to higher levels of economic organization and arouse enthusiasm for new knowledge and improved ways of life.

This programme will be the first step in a programme of intensive development which is expected over a period of years to cover the entire country. Increased food production and rural development are given first priority in India's Five-Year Plan for Economic Development. This is also considered necessary to lay the proper foundation for the industrial and general economic development of the country. To accomplish this purpose the Community Development Programme must reach as large a section of India's population as possible. The present programme will be confined to approximately 55 projects which should provide a proper foundation for the expansion of the programme in the future.

Area and Development Blocks

Each project will embrace approximately 300 villages with a population of about 200,000 people and cover a cultivated area of approximately 150,000 acres of land. A project area will be divided into three development blocks, each comprising about 100 villages and a population of about 65,000 people. In areas where a full project is considered feasible, one or two development blocks will be started for the time being. The 55 projects will include approximately 16,500 villages and over a crore of people.

The proposed projects will be of the rural development type including irrigation, fertiliser application, agricultural extension, health measures and education. Six of the 55 projects, however, will be of the composite type including, in addition to the foregoing, activities in small and medium scale industries, township planning and development, etc.

The following rural community development activities will be undertaken in such varying degree within the limits of the available programme funds hereinafter provided, as will be advisable under the circumstances existing in each particular project area and development block.

A. Agriculture and related matters—

- (1) Reclamation of available virgin and waste land.
- (2) Provision of water for agriculture through irrigation canals, tube-wells, surface wells, tanks, lift irrigation from rivers, lakes and pools, etc.
- (3) Development of rural electrification.
- (4) Provision of commercial fertilisers.
- (5) Provision of quality seeds.

- (6) Promotion of improved agricultural technique and land utilization.
- (7) Provision of veterinary aid.
- (8) Provision of technical information, materials, bulletins, etc., on agriculture.
- (9) Provision for dissemination of information through slides, films, radio broadcasts, lectures, etc.
- (10) Provision of improved agricultural implements.
- (11) Promotion of marketing and credit facilities.
- (12) Provision of breeding centres for animal husbandry.
- (13) Development of inland fisheries.
- (14) Promotion of home economics.
- (15) Development of fruit and vegetable cultivation.

- (16) Provision of soil surveys and information.
- (17) Encouragement of the use of natural and compost manures.
- (18) Provision of arboriculture including plantation of forests.

B. Communications—

- (1) Provision of roads.
- (2) Encouragement of mechanical road transport services.
- (3) Development of animal transport.

C. Education—

- (1) Provision of compulsory and free education preferably of the Basic type, at the elementary stage.
- (2) Provision of high and middle schools.
- (3) Provision of adult education and library services.

D. Health—

- (1) Provision of sanitation (including drainage and disposal of wastes) and public health measures.
- (2) Provision for control of malaria and other diseases.
- (3) Provision of improved drinking water supplies.
- (4) Provision of medical aid for the ailing.
- (5) Ante-natal care of expectant mothers and midwifery services.
- (6) Provision of generalised public health service and education.

E. Training—

- (1) Refresher courses for improving the standard of existing artisans.
- (2) Training of agriculturists.
- (3) Training of extension assistants.
- (4) Training of artisans.
- (5) Training of supervisors, managerial personnel, health workers and executive officers for projects.

F. Social Welfare—

- (1) Organization of community entertainment.
- (2) Provision of audio-visual aid for instruction and recreation.
- (3) Organization of sports activities.
- (4) Organization of melas (village fairs).
- (5) Organization of co-operative and self-help movement.

G. Supplementary Employment—

- (1) Encouragement of cottage industries and crafts as main or subsidy occupation.

COMMUNITY PROJECTS

(2) Encouragement of medium and small scale industries to employ surplus hands for local needs or for export outside project areas.

(3) Encouragement of employment through trade, auxiliary and welfare services.

(4) Construction of brick kilns and sawmills to provide building materials for local needs.

H. Housing—

(1) Demonstration and training in improved techniques and designs for rural housing.

(2) Encouragement of improved rural housing on a self-help basis.

Mandi Units

Each development block will have a *mandi* unit. The *mandi* unit will be established as the centre of economic, social and community activity for the villages in the development block and will be conveniently located within the development block in order to fulfil most effectively this function. The *mandi* unit will normally have a dispensary and health centre reaching out to the villagers through mobile units and will be serviced by a doctor, health visitor, midwives and a sanitary inspector. It will also usually have a transport and farm implement and equipment service centre, a centre for marketing and shopping, a storage godown for agricultural produce and a veterinary centre. In addition, there will be established certain recreational and educational facilities. The *mandi* unit will also contain the residential housing and other facilities for the project workers.

It is recognized that in certain areas the development of small and medium scale industries will be warranted by the existing economic environment and will add to the sum total of the community development. Therefore expenditure from the dollar and rupee budgets hereinafter provided in the activities listed in item G (2) above will be made in six agreed projects. Such areas will be provided with some equipment (both for training and for use) for small industries and possibly small thermal power stations.

The Community Development Programme will be supported by a training programme for village level workers and project supervisors. The present plans are to establish a minimum of 30 training centres throughout India, to be associated as far as possible with a Community Development project so that the trainees can be given actual field experience in the villages as part of their training. The training of capable village workers and project supervisors is an essential part of the rural development of India because the success of the Community Development Programme will rest primarily upon the ability of these village level workers to mobilise the enthusiasm and co-operation of the people.

Organization for the Programme

The Community Development Programme will be undertaken by the Government of India and the Governments of the various States of India in co-operation with one another. For this purpose, it is contemplated that the organization for the Community Development Programme will be as follows:—

(1) *Central Organization*.—Pursuant to paragraph 1 of Article IV of the Technical Co-operation Programme Agreement of January 5, 1952, the Government of India has designated a Central Committee to lay down the broad

policies and provide the general supervision for the agreed projects and under it an Administrator of Community Projects.

The Administrator will be responsible for planning, directing, and co-ordinating the community projects throughout India under the general supervision of the Central Committee and in consultation with appropriate authorities in the various States. He will be assisted by a highly qualified executive staff to advise him on administration, finance, personnel (training), community planning and other matters, and operating divisions in the fields of (1) agriculture, (2) irrigation, (3) health, (4) education, (5) industries, (6) housing and (7) community facilities. These staffs will work with the State, district and project level workers in the interest of carrying out co-operatively the Community Development Programme.

(2) *State Organization*.—Each State Government has established a State Development Committee or similar body consisting of the Chief Minister and Ministers in charge of departments concerned as he may consider necessary.

The State Development Commissioner or similar official will be responsible for directing community projects within the State and will act as the Secretary to the Committee. He will be responsible for assuring co-ordination of the heads of the various State departments concerned with the Community Development Programme.

Since he may also have the additional responsibility of looking after the general development in the State under the five-year plan, it may be necessary in States where a number of community projects will be in operation to have a Deputy Development Commissioner specifically in charge of community projects. He will enjoy the status of a Collector.

The Development Commissioner or other similar official will be responsible for the direction of the programme in his respective State, and he will be assisted by a suitable operating staff. The Development Commissioner and members of this staff will work in close co-operation with their counterparts at the Centre and at the district and project levels in order to facilitate project operations within the State. Maximum emphasis will be placed upon the selection of the Development Commissioners since the success of the programme depends, to a large extent, upon their competence.

(3) *District Organization*.—There will be established at the district level, where necessary, a District Development Officer who will be responsible for the Community Development Programme in his district. This officer will have the status of an Additional Collector and will be responsible for the execution of the community projects as well as the general development in the district. He will operate under the direction of the State Development Board consisting of the officers of the various departments concerned with Community Development with the Collector as Chairman and the District Development Officer as Executive Secretary.

(4) *Project Organization*.—Each individual project unit (consisting of a full project or one or more development blocks where there is not a full project) within the district will be in charge of a Project Executive Officer who

Name of system.	Generation in units.	System peak load in K.W.	Services connected.		
			Agricultural.	Industrial.	Domestic.
Pykara	20,793,000	11,700	53	8	217
Jettur	23,732,140	13,600	70	1	113
Papanasam (*)	11,277,600	23,300	24	5	373
Total			147	17	703

(*) This includes 715,600 units generated by the Madurai Thermal Station.

Name of system.	Peak load in K.W.	Generation in units.	Services connected.		
			Agricultural.	Industrial.	Domestic.
1 Madras	27,800	8,980,000	25	21	318
2 Vijayavada—					
Steam	5,500	2,574,760	16		174
Diesel	770	127,700			
3 Visakhapatnam—					
Steam	3,550	1,327,190		1	32
Diesel	720	105,040			
4 Kakinada	750	162,982			70
5 Nellore	760	239,997	2		312
6 Rajahmundry	634	98,834			
7 Proddatur	90	21,190	1	1	1
8 Kurnool	340	89,305			104
9 Anantapur	152	43,422			43
10 Cuddapah	185	60,608			22
11 Hindupur	128	46,806			
12 Sokke	2,520	1,008,000			
Total			44	24	1,076

Food Offences in the State Many Fined and Imprisoned

During the fortnight ending October 31, 1951, 720 cases of prosecutions against food offences were disposed of in the Madras State (except in the districts of Chittoor and Ramanathapuram). 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 three months were imposed.

In East Godavari district, T. Veeranna was fined Rs. 500 with three months rigorous imprisonment in default, for unauthorised transport of paddy, and K. Veeraramanna and M. Venkanna were each fined Rs. 200 with rigorous imprisonment for four months in default, for unauthorised sale of paddy in excess of the ceiling rate.

Gandhi Reddeyya of Visakhapatnam district, who was in possession of rice without permit for sale, was fined Rs. 250.

For transport of paddy without a permit, K. Ramakrishnayya, a cultivator of Sangapalem in Guntur district, was sentenced to undergo imprisonment till the rising of the Court and also to pay a fine of Rs. 200 with simple imprisonment for one month in default. In the same district, for running a mill without licence, for selling paddy without permits and for non-maintenance of accounts, Kodali Venkatappaiah and Oli Subramanyam were each fined Rs. 200 with rigorous imprisonment for three months in default.

A fine of Rs. 200 was imposed on Jani Alam Row of Tiruchirappalli district, for unauthorised possession of 78 Madras measures of rice.

K. A. Sheikh Abdul Kader, Kaniyur, Udampet, Coimbatore district, was fined Rs. 200 for sale of grains exceeding ten maunds.

For illicit transport of paddy, Muthu Gound, Tanjore district was fined Rs. 200 with rigorous imprisonment for three months in default.

During the same fortnight, other departmental punishments, such as warnings, fines, forfeiture and enhancement of cash security deposits, suspension or cancellation of retail and wholesale licences, etc., were also awarded in 263 cases.

THE ELECTIONS AND THE CITIZEN

By PROF. M. VENKATARAMAIA, M.A.

37 Pages: price, As. 10.

At a time when the teeming millions of this country are going to polls to elect their representatives to various legislatures, this booklet on Elections from the pen of the eminent professor, Sri M. Venkataramaiah is certainly most welcome. The booklet explains the national and the international significance of coming elections and the need on the part of the electorate to choose proper persons to the People and various legislatures, by voting wisely and honestly. Copies can be had from Messrs. Chalam & Co., 7, Sunkurama Chetty Street, Madras.

Stock of Foodgrains that Non-producers can Possess

Under the Madras Essential Articles Restricted Acquisition Order, 1947, as amended, the non-producers can acquire and stock for personal consumption, foodgrains up to one month's requirements in the rationed areas and in the surplus taluks of surplus districts and up to six months requirements in the derationed areas, of deficit districts and the upland taluks in the districts of East Godavari, West Godavari, Krishna, Guntur and Nellore calculated at the rate of 12 oz. per adult per day. Under the Madras Foodgrains Control Order, 1947, a licence or exemption certificate is required for the stocking of foodgrains by any one in quantities exceeding 15 imperial maunds for purposes other than those of sale. The Government have therefore ordered that where the non-producers have to stock foodgrains in quantities exceeding 15 imperial maunds under the concession given in the Madras Essential Articles Restricted Acquisition Order, 1947, they should be given an exemption certificate and that they should be exempted from the payment of the prescribed licence fee of Rs. 24 per annum.

The non-producers whose one month's or six months' requirements of foodgrains, as the case may be, exceed 15 imperial maunds should, therefore, take out within one month from the date of publication of this Press Note (7th December 1951) an exemption certificate under the third proviso to clause 3 (1) of the Madras Foodgrains Control Order, 1947, from the Commercial Tax Officer having jurisdiction over the area in which they reside. Such certificates will be issued free of licence fee by the Commercial Tax Officer on application. If any non-producer is found in possession of foodgrains in excess of 15 imperial maunds without an exemption certificate after the expiry of the period of one month, he is liable to be proceeded against under the Madras Foodgrains Control Order.

Procurement Price of Paddy Increased

The Madras Government after a careful consideration of the cost of production, the price levels of essential commodities other than rice and the interests of consumers, have increased with the approval of the Government of India, the procurement prices of paddy in the districts of East Godavari, West Godavari, Krishna, Nellore, Tanjore, Madbar and the Nilgiris, where an intensive procurement scheme is in force by As. 8 per imperial maund with effect from December 2, 1951. The increase in procurement prices will be passed on to consumers by suitably revising the f.o.r., ex-mill, wholesale and retail prices.

The prices in the four industrial towns of Madras, Jurai, Coimbatore and Visakhapatnam will however remain at existing levels till the end of this year.

In view of their difficult ways and means of transport, the Government could not subsidise the increase in prices, much as they would have liked, to relieve the additional burden on the consumers. The Government have been spending about a crore of rupees annually by way of subsidy on foodgrains imported from other countries at high prices so as to make them available to consumers at reasonable prices, not to speak of the huge sums spent on Grow More Food Scheme. Although the increase in the procurement prices may not be appreciable from the point of view of producers, yet it will put up the consumers' prices about 6 pies per Madras Measure. In increasing the procurement prices of paddy, the Government had to take note of the fact that foodgrains' prices are the basic structure of price levels and that any great

increase in the prices paid to the producers for foodgrains must inevitably result in an increase in the cost of labour and cost of other essential commodities, thus creating a vicious spiral of increase all round and nullifying the benefit accrued to producers.

Nevertheless, the Government have responded to the repeated demand for some increase in procurement prices in the hope that it will encourage increase of production in the surplus districts which will continue to be the principal source of supply of rice to the deficit districts in the State.

The Government desire to appeal to the producers in these districts to increase production by all possible means and to surrender their entire surplus to the Government and thus help the Government to fight the food scarcity, which, under present indications, promises to be as acute next year as in this year.

Doddabettah Park Advisory Committee

The Government have sanctioned the constitution of the "Doddabettah Park Advisory Committee" for the purpose of preparing a scheme for converting 200 to 250 acres of land on the steep slopes in the Doddabettah Reserved Forest in the Nilgiris district, into a wooded park.

The following will be the members of the Committee:—The Collector of Nilgiris, Ootacamund (Chairman), the Curator, Botanical Gardens (Secretary), the Conservator of Forests, Ootacamund, the District Forest Officer, Ootacamund, the Provincial Sylviculturist, the Assistant Conservator of Forests in charge of Soil Erosion, the District Health Officer, the District Agricultural Officer, and the Executive Engineer in charge of Special Division, Ootacamund.

will be responsible for the Community Programme in the unit area. The Project Executive Officer will operate, as the case may be, under the direction of the District Development Officer or the State Development Commissioner. In the selection of the Project Executive Officers, special regard will be paid to experience, general outlook, understanding of the needs and methods of Community Development, and capacity for leadership as well as ability to secure both official and non-official co-operation.

In addition, there will be a Project Advisory Committee which might include, besides the principal officials concerned, leading public workers, a few representative agriculturists, the Chairman of the District Board, local representatives in the Parliament and State Legislatures, etc. The Executive Officer in charge of the project will serve as Secretary of the Advisory Committee.

Each Project Executive Officer in charge of a full project will have on his staff approximately 125 supervisors and village workers who will be responsible for the successful operation of all activities at the project level. Project Executive Officers in charge of lesser units will have proportionate staffs.

The above organizational pattern will be adapted to suit local conditions and needs as may be deemed necessary by the Administrator and the respective State Governments.

Financing the Programme

(a) The total estimated joint cost of the Community Development Programme is \$8,671,000 and the Government of India agrees to contribute Rs. 34,38,34,000 from Fund B or other source. It is agreed that the rupees deposited in Fund B for the prosecution of further projects of economic development under Operational Agreement Nos. 1 and 2, estimated at Rs. 4,77,40,000, will form part of the rupees contributed by the Government of India to the financing of this programme. The funds so made available shall be allocated and spent in accordance with an agreed budget estimated as follows:—

	Dollar Expendi- ture.	Rupee Expendi- diture.
1 Equipment, construction and supplies for basic project villages.	4,042,000	23,78,75,000
(a) Irrigation canals, surface wells and tanks including earth-moving equipment.	2,310,000	10,03,75,000
(b) Drinking water-supply.	..	2,20,00,000
(c) Drainage ..	..	55,00,000
(d) Roads, including earth-moving.	1,386,000	5,665,000
(e) Education ..	..	3,85,00,000
(f) Reclamation of cultivable waste land including earth-moving equipment.	346,000	1,48,50,000
2 Rural arts, crafts and industries.	289,000	2,33,75,000
3 Animal Husbandry ..	..	14,30,000
Total ..	\$ 8,671,000	Rs. 34,38,34,000

Voluntary Service for Community's Welfare

Citizens all over the country will soon be provided with a forum for rendering service to the country through a broad-based, non-political, voluntary social service agency, the establishment of which has been proposed in the near future by the Planning Commission. Named the "Bharat Sevak Samaj", the membership of this body will be open to all adults irrespective of caste, creed, sex, religion and party affiliations. Only those who profess faith in violent or subversive activities or communal hatred cannot have any place in this organization.

Details of the organization are given in a pamphlet just published by the Planning Commission with a foreword from the Prime Minister, Sri Jawaharlal Nehru. The functions of the Samaj, the Prime Minister says, would be to approach the people "in humility of spirit and with the intense desire to bring about, with our common labour, that joint effort which can shake and break up a mountain of inertia."

The Genesis

The idea of Bharat Sevak Samaj has its genesis in the Draft Outline of the Five-Year Plan which emphasises the need for willing, intelligent and effective public co-operation if the Plan is to succeed. The concept of planning, the Commission observes in the Draft Outline, has been associated largely with the totalitarian regime in which a group has gathered in its hands all the power to control and regiment the life of the community and to command and direct its material and resources. In a democracy this unified direction is provided by a common social outlook which interprets progress in terms of social justice and the economic and social well-being of the masses. "The fulfilment of a plan of economic development" the Commission observes, "rests very much on the capacity of the community to transmute this common social outlook and the deep aspirations of the people for progress into a living force and its use for constructive purposes." To provide an organised body through which this living force could be canalised into constructive effort, the Commission had suggested the setting up of a volunteer body under the name of the Bharat Seva Sangh. The Bharat Sevak Samaj is a development of that idea in more concrete shape.

Inadequacy of Government Resources

Sri Gulzarilal Nanda, Minister for Planning and River Valley Schemes, in several notes which form part of the pamphlet, explains the fundamental objectives of the proposed Samaj, its functions, its relationship with the existing volunteer organisations in the country and with the State. Referring to the need for such an organization, Sri Nanda says that to give the people a standard of living which may satisfy the most modest requirements of health and efficiency, the national income may have to be more than three times than the present level in the next few years. The resources of the Government both at the Centre and in the States, on the other hand, are so meagre that any investment programme based on them could yield relatively only a very small annual increment in the national

income and it would not be feasible for years to meet even a fraction of the demand in respect of the range of the services which a Welfare State is called upon to perform. While the Government's resources are thus limited there is, Sri Nanda says, the untapped resources and the spare energy of the nation which if properly canalised can help very substantially towards supplementing Government's efforts. The task before the Nation, is, therefore, to organise the utilization of these resources in such a manner that the community gains by the collective endeavour of the people themselves.

"Break Mountain of Inertia"

"We have talked about planning for a long time and we have produced a draft five-year plan. That plan will presumably be finalised in the course of some weeks. Every one recognises now the necessity for planning and tries to utilise our resources to the best advantage.

"We can, to some extent, measure our resources or most of them. But it is very difficult to measure the biggest of these resources that we have, that is, manpower, and that psychology which makes people work for great ends. Unless we utilise this manpower and unless we can produce that temper in our people which laughs at difficulties and get things done, sometimes in spite of facts, we cannot achieve anything really big.

"Therefore we have to look to our people, go to them, talk and discuss with them and work with them. We must function as comrades in a common task, as partners in a joint undertaking. We may have to teach them something, but we have much to learn from them also. So we should go to them not with the pride of knowledge but in humility of spirit and with the intense desire to bring about, with our common labour, that joint effort which can shake and break up a mountain of inertia.

"The proposal to start an organization, to be called the Bharat Sevak Samaj, has this in view. It is an ambitious task and we want men and women with high ambition for it—not the ambition for the little and personal things of life but the ambition to serve great causes forgetting oneself, and achieve great ends.

"This is not a political organization, even though I, a politician, commend it. It is meant for every able-bodied man and woman, whatever his or her views might be on other topics."

—Jawaharlal Nehru

Art Gallery for Tanjore

A chance request for a discarded idol has led to Tanjore the spiritual home of South Indian fine arts, acquiring an art gallery of its own. Art lovers from all over the world have endlessly streamed into Tanjore to study the majestic splendour of the temple and palace architecture, gaze at the frozen music of the sculptural bounty, applaud the formalised appeal of the Bharata Natya artist, or thrill to the word-forms and sound-pictures built sea by scale into geometric patterns by master musicians.

Yet this bounding plenty of art wealth till recently was cast with lavish prodigality all over the countryside, making a compact presentation of representative art forms in the district a wellnigh impossible task.

A chance request led to the welcome correction of this oversight. When a demand was made by a connoisseur of art from Calcutta for the acquisition of an image of Brahma, left neglected on the banks of the Vadavai a Karunthattangudi, Tanjore woke up to the need for an art gallery.

With characteristic speed and thoroughness, arrangements were made for the establishment of an art gallery at the Naik Durbar Hall of the Maharatta Palace, the

renowned home where till a few generations back traditional art forms were nourished and cherished. The present institution contains exquisite specimens of sculpture in bronze, collected from various parts of Tanjore district.

A significant note of warning was struck, both by Hon. Sri P. S. Kumaraswami Raja, Chief Minister, who presided over the opening ceremony and by Hon. Sri M. Bhaktavatsalam, Minister for Public Works, who opened the Gallery. The Chief Minister deplored the lack of progress in recent times in arts such as sculpture, painting and architecture, while there was a fair advancement in fine arts like dancing and music.

Sri M. Bhaktavatsalam referred to India's achievement in art as practised by the ancients. These art treasures now attract our attention, he pointed out, in spite of a decadent stage in which is found specimens of sculpture painting and architecture.

The establishment of the Art Gallery at Tanjore may well serve to focus the attention of art lovers and artists on this problem, and aid to foster a revival which can reflect with pride the glory of the past.

Estate Forests and Grazing Rights Concessions Granted

It has been represented that consequent on the taking over of estate forests by the Forest Department on October 15, 1951, the cattle which till then resorted to certain forests for grazing have been prohibited from entering into such forests, thereby causing hardship to the people concerned. With a view to avoid drastic and sudden changes in the administration of these forests, the subordinates of the Forest Department have been instructed to observe the following procedure until further orders:—

(1) In all estate forests that have been already notified as reserved land under section 4 of the Madras Forest Act or under Rule 5 of the General Rules framed under section 26 of the Act, grazing shall be permitted in the manner prevalent at the time of the taking over of the forests from the managers of estates and subject to the payment of the usual fees.

(2) In estate forests that remain to be notified as reserved lands, grazing shall be permitted also in the manner existing at the time of the transfer of the forests to the control of the Forest Department and subject to the payment of the usual grazing fees.

(3) There will, however, be cases where some of the forests, though classified nominally as estate forests, are of such minor importance owing to small size or other reasons and which may not ultimately be considered for reservation. In such cases, the customary grazing shall be allowed and fees will be charged only in those cases in which the fees were being collected at the time of their transfer to the Forest Department.

(4) The scale of grazing fees shall vary in different estate forests according to customary practice and even if they are lower than the departmental rates there shall be no attempt to enhance the rates at present.

(5) In the major forests referred to in item (1) above, goat browsing shall be prohibited altogether. In the forests in item (2) where it has been the practice to allow goats to browse, goat browsing shall be discouraged in the interest of forest conservancy but not prohibited and the villagers concerned shall be given due notice. Goats are liable to be prohibited from April 1, 1952. In the class of forests covered by item (3) above, restriction on goat browsing shall be enforced at present.

2. In the matter of removals of forest produce such as green leaf manure, thorns and other fencing material, fuel and small timber required for domestic and agricultural purposes free or on payment of fees, practice in force at the time of transfer of forests to the Forest Department shall continue until further orders.

Scholarships for Kallar Students

The Government have sanctioned a further sum of Rs. 7,430 in addition to the allotment of Rs. 8,000 already sanctioned, for the grant of scholarships to students of the Kallar community studying in schools and colleges in the Maturai district, where the Kallar Reclamation Scheme is in force.

Mid-day Meals for Harijan Pupils

The Government have sanctioned the free supply of mid-day meals, books and clothing to Harijan children studying in the Reclamation Schools in Chittoor district.

Electricity Schemes—Progress of Work

Details give us an idea about the activities of the Government Electricity Department in the month of October 1951.]

Hydro-Electric Scheme.—Position under land continued to be the same and lands were yet to be surveyed on the Orissa side. Survey of Jalaput area and low saddle portion was completed. Acquisition for submergible lands has been sent to the Orissa Governments. Metalling was completed for the entire Lamtaput-Machkund road. Construction of 16 bridges and almost all culverts was completed. Little work could be done in the Diversion of floods in the river. Excavation and collection of masonry were in progress in the Tunnel. The Flume Tunnel excavation and work continued. Entire drilling of the Flume Tunnel was completed. Entire concrete lining was done for about 50 per cent of the Pressure Tunnel.

Construction of temporary buildings at Jalaput and at buildings at Onukudelli was progressing. Work on winch house-site, penstock grading, levelling and house were progressing. Total labour force for the month was 4,132.

Hydro-Electric Scheme.—The civil works for the works up to Moyar Forebay have been completed. High pressure works along the flume were continued. The power pipes were continued to be erected. The first machine building was nearing completion. The first machine connected parts were under erection.

Kara Plant III Stage Extensions.—Construction of Kara Dam involving excavation for foundation and masonry building for main dam and 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 IV penstock line were laid at site and about 60 per cent of the pipes were erected in position. The foundation for power-house extension was completed.

Maturai Thermal Scheme.—Erection of the third boiler completed and steam raised. Erection of minor accessories was being attended to.

South Kanara Scheme.—Survey of the lines has been completed and preparation of the valuation schedule was in progress.

Tungabhadra Hydro-Electric Scheme.—Detailed survey of about 50 miles of route of transmission lines was done.

Vijayavada and Visakhapatnam Power House Extension.—Earth work excavation and rough stone packing under flooring of the portion north of Boiler were in progress. Plastering the first floor of control masonry was nearing completion.

Winding grills and bending rods completed for coal chopper and further work was in progress.

Visakhapatnam.—The second of the two 15,000 KW sets sanctioned under the extension was commissioned satisfactorily. Painting third coat of the iron

members of boiler house was nearing completion. Tenders for the extension of south and west side of the power house was yet to be decided.

Ceded Districts Scheme.—Survey for the 33 KV line from Adoni to Yemmiganur has been completed. Survey of the Rayadrug 11/33 KV line was completed. Fifty percent of pole erection was also completed. In Rayadrug distribution, pole erection and stringing of lines were in progress.

Nellore Thermal Scheme.—All works completed except sewage arrangements.

Nandyal and Tadpatri Scheme.—With the commissioning of the diesel sets in Nandyal and Tadpatri in September and October 1951 respectively, the works are coming to a close. Numbering and painting of poles were nearing completion.

Madanapalle Scheme.—The site proposed for construction of Thermal station was taken over by the Department. Tender for erection of Panagarah shed was under scrutiny.

Madras Plant Extensions.—Works on main power station superstructure, office and control block, coal conveyors one and two and weighbridge, cooling towers two were continued during the month. Works connected with railway coal siding, evaporator plant house were in various stages of progress. Electrical and Mechanical works such as erection of boilers, mechanical coal handling plant, piping equipment, etc., were in progress.

Operation Branch

Hydro areas.—The three hydro systems continued to run in parallel with Madras Electricity system this month also. The number of units generated, peak load and services connected during the month for the three hydro electric systems were as shown in the statement published in the next page top.

Thermal areas.—Supply conditions in Madras and Andhra systems were satisfactory. Madras Electricity System continued to take relief from Mettur Electricity System.

The V 1500 KW turbo alternator at Visakhapatnam was commissioned on 26th October 1951. Chodavaram line was energised during the month. Velpu and Tanuku distributions and the 11 KV line from Attali to Tanuku were energised in West Godavari. Atukuru and Telaprolu distributions in the Vijayavada area were energised during the month. The Nellore-Gudur line was energised on 5th October 1951 and supply was given to Gudur town. Tadpatri Thermal stations commenced operation on 10th October 1951 with two numbers 235 KW diesel generating sets.

The generation, peak load and number of services given during the month in several areas were as published in the next page.

Also in the Madras Electricity System, 38 D.C. services with an approximate connected load of 69.68 K.W. were changed over to A.C. supply.

During the month seven extensions costing over Rs. 10,000 and less than Rs. 30,000 were sanctioned by the Chief Operation Engineers and Chief Engineer for Electricity at an estimated total cost of Rs. 1,27,250.

SOCIAL SERVICE

Age-long Inertia

Analysing the peoples' attitude towards the Government, Sri Nanda says that there is among the active elements of society a largely negative, non-co-operative and destructive mood, while among the masses their age-long ignorance and inertia prevail. This 'social stalemate', as he calls it, has got to be cleared and that can be done if the peoples' energy is directed towards constructive activities through organised and willing effort. Already, useful work by voluntary organizations in various parts of the country are being done. With the formation of an all-India body, with the avowed objective of enlisting peoples' voluntary effort for the community's welfare, "the little deeds and toil of obscure individuals and groups in all parts of the country will rise in significance and yield far greater satisfaction if they become events in a national drive and parts of an inspiring picture of national reconstruction."

The proposed organization will be a non-political body and will not be tied to the Party in power. But since whatever it can accomplish should strengthen the foundations of the State and further the fulfilment of its obligations to the community, the organization, Sri Nanda says, "will be found worthy of the fullest recognition and support by the Union as well as by the State Governments." It may eventually become for them an important contact and channel of communication with voluntary agencies. While to that extent its association with the State is justified, Sri Nanda warns: "It should not lean on the State, and must be prepared to collect its sinews of action from the people whose confidence it will have to earn."

Food Problem—Highest Priority

The range of activities of the Samaj will no doubt comprehend all aspects of community welfare. But initially, Sri Nanda says, it will not be wise to attempt too much or diffuse energy in too many directions. Only urgent tasks may be taken in the earlier stage and, in view of its importance to the community, the food problem must be given the highest priority. Other activities may include organization of public opinion against anti-social practices, formation of community centres, organising the youth for the service of the community, improvement of relations between the people and the Government by striving for quicker redress of public grievances, social education, prevention of disease, anti-malarial campaign, etc.

Decentralisation of Functions

Utmost decentralisation will be a cardinal feature of the work of the Samaj, observes Sri Nanda. The basic unit will be the village and the subsequent tiers will be identical with the administrative divisions in the country. The Samaj will offer a general scheme and framework into which spontaneous activity springing up all over the country may fit itself. "No regional unit," Sri Nanda says, "need wait direction to form a branch. The aid and impulse from the Central and Provincial organizations may proceed side by side."

The activities of the Samaj have to be carried out mainly by free services of the members of the Samaj. A small nucleus of the workers may, however, be paid as whole-time workers which would mainly be in the interest

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MADRAS INFORMATION

of stable administration and continuity of service. This, apart from the costs incurred on specific projects, will entail a certain scale of expenditure, and funds for this purpose will have to be collected from private and public sources.

Membership

According to the Draft Constitution of the Samaj, any person who has attained the age of 18 may become a member of this body if he agrees to volunteer his service as a part-time or a whole-time worker for a period which may normally be five years and shall not be less than 12 months. The other types of members will be founder members, honorary members, life members and associate members. Organizations engaged in social welfare or constructive work which agree to associate themselves with the work of the Samaj may also be admitted as members.

No person or organization shall be admitted as or continue to maintain a member who engages or professes faith in violent or subversive activities or communal hatred or has connection with any organization countenancing such activities.

Any member who uses or attempts to use the platform or organization of the Samaj for political advantage or personal gain shall be removed from the list of members.

The functions of the Samaj shall be discharged at the top level by a Central Board elected by a General Council which will consist of 75 members elected by the founder-members, the affiliated organizations and the other members. The Central Board will consist of 12 persons and shall lay down the rules of business for the efficient conduct of the affairs of the Samaj and all its branches and define the responsibilities and powers of the office-bearers.

Principles of Work

The organization and the activities of the Samaj shall conform to the following principles:—

- (i) A common platform for the service of the nation will be provided irrespective of caste, creed, or political belief or affiliation.
- (ii) Any use of the organization or its activities for political or communal purposes will be strictly forbidden.
- (iii) The principle of decentralisation will be applied to the utmost extent, the basic unit for the purpose of administration being a village or a compact locality in a town. Care will be taken to secure full play for the initiative and enthusiasm of the people in each local area. Control and direction of the work of the branches will be exercised only for the purpose of co-ordination, efficiency and economy.
- (iv) Every endeavour will be made to secure the fullest co-ordination and collaboration between the Samaj and the official or non-official agencies working in the same field.
- (v) Funds required for activities in any particular area will be collected in that area, as far as possible.
- (vi) The principle of co-operation will be applied and developed as fully as possible in the activities organised by the Samaj. Community centres will be established wherever possible and organizations of producers as well as consumers will be encouraged to give expression to this principle in every aspect of group life.

INDUSTRIES

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MADRAS INFORMATION

Potentialities of the Silk Industry

By SRI A. T. JANAKIRAMAN, Sericultural Expert, Kollegal.

"Without industries no country can ever hope to attain prosperity or a high stage of civilization. Without industries, it cannot acquire the wealth which is necessary to provide the various social amenities such as decent housing, medical relief, education, etc. Until India is fully industrialized, there is no hope of economic salvation and I am inclined to believe also of its political salvation."

—ARDESHIR DALAL

The importance of cottage industries in the socio-economic set-up of India cannot be gainsaid. The establishment of cottage industries on sound, rational and scientific lines, embodying the cardinal principle of "employment to number" and pregnant with possibilities of all-round success, is of paramount importance and perpetual consequence in the matter of amelioration of the economic conditions of the teeming millions. The silk industry in India is a national asset and is endowed with great possibilities of occupying an important place in the rural economy.

It is a well-known fact that the silk industry is a cottage industry 'par excellence' which draws its support from the socio-economic set-up, which is an integral part of village life and which provides profitable employment to agriculturists during their agricultural off-seasons. The origin of this industry is lost in antiquity; nevertheless, it has a history and a romance, a history which takes us back to the days of Tippu Sultan of Mysore and a romance which thrills us with joy to imagine the apparently baffling idea of a tiny silkworm building up a mighty industry. Geographical and historical records establish that the silk industry in the Madras State has had a parallel growth with Mysore on account of the geographical contiguity.

The industry is nearly two centuries old in both Madras and Mysore. Kollegal Taluk in Coimbatore District is the main area where the industry is extensively practised as a cottage industry, but in recent years, it has spread to other places in the State like Hosur Taluk in Salem District, Palmaner, Madanapalle and Kuppam and Punganur Zamins in Chittoor District, Coonoor Taluk in the Nilgiris District and Talavadi area in Gobichettipalayam Taluk. Experimental silk farms have been opened in congenial tracts in the Ceded and Northern Districts of the State also where the results of rearing are encouraging for the successful introduction of the industry in these districts. In fact, already nucleus areas of mulberry plantations have been started by private agriculturists in the new areas.

The silk industry is rightly regarded as the 'Queen of Textile Industries.' Its products are useful not only for dress and artistic purposes, but also for surgical and scientific purposes. The silk industry has faced many a crisis bordering almost to extinction and despite all these it has survived, which only reflects the vast potentiality and invulnerable vitality of the industry. The Second World War gave a good fillip to the industry. Silk goods found large markets of consumption and reached even the trenches in the form of cartridge bags. During the Second World War, India was the only major silk producing centre

on the Allied side and as such, the silk industry was given a good impetus and the industry in turn rose to the occasion. In aerial warfare, silk was used in the manufacture of balloons and parachutes. Indeed, 'the silk industry represents the high-water mark of technical attainment among textile industry'. It is really 'a thing of beauty' which 'is a joy for ever'.

Constitution of the Industry

The sericultural industry in India is an important national asset with strongly marked characteristics. It consists of two well-defined sections:—

- (1) The production of cocoons.
- (2) The production of raw silk including the utilization of by-products.

While the first part is essentially a cottage industry, subsidiary to agriculture, the second is a factory industry utilising the collected output of the first. Silkworm rearing is a home occupation and though silk reeling is done in houses on a small scale with primitive appliances, still the system of reeling is based on modern scientific lines, on a reorganised basis, which makes for utilization of a major portion of cocoons in filatures, so that there may be ever-increasing and permanent flow of silk good in reeling and high in quality. Thus there is a division of work and in the co-ordination and blending of the two in proper proportions lies the prosperity of the industry.

The first section which forms the fundamental basis of the industry, which deals with the cultivation of mulberry up to the production of cocoons, is highly amenable to the laws of psychology. It has definite characteristics and is extremely sensitive. It would be no exaggeration to call it an industry based on 'domestic hopes and fears'—dependent almost wholly on the home's ability and inclination to work and involving no great commitment by way of capital. If the return from work seems no longer worthwhile or the home suffers losses, it gives up rearing silkworm and the field is cleared of mulberry and cultivated with other crops. The predominance of the human factor which makes the industry so sensitive also invests it with a special human value, making it an efficient instrument of welfare and employment.

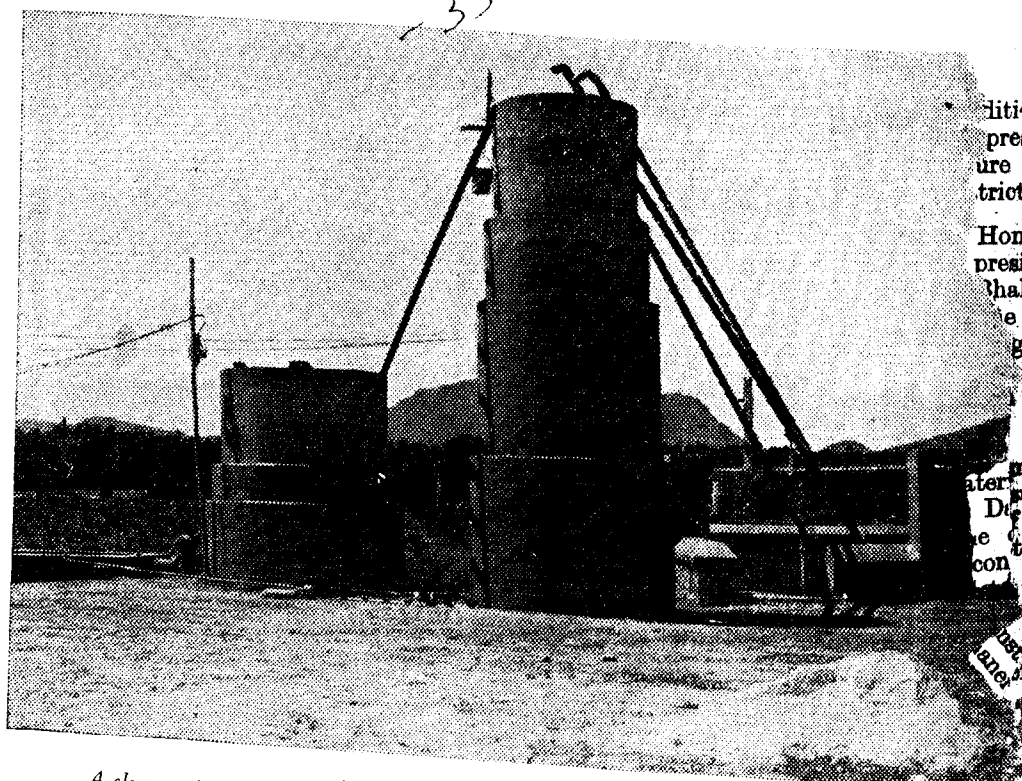
Various Branches

- (1) **Mulberry.**—Mulberry is the foundation of the sericultural industry and on the whole accounts for more than 50 per cent of the expenditure in sericulture. The mulberry leaf, which forms the staple food of the silkworm, is the pivot upon which the whole industry revolves. The silkworms reared in Madras State are multivoltine in character and on an average six crops of cocoons are raised with the leaves available in the rainfed mulberry garden. Mulberry is cultivated as a bush with the local variety. On an average it costs Rs. 200 to establish one acre of mulberry and Rs. 150 in maintaining it per year subsequently. The yield per acre per year is about 3,750 lb. of leaves in respect of rainfed garden. But if

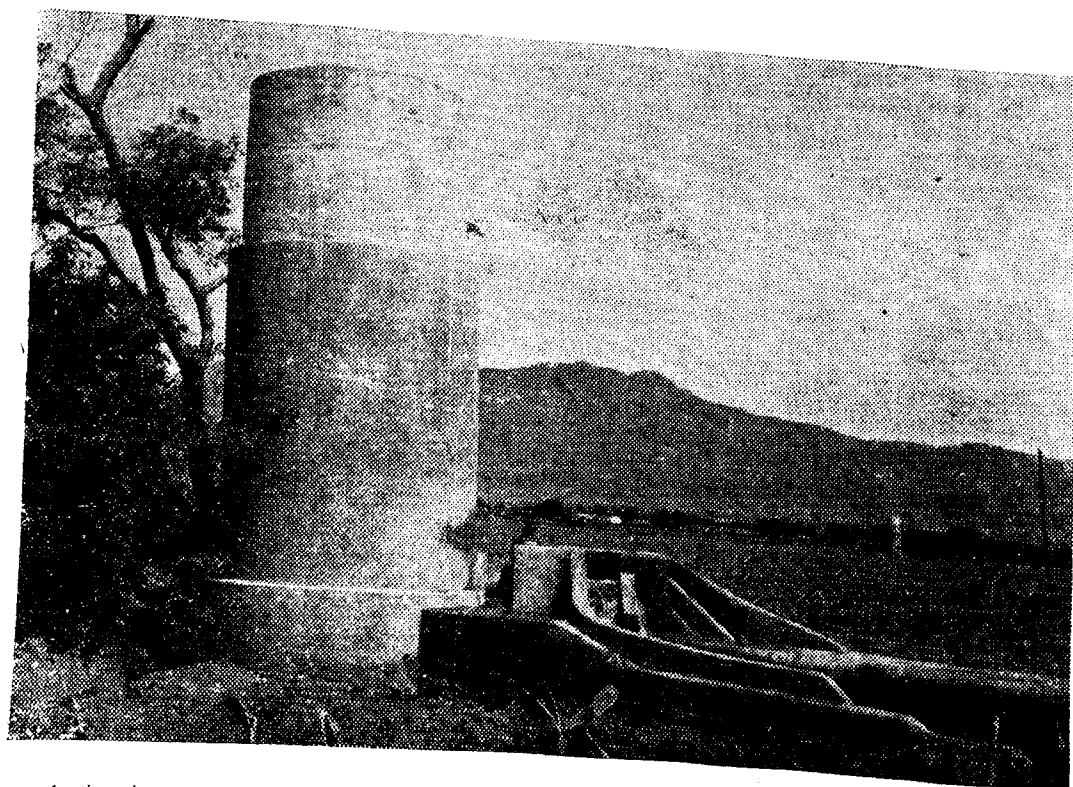
IRRIGATION

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MADRAS IN



A close up view of the masonry towers showing the gate valve and discharge cistern at Vedapatti Farm.



Another close up view of the masonry water tower showing the flow of water through the gate valve for irrigation of adjoining fields.

harm, and outstanding ability. India has not chosen to follow the or perhaps because of it, there in everything Indian. In the is respect for India's devotion considerable cost.

United Kingdom

an India, in the United Kingdom, independence has tended to per of Indians, and their place town. The friendship between nuine being based on mutual he High Commissioner, who was fies the dignified and friendly countries. Without sacrificing completely one with the English i, I remember a lunch at India MacArthur, Menon complimen- aper being the one and only and. Kingsley repartied by e one and only independent in the context of Marshall Aid lenied.

ance

respect on account of her ple to meet the great econo- tialist philosopher, Sartre, onte and Berdeau. I felt

ia has a place by virtue wers. Really India has Germany by two of her Prem Kishan, both my ds. Both Mr. and Mrs. for life which is irrisis- First Secretary, his wife rg form fitting members

Italy

h whom I worked in the Food opriately fills the ambassadorial in which they live, the Sens tlectual company available in eet some of these intellectuals. with the Pope.

ey

is making an impression for very secular Islamic country is greatly appreciated, as the ts internal weakness. nus and his charming wife arachi, Khub Chand and his ly needed between ourselves t can discover and organise xistence of which cannot mon people are studied.

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MADRAS INFORMATION

After my long tour, I had only one feeling, that our representatives in various countries could not have been chosen better. For a young service, they have done as well and even better than the age old diplomatic missions of many other countries. They have put India on the map of the world, as a country, old in its traditions, and new in its aspirations, to be a worthy member of the comity of Nations.

(Continued from page 37)

Mylam, Srimushnam, Vridachalam, Tiruvendipuram, Tiruved, Tirukkoilur, Tiruvarangam and Tiruvakkara, Vadalar.

The district is fairly fertile even in dry areas and with further improvement in communications, agriculture and industry will be greatly benefited.

Statistics showing areas, population, number of villages, length of roads, etc., for South Arcot District.

	Area.	South Arcot District.	For the whole State.
1 Area ..	..	4,201 sq. miles.	127,768
2 Population (1941) ..	..	2,608,763	4,98,40,564
3 No. of divisions ..	..	1	37
4 No. of subdivisions ..	..	41 (tem.) 1 (Special).	101
5 No. of sections ..	..	16 permanent 2 temporary.	367
6 No. of villages less than 500 population (1941).	..	594	12,669
7 No. of villages more than 500 population (1941).	..	1,749	23,683
8 No. of Panchayats (Major)	..	13	418
9 No. of Municipalities ..	..	4	92
10 No. of Firkas under Rural Welfare department.	..	4	35
11 Length of Government roads.	..	548	15,187
12 Length of District Board roads.	..	1,449	22 181
13 Total length of all roads ..	..	1,997	27,358
14 Length of National Highways.	86 0 0	..	2,000
15 Length of Provincial Highways.	90 2 0	..	3,096
16 Length of Major District Roads Government and District Board.	..	734	16,071
17 Length of other District Roads.	..	466	7,780
18 Length of village roads ..	..	623	8,411
19 Minimum allotment required for Government roads.	..	19,55,492	5,03,11,688
20 Average rate per year ..	..	3,567	3 313
21 Provision made in the 5 year programme of P.W.R.D.	..	56-31	1,207-23 lakhs.
22 Length of cement roads (1949).	1 3 0	141 4 16	..
23 Length of black top surface (1949).	43 6 02	602 0630	..

MENT PANS, AND EDITED AND PUBLISHED BY THE GOVERNMENT OF MADRAS



1. The winners receiving their trophies.

INDUSTRIES

irrigation facilities are provided, the yield of leaf per unit could be easily doubled or trebled by judicious and scientific cultural operations and the leaves utilized for seven to eight rearing crops in a year. Ordinarily a mulberry garden once established lasts for 10—15 years and thus mulberry can be appropriately called a perennial crop.

In order to intensify mulberry cultivation, the Government of Madras have in vogue the Mulberry Expansion Scheme according to which certain concessions as remission of assessment and granting of loans are granted. This had the desirable effect and in fact, the mulberry acreage has appreciably increased and the area under mulberry in 1950-51 is nearly three times that in 1941-42. The concessions should be continued and improved methods of cultivation and cultural operations should be introduced. For this purpose a separate Research Section is functioning and it is hoped that very soon grafting work will be undertaken on a large scale. Irrigation facilities should be given wherever possible so that there may be an increased production of mulberry leaves which in turn will increase the production of cocoons.

(2) *Production of Cocoons.*—The next link in the chain of the industry is the production of cocoons which fundamentally depends upon disease-free eggs. There are grainages managed by the Government of Madras for the supply of disease-free eggs which forms the sheet-anchor of the industry. In addition to the Government Grainages, there are Aided Grainages, run under the supervision and management of the Industries Department to augment the supply of disease-free layings. By careful handling, the rearer is assured of at least 85 per cent success. The cost of production of one pound of cocoons is also low. The following statement shows the cost of production of one pound of cocoons:—

	RS.	A.	P.
1. Cost of 100 disease-free layings (Cross breed).	4	0	0
2. Cost of leaves used—1,135 lb. at Rs. 4 per 80 lb.	56	12	0
3. Labour charges in packing	34	0	0
4. Labour charges in rearing	18	0	0
5. Cost of appliances and kerosene oil ..	4	0	0
Total ..	116	12	0

	LB.
Production of cocoons in lb.	80
Cost of production of 1 lb. of cocoons ..	RS. A. P.
Selling price of cocoons (June 1951) ..	1 7 0
Net income over the cost of production per lb.	2 0 0
	0 8 9

N.B.—The Indian Tariff Board have fixed Re. 1-4-0 a lb. as economic price for cocoons, but owing to serious shortage of silk, the prices of cocoons have gone high.

It may be noted that the above cost of production has been calculated taking into consideration the cost involved in family labour for which there is no cash payment. Barring the two items of expenditure, viz., mulberry leaves and family labour, the cost of production is very small

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State Aid to Industries

The Government have been granting financial aid under the provisions of the Madras State Aid to Industries Act to new and nascent industries. The Government have also sponsored in 1949 the establishment of the Madras Industrial Investment Corporation Limited, with a share capital of Rs. 2 crores, for the purpose of giving financial aid to medium and large-scale industries. The Government have decided that aid under the Madras State Aid to Industries Act should be restricted to a maximum of Rs. 50,000 in each case. Applications for loans in excess of Rs. 50,000 may be sent to the Secretary of the Madras Industrial Investment Corporation Limited, Madras-14.

(bordering almost to nothing) and hence income to the rearer is more, thus establishing its economic importance in rural life.

(3) *Reeling.*—The next step after the production of cocoons is reeling. It is in fact that index by which the industry will be judged by the world at large. Reeling is the process which harnesses the natural excellence which makes the silk the 'Queen of Textiles', to the highest requirements of the art of the weaver. It is easily seen that this process requires a careful and perfected technique. But in India, the bulk of the production is of charkha grade. Therefore, a gradual changeover from charkha establishments to filatures is essential. There can be no dispute in saying that filature silk is higher in all respects than to charkha silk.

The harnessing of all scientific knowledge and modern development in the various branches of manufacture of silk and application of these on rational lines will go a long way to improve the quality of raw silk. The charkha reeling should be removed by a process of evolution, that is, by a gradual and judicious amalgamation and transformation of two or three charkha establishments in one place to a miniature filature where up-to-date machinery should be set up and a continuous flow of cocoons at reasonable rates should be assured.

The potentialities of gradual changeover from charkhas to filatures should be further supplemented by the establishment of testing houses at important centres to grade and fix the price of silk from time to time. For this purpose, it will not be out of place here to remark that Filature Advisory Committees should be set up on an all-India basis, which will review the position of the filature industry from time to time. The continuous flow of cocoons into the filatures at reasonable and economic rate is possible only if a stabilising system is introduced at which the prices will be levelled to moderate scales.

Twisting, Winding and Weaving.—An important item after reeling is the twisting of silk which gives it strength and elasticity. In general, it may be remarked that the potentialities and scope for future development of the twisting industry are very great since there are only a few

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MADRAS INFORMATION

Payment of Sugarcane Prices by Factories

With a view to relieve the financial burden said to be experienced by the sugar factories in this State due to the accumulation of sugar stocks and other causes, the Government of India authorised the factories in April 1952 to pay sugarcane growers the minimum cane price of Rs. 1-12-0 per maund in two instalments, viz., Re. 1 per maund on delivery of cane and the balance of 12 annas before October 31, 1952. Some factories are alleged to have misunderstood or misinterpreted the order and to have deferred payment in respect of cane delivered to them before the date of the order also, viz. April 19, 1952.

Such action on the part of factories is contrary to the order and is causing hardship to the cane growers. The Government therefore wish to make it clear that the cane price in respect of all cane delivered to sugar factories before 19th April 1952 should be paid for in full and deferred payment of part of the price made only in respect of any cane delivered to factories on or after April 19, 1952. The sugar factories in this State are therefore advised to pay up in full to the growers immediately the entire cost of the cane purchased by them up to April 18, 1952 (inclusive), if this has not already been done.

bestowing their keenest attention to improve the industry, especially because it cannot be disputed that the attention will go on increasing as the realization of the need for the cottage industries increases and the demand from the villagers grows in volume and force.

The experience of other countries, especially those in which the rural people take to the cottage industries, individually or collectively, should be taken full advantage of. "Improvements in machinery and materials should be introduced and improved methods should be greedily imbibed. The maladjustment should be remedied and a new era inaugurated, replacing poverty by prosperity in the New India."

Broadcasts for Schools

(Continued from page 22)

have four movements and the exercises are repeated for either 16 or 32 counts. When the pupils have learnt the movements the teacher starts the exercise in time with the music. The music for these exercises is specially written with pronounced rhythm. The class teacher can then see that his class do the exercise to coincide with the beat of musical tunes. This I am sure is a more interesting way of learning drill and at the same time gives pupils an idea of musical time.

All these broadcasts are planned in accordance with the syllabus of the State Government and I am sure they will prove to be of great help to teachers. I wish the staff and students all over the State, a good and useful listening during the current term. *Jai Hind!*

(By Courtesy, A.I.R., Madras.)

twisting mills in Madras. As at present calculated, the demand for silk in India is eight million pounds, as against an actual production of 2.2 million pounds. Ordinarily one spindle working for eight hours can twist one ounce of organ zinc and 3 oz. of tram. So if the raw silk produced in India alone is to be twisted, basing on the above calculation we require at least 35 million spindles. It is easily seen that when India is able to be self-sufficient, i.e., when the production is eight million pounds, we require at least 140 million spindles. Therefore, in order that all the silk may be twisted more twisting factories have to be established in important silk centres, in particular at Kollegal Taluk in Coimbatore District. The twisting factories may be established along with weaving factories in important weaving centres, e.g., Kumbakonam, Gudiyatham, Mayuram, Salem and Kancheepuram.

Marketing.—Marketing of silk forms the last link in the chain of organization. Unfortunately, there is no proper organization for marketing of silk. The present marketing system is very defective as the silk reelers always run the risk of being exploited by the silk merchants, particularly when the market becomes dull. The Government, having realised the need for constitution of cocoon markets for the benefit of rearers and the reelers for efficient conduct of transactions and prompt payment of cash on the spot, have started Government Cocoon Markets in important sericultural centres. Marketing of raw silk is another factor which deserves attention. Kollegal and Bangalore are important silk trading centres. Besides these places, Kancheepuram, Kumbakonam, Salem, etc., are also silk business centres. Efforts are being made to organise sales of charkha silk on a co-operative basis so that the interests of the reelers may not suffer.

Problem of Resuscitation

A close examination of the cottage industries in India should at once lead to the conclusion that the problem of resuscitation must be pre-eminently provincial. The development of any cottage industry in a particular State depends upon the environments and peculiarities of the State concerned. Mr. Chatterton (of the School of Arts and College of Engineering, Madras) in 1901, submitted a Memorandum to state what could be done by the Government of India to revive indigenous industries. He wrote of the Indian artisan: "He is to remain a hand-worker but his rude hereditary skill is to be trained and developed. He is to strive no longer to compete with machinery but his energies are to be directed into channels where machinery is of little use; and he is to be supplied with good tools and taught new methods of production. He is to be supplied with the best raw materials purchased in the cheapest market. In fact, instead of leaving him severely alone, the highest technical skill and keenest commercial intelligence are to be devoted and a prosperous and flourishing artisan community established."

It is not out of place here to say that the silk industry offers great potentialities and scope and the agricultural populations are greatly benefited by it, though they are not wholly depending upon it. A Central Silk Board has been constituted by the Government of India to keep a watch over the sericultural industry and to take such steps as are necessary to improve the industry on all lines. There is no doubt that the Government are

Indian labour and finance. In spite of the cry of nationalism, Indians still enjoy an honoured place in the life of Rangoon. The Ambassador Rauf, who had practised for several years as a barrister at Rangoon, has been personally associated with most political leaders, who regard him as one of their own. His charm also enables him to a secure place in the diplomatic community with whom he is on the friendliest terms.

Siam

In Siam, India's position is related to the cultural conquest by the Kalinga Chola and Pallava civilisations, which outpoured into these areas for nearly ten centuries. Though a Buddhist country, Siam shows many traces of Hindu influences. I saw one king of Siam being cremated and another crowned by Brahmin priests, according to what was essentially Hindu ritual. The present position of India is due almost entirely to the Indian Minister, Bhagwat Dyal, who is every inch a diplomat and is probably the dearest of all diplomats to the Thai Government. His sympathy with the Thai Government's interests, his personal friendship with the ministers, almost made it appear that he was going to be kept always in Siam. He has now gone as ambassador to Indonesia, but his influence will survive for long.

Malaya

In Malaya, India's position arises from the fact that one-tenth of the population is Indian, which opened up the rubber plantations and is even now their mainstay. The Indian population has also played an important part in the politics of this unfortunate country. In trade, our traders seem to dominate in Singapore, at least in respect of textiles. It is fortunate that Trade Commissioner, Singh, possesses the personality and drive necessary to advance our trading interests.

Hongkong

At Hongkong, Indians have some place in the trade and are doing very well for themselves. There are also some

Indians in the administration and the Parsees appear to be the only representative of the Indian community in Hongkong, but the British authorities and the Indian Trade Commission are in all questions of importance.

Japan

In Japan, India was occupied as a member of the S.C.A. (Honoured Allied Powers). Trade possibilities could be greater but for Japan drawing an increasing number of its representative missions. In its representative most fortunate, as he has made a mission both on the Allied Powers is enough. I mention that he would like to see General McArthur arranged the next day. In D. McArthur, he referred in his relations with Mr. Rama Radford, who was a guest of my pride by his praise of Sir R. he met at a conference in Bagio, praise of other Indians in other persons like the Premier of and Malcolm MacDonald, in the Far East. The Japanese about us and spare no pains and its characteristics.

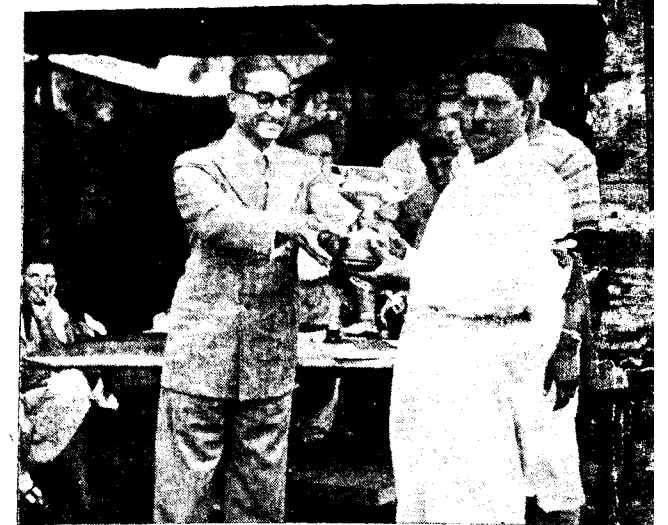
Farm.

In the United States context, our official representative. Only one fact appears of our ambassador, Mrs. no other foreign representative is known probably to sister of Prime Minister.

A luncheon party was given to the Members of the World Bank Mission during their visit. Here are seen the guests and Hon'ble Sri P. S. Kumarasami Raja, Hon'ble Sri M. Bakthavatsalam.



Water tower showing the flow of water through the gates into the irrigation of adjoining fields.



South Arcot Lignite

By DR. C. V. S. RATNAM, PH.D., Member, Expert Committee, Lignite Investigation

Part I—Nature

Lignite is a member of the coal family. Coal is a familiar commodity to most of us. It is used as fuel in the locomotives, factories, restaurants, power stations and even in domestic service. The non-availability of coal in Madras, Travancore-Cochin and Mysore States has been an important factor in the non-existence of iron and steel industry in the South, in spite of large and proved iron ore resources and the generally slow industrialization of South India. The exploitation of the newly discovered lignite deposits of South Arcot in Madras State would go a long way to meet this shortage of coal for South India industries.

Lignite has been almost unknown among Indian fuels and only the discovery of large deposits in South Arcot (2,000 million tons has been proved so far) and the great interest shown by the Government of Madras and the Government of India in this project made this commodity somewhat known in our State albeit only through Press statements thus far. Over 95 per cent of the people in our State have not seen this material until now and the

railway freight schedule does not have this commodity listed in it. Hitherto, the main varieties of coal available and used in India have been bituminous coals.

The Origin of Coal

The popular notion that coal wherever it is obtained is the same is not true. The American Society for Testing of Materials (A.S.T.M.) in its classification of coals by rank described 13 varieties of coal. This classification is based mainly on the heating value and cooking properties of coal. Lignite comes almost at the bottom in this classification. Pound for pound lignite gives less heat than most other coals.

Coal is defined as "a compact stratified mass of metamorphosed plants which have in part suffered arrested decay to varying degrees of completeness."

The definition describes the origin of coal. All people now agree that coal is formed from plant materials. The plants went through two stages of change before coal was formed from them. During the first stage called *bio-chemical stage* the plant material was attacked by bacteria

RAILWAY FUEL ECONOMY: A meeting of the Railway Fuel Economy Enquiry Committee was held recently at the Committee Room, Fort St. George, when discussions were held with officials of the Development and Public Works Departments of the Government of Madras.





Registered No. M-4767

ELECTRICITY FOR EKKADU

Hon'ble Sri M. Bhaktavatsalam performed the switching on ceremony of electricity supply to Ekkadu village known for its industrial progress. Even fountain pens are manufactured in this place.

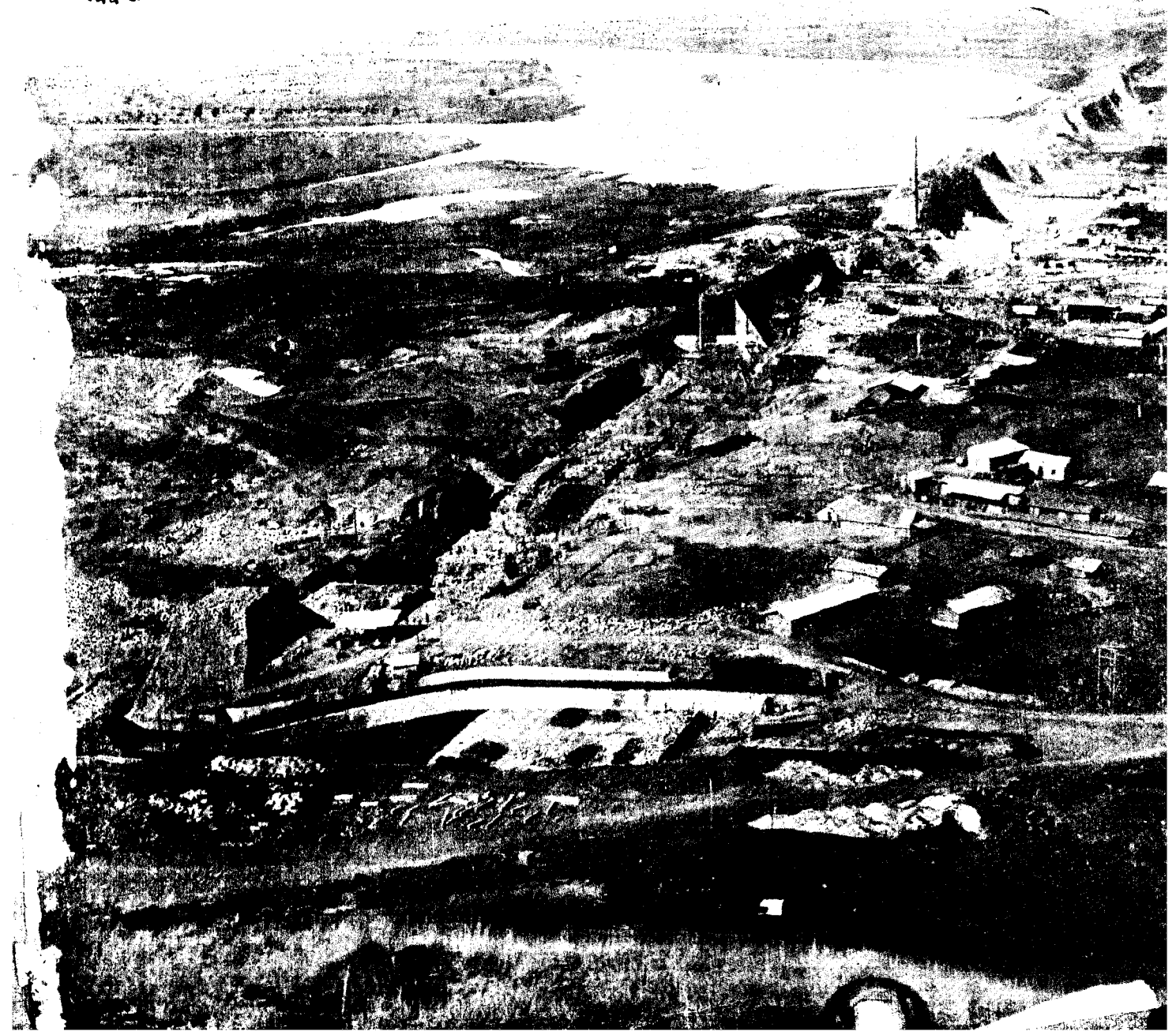


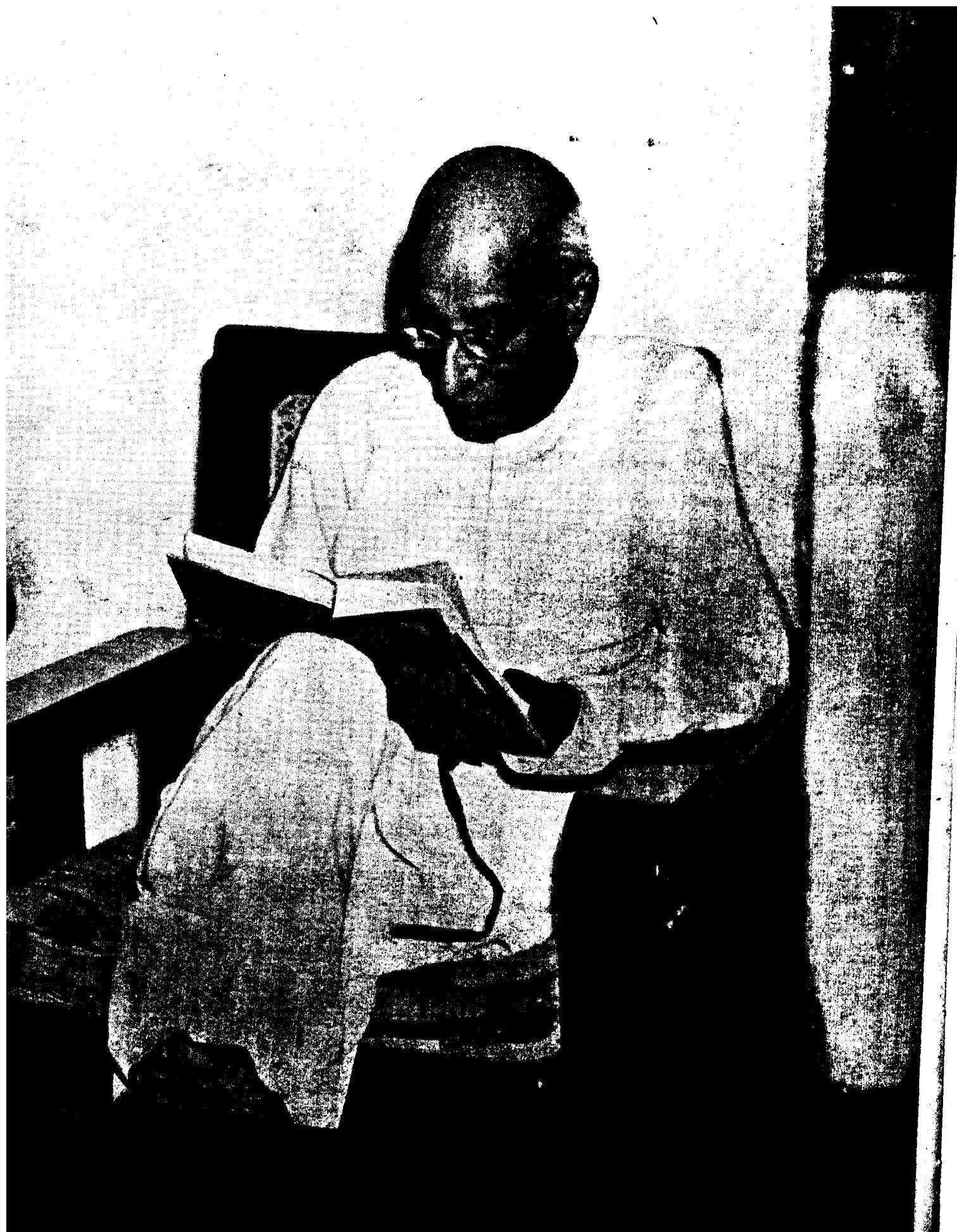
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Information



February 19
Price As.





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resulting in a peat bog. In the latter stage called *dynamo chemical change*, these peat bogs were covered by layers of earth, thus subjecting the vegetable material to pressure and temperature. Depending upon the change undergone by the plant material during the first bio-chemical stage and the extent of the changes brought about by pressure, temperature and the age of formation, various kinds of coal, from anthracities to brown coal were formed.

Definition of Lignite

Lignite according to A.S.T.M. classification is defined as below. Lignite is non-cooking and when exposed to air, it disintegrates and falls into small pieces. When obtained from the mine, it is consolidated. Its heating value is less than 8,300 B.T.U. per pound. This is on a mined basis without taking into consideration the ash content. B.T.U. is a heating unit which will raise the temperature of one pound of water through one degree Fahrenheit.

The above definition of lignite describes briefly the nature and handling properties of lignite. The one main difference between bituminous coal and lignite is that the former gives coke when heated out of contact with air. Lignite when heated out of contact with air or carbonized gives fine char and no large blocks of coke. Another important difference is in weathering properties. Lignite contains relatively large amount of water, when mined. Although lignite exists as consolidated hard blocks when mined, it will rapidly disintegrate into small pieces on its exposure to air. Thus the handling properties of lignite are not as satisfactory as those of bituminous coal.

Deposits in South

The South Arcot lignite contains from 35 to 45 cent moisture. It exists as large blocks in the ground but when mined and exposed to air, rapidly disintegrates into small pieces losing a large part of its moisture in the process. The South Arcot lignite does not coke when carbonized. The ash content of South Arcot lignite is comparatively low, around five per cent, and its heating value is about the same as those of lignites obtained in other countries. The samples of this lignite analysed so far contain relatively large amount of wax useful in a variety of industries.

There is a popular misconception that lignite is a "low grade coal" and hence not very useful. Nothing can be further from truth. The technology of fuels is now so advanced that for practical purposes one can substitute lignite for all those uses where bituminous coal is required. It is well known that Germany depends on its "brown coal" or "lignite" deposits for carrying on a number of its industries. Germany utilises brown coal for generating electricity, for making gas for domestic and industrial purposes, for manufacturing petrol, for the manufacture of briquets, for domestic and industrial use and as a raw material for a number of chemical industries. Australia makes use of its huge lignite resources very much in the same way. So also in some parts of U.S.A. The State of North Dakota has estimated resources of 600,000 million tons of lignite. Many families use it for domestic heating. Recently, a laboratory costing 37 lakhs of rupees was opened in Grand Forks by the United States Bureau of Mines to investigate all phases of lignite production and utilization.

Plans for Utilization

Any plan for the utilization of South Arcot lignite must take into consideration the following:—(1) There is a coal shortage in South India. This prevents the full working and expansion of South Indian industry. (2) There is no iron and steel industry in Madras State in spite of its large proved iron ore reserves. (3) A large amount of charcoal and firewood are being used for bus transport and for domestic purposes. (4) Adequate power supply is essential for general betterment of the community.

Taking into consideration the above factors, the South Arcot lignite can be utilised for the following:—

(1) A good portion of this lignite can be straightaway used for the production of electricity both at the mine site or away from it.

(2) A part of the lignite can be carbonized and briquetted for utilization in existing boilers, industries, bus transportation and for domestic purposes.

(3) The lignite can be used for reducing iron ores and for making iron and steel. It will be possible to establish an iron and steel industry in Madras State.

(4) Other uses to which South Arcot lignite can be put are gasification and manufacture of hydrogen, ammonia and ammonium sulphate, methyl alcohol, Montan wax, active carbon, carbon for electrodes, synthetic petrol, etc. For utilisation of lignites for some of these purposes active laboratory and economic investigation would be necessary.

The South Arcot lignite deposits are considerable (2,000 million tons). They are the only coal deposits of any consequence in South India until now. Technology is sufficiently developed to make lignite a most useful material in a large number of ways. The Government are giving this project their best consideration and our State stands to benefit greatly from these mines.

(To be continued)

Fee Concessions

The Government have directed that the following communities be granted fee concession under Rule 192 of the Madras Educational Rules as they are found to be equivalent of "Vanniyakula Kshatriya" which is included in the list of Backward Classes.

1. Vanniya or Vanniyar or Vanniar; 2. Padayachi; 3. Gounder; 4. Kander or Vannia Gounder; 5. Vannia Kander (other than Vellal Gounder).

They have also directed that the following communities of the handloom weavers be granted fee concessions under Rule 92 of the Madras Educational Rules, as they are found to be equivalents of Saliyan which is included in the list of Backward Classes:—

1. Padmasali; 2. Pattusali; 3. Thogata; 4. Karni-bhaktula; 5. Senapathulu; 6. Sali; 7. Sale; 8. Kari-kalabhaktulu.

Licensing of Cinemas

The Government have directed that a touring cinema in any place should not be allowed within a distance of (a) one mile of the nearest permanent cinema located in an adjacent village, panchayat or town having a population of less than 50,000; or (b) half a mile of the nearest permanent cinema located in its adjacent town having a population of 50,000 and over.



THE PUGALUR BRIDGE

Sri C. Rajagopalachari, former Governor-General of India, recently opened the Pugalur Bridge across the Cauvery. Sri K. Santanam and Sri M. Bakthavatsalam also addressed the gathering at the function.

Pugalur Bridge is a concrete T-beam bridge, singly supported, costs about Rs. 30

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COVER PAGE: A birds'-eye view of the Tungabhadra Project depicts graphically the scope and magnitude of the scheme.

Veterinary Research

By SRI V. R. RAJAGOPALAN, Director of Animal Husbandry

Research in any branch of learning has as its ultimate objective improvement of the lot of humanity. In a general way, we may say that it aims at providing more and better amenities of life, new and more efficient machines and drugs, improved varieties of plants or improved breeds of livestock. It is the yardstick by which all human progress has been measured. Discoveries leading from research in physical science seek to change our environment, whereas discoveries in biological sciences often produce profound changes in our way of life. Veterinary Science as a branch of biological science, deals with the control of animal diseases and with problems relating to animal production.

The latter aspect of Veterinary Science, namely, that connected with increased production from animal sources by way of milk, meat and eggs, has a bearing on nutrition of the people. This makes Veterinary Science and Animal Husbandry to contribute directly towards human health and welfare. Yet from another angle, Veterinary Science and Animal Husbandry support agricultural production by supplying animal labour which is the chief motive power behind all agricultural operations and farmyard manure which is even now the chief source of fertiliser for the land.

In this connection, a few basic facts connected with livestock production in India may be significant. By providing transport for agricultural produce, it is estimated that cattle contribute annually about 160 crores of rupees; by way of cattle labour for agriculture, about 300-400 crores of rupees. Livestock contribute annually about 1,000 crores of rupees in the form of manure; about 480 million maunds of milk and milk products valued at 750 crores, hides and skin at about 40 crores and wool at three crores of rupees annually. The number of eggs produced yearly is over 300 crores which is estimated to cost about 30 crores of rupees. These figures show the importance of livestock in the economy of the nation and also how essential is research in problems relating to their health and production.

Eradicating Cattle Diseases

Veterinary Research aims at controlling, if possible even eradicating, major diseases of cattle and at increasing production from animal sources. These aspects are under investigation by specially trained scientists, working often as a team at Veterinary Research Institutes and in Veterinary colleges in various parts of India. The money spent for this purpose is about a crore annually. This amount, however, considering the size of the country and its problems, should be looked upon as a very low premium we are paying for the health and well-being of our livestock and human population.

There are quite a few major contagious diseases in India which, in spite of vast amount of research done in the past are still taking a heavy toll of animal lives. Among these Rinderpest, commonly called cattle plague, still claims about 1-2 lakhs of cattle every year. Besides this, Haemorrhagic Septicaemia, Black Quarter, Foot and Mouth Disease, Anthrax and parasitic diseases also claim a large number of victims every year. On a moderate scale, the

annual loss of life among livestock through disease alone may be put at one million heads and a much greater number is incapacitated totally for a considerable period of the year. Research has helped, however, in checking these major animal scourges, but still much remains to be done by way of effectively bringing to the scene of outbreak modern methods of prevention and treatment of diseases.

Potent Vaccines Evolved

Intensive research in animal diseases for over 60 years has removed from the mind of the public the dread associated with some of them. Mention in this connection may be made of Rinderpest. (From the reports of the Cattle Plague Commission published in 1871, one learns of the enormous deaths of cattle and buffaloes caused in India by periodical visitations of this disease.) But thanks are due to the intensive and continuous research done since 1890, which has helped in the evolving of potent vaccines to control and minimise the mortality from this disease. At the present moment, plans are ahead to eradicate this disease from India by vaccination of cattle by improved methods. In the case of Haemorrhagic Septicaemia, Black Quarter and Anthrax, research work has resulted in evolving effective preventive vaccines.

While Veterinary Research has been making great progress abroad Indian scientists have also been contributing their discoveries in treatment and control of diseases in India. The Madras Veterinary College, a premier institution, has been doing valuable work in this connection. A few diseases of local importance which have been successfully combated by research done at the Madras Veterinary College may be mentioned. A disease of cattle called the 'Snoring Disease', commonly met with in working bullocks, was causing great hardship to the agriculturists. A cure for this disease by way of injection of a drug called tartar emetic was found out followed by the discovery of the casual agent of this disease, namely, a worm called *Stomatostoma nivalis*. The life history of this worm was soon worked out and this resulted in effectively checking the spread of infection of these worms from one animal to another.

Another disease of importance that was tackled at the Madras Veterinary College was Bovine Lymphangitis. This disease causes enlargement of the superficial lymph glands of the body resulting in great difficulty in the movement and efficiency of the animals for agricultural operation. Research into this condition showed that it was caused by specific bacterium and the disease has been checked by means of vaccination.

Goat and Poultry Diseases

Before the year 1939, a fatal disease among goats called Contagious Peuro-pneumonia was causing great havoc to the goat industry in India. Research done on the disease, during the year 1937-39 at the Madras Veterinary College, showed that it was caused by a specific agent and that it can be effectively controlled by vaccinating goats against this disease.

For a very long time, a disease called Ranikhet Disease was taking a heavy toll among poultry. Research done

large-scale commercial poultry farming was possible in India due to this disease. However, about the year 1944, a new vaccine was evolved at the Indian Veterinary Research Institute, which was very effective in preventing this disease. This vaccine now used on a very large scale to protect birds against the Ranikhet Disease has conferred a great boon to poultry in India. The vaccine is manufactured at the Madras Veterinary College and the inoculation of birds is done free of cost at all places in this State.

Bovine mastitis is another important disease of cows resulting in the loss of milk and eventually the udder also. This disease has been causing much economic loss to the milk industry. But research has helped in the early diagnosis of the disease by laboratory methods, thus preventing much economic loss to the farmer.

Another aspect of Veterinary Research is concerned in effectively checking or even eradicating animal diseases that are communicable to human beings. This is in fact part of the larger problem of public health. The most important among these diseases are Rabies, Tuberculosis and Glanders. Veterinary Research and the vigilance of the Veterinary profession has been responsible for keeping in check or even completely eradicating these communicable diseases.

Protective Foods

There is yet another aspect of Veterinary and Animal Husbandry Research which is closely linked up with public welfare and that is the food problem. It is not often realised that it is from animal sources that we derive all types of what we call 'protective foods', as meat, milk and eggs. Research has resulted in increased production of these foods. Average milk production of local breeds of cattle has been increased considerably by better feeding, management and selective breeding in Government Livestock Farms. Experiments have shown that it is possible to evolve improved strains of indigenous birds giving on an average more than twice the number of eggs given by a desi hen in a year. This figure compares favourably with the production of birds of exotic origin. Research thus brings out the latent potentialities in our animals and thus contributes to solve the problem of increasing production of protective foodstuffs which are in such short supply in our country.

Through research in animal breeding, it has been possible to increase enormously the utility of valuable bulls which are very few in number in this country. This is accomplished by means of a process called artificial insemination. By this method, semen collected from a single bull could be utilised for inseminating a larger number of cows. This will mean that the improved qualities of the bull could be transmitted into offsprings of a larger number of cows than it would be possible by natural method. Usually from one collection of semen, it is possible to inseminate about 10-20 cows. This work was taken up in the Madras Veterinary College as far back as 1939 and at present there is a fairly well-equipped artificial insemination unit in this College for the benefit of owners of this City. Research done here and elsewhere has also shown that semen could be preserved and used for about eight days and this has further increased the potentialities of this method. Artificial insemination of cows is done free of cost at the Madras Veterinary College and at other places in the City. This service has

also been extended to towns like Coimbatore, Guntur, Ootacamund and the various Key Village Centres in the State.

Thus from the foregoing, it will be clear that much research in Veterinary Science and Animal Husbandry has been done in India and the results so obtained have been applied for the benefit of the agriculturists. However, much remains to be done in the field of animal production and control of animal diseases. Better breeds of livestock and new and more effective type of vaccines against disease are required and all this will be possible by further continuous research. It is for this reason that much emphasis had been laid on Veterinary and Animal Husbandry problems in India in the five-year plan of the Indian Planning Commission. The Indian farmer is sure to derive lasting benefit from the fruits of research.

(By Courtesy, A.I.R., Madras)

Services of U.N. Expert on Veterinary Biological Products Secured

The services of an expert with knowledge of use of modern equipment in the manufacture of biological products, have been secured for a period of one year under the Supplemental Agreement No. 4 entered into by the Government of India with the FAO of the United Nations. Mr. Godfrey G. Alton, who has been assigned by the FAO for this work, has arrived. The expert will advise and assist in the production of biological products for effective field work and train personnel in this field.

Under the terms of agreement, the FAO will provide certain necessary equipment not procurable locally but essential to the manufacture of the veterinary biologicals. Such items of equipment will be decided by the Organization and their cost shall not exceed the equivalent to U.S. \$8,000. The expert has brought with him a spin freeze drying apparatus. In tropical countries, biological products in liquid forms rapidly degenerate, and with this new apparatus potency of the sera and virus can be better assured for a longer period by concentrating and drying them.

Veterinary Dispensary At Nidubrole

Veterinary dispensary buildings were constructed at Nidubrole, Guntur District, from the public contributions and handed over to the Animal Husbandry Department. The Panchayat Boards of Nidubrole and Ponnur have agreed to contribute Rs. 300 and 500, respectively, every year from their funds for the maintenance of the veterinary dispensary. The approximate value of the buildings will be Rs. 50,000. While accepting the land and building offered by the public, the Government have expressed their appreciation for the good work done by the following donors and other members concerned in the execution of the work connected with the Veterinary Hospital at Nidubrole: Srimathis P. Rajeswaramma, P. Raghavamma, K. Sitamma, K. Mallamma and Sriyutha P. Raghaviah, N. Nagiah, P. Sujanga, K. Venkatasubbiah, P. Raghaviah, P. Subbiah, V. Bapayya, rayadu, K. Lakshminarayana, P. Subbiah, V. Bapayya, P. V. Punniiah, G. C. Srihari Naidu and P. Panduranga Rao.

New Allies of the Farmer

One day, not long ago, in the brilliant glare of the morning sun, President Rajendra Prasad walked unconventionally, spade in hand, and turned up clods of silt in the 60-year old Nangloi drain, which travels through nine villages in its twelve-mile stretch. The day was June 6, 1951, the place Shahibabad, a village 15 miles away from the Capital, and the occasion, inauguration of the first recruitment centre for India's Land Army.

There was more than what met the eye in that simple Presidential gesture. It was at once the birth of a new concept in which a volunteer army of selfless workers would spark, in a co-operative effort, an agrarian renaissance, and a simple effective remedy to cure the malaise of rural India.

India's Land Army seeks to achieve "Land Transformation", that is develop all the available resources of land, water and livestock to the maximum, and to assure the rural people a decent standard of living. Its members have to stimulate the necessary enthusiasm among the rural population towards the development of agricultural extension work, by continuous contact with the farmers.

The work includes improvement of, and efficiency in, agricultural production. The Land Army, as an ally of the tiller of the soil, will take in its stride even such personal aspects of village life as that of developing the savings habit in rural areas.

Regulars and Auxiliaries

The band of non-official workers of the Land Army will work the extension schemes in the villages. On them

devolves the task of undertaking studies of agricultural conditions, the formulation of recommendations for rural development.

In India's Land Army comprise two type of personnel; the Regulars and the Auxiliaries. The first come from the rural population, especially from those connected with agriculture and allied occupations. The auxiliaries are recruited from all classes of the urban population from students of schools and colleges, Members of Parliament and other public-spirited men and women who offer their voluntary services for the betterment of village life.

The Regulars have round-the-year-work. They are entrusted with schemes which are designed to bring improved and better standard of living for the villagers. Within their purview come questions such as yield of crops, improvement of the fertility of the soil, use of better seed, better implements, care of cattle, control of pests, prevention of soil erosion, improvement of village sanitation and roads, tree planting, crops competitions, destruction of wild animals and plant protection measures.

In the case of Auxiliary members, the work is restricted to certain periods in the year of about six weeks. They work in units of not less than ten and not more than twenty-five per village or groups of villages.

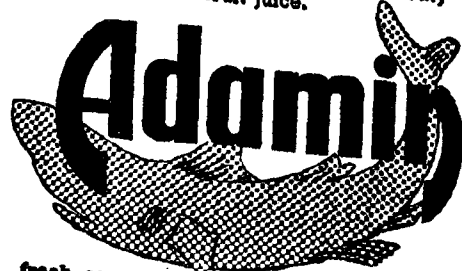
The work of Auxiliaries is honorary, but their transport needs will be met. The essence of their services will be that they will actually work with their own hands on projects which come within their sphere. The schemes on which they will be employed will be seasonal, and



Wasted body-cells have to be built up after an illness or an operation. But the very food-elements without which the body cannot turn the rest of its food into tissues are largely missing from the foodstuffs in the market to-day.

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MARCH OF THE NEW ARMY: Members of the Land Army (students and staff of the Indian Agricultural Research Institute, Delhi), on their way to villages in the Madras State for land reclamation work.

Livestock Statistics

Livestock statistics formed part of statistics relating to land and agriculture which were originally published in certain tables drawn up by the Statistical Committee of 1866 and added to the Appendices to the Annual Administration Reports. One of these tables (III-D-2) related to agricultural stock. The Government of Madras in G.O. No. 32, Revenue, dated 10th January 1855, modified these forms by way of implementing the proposals of the Statistical Conference held in Calcutta in December 1883. From this data the proposal for conducting Quinquennial Livestock Census was approved and the first was conducted in 1887-88. So far 14 censuses have been taken and the latest is the fourteenth in 1951, seven years after the previous one in 1944.

Although the fourteenth fell due in 1949, there was at the time a proposal to conduct a World Census of Agriculture and in considering that, the Conference of State Ministers resolved that the Quinquennial Census due in 1949 should be conducted with the Census of Agriculture in 1950-51. The latter, however, did not materialise. It was therefore decided to conduct the livestock census alone on the lines indicated by the Food and Agriculture Organization of the United Nations in its general scheme of World Census of Agriculture.

Agency for the conduct of Census.—The primary agency for the enumeration of this census consisted of the village officers who filled up the forms prescribed by the Government of India. Their work was checked by Revenue Inspectors, Grama Sevaks, Rural Welfare Officers, Deputy Panchayat Officers, Agricultural Demonstrators, Touring Veterinary Assistant Surgeons and Municipal Commissioners. These data were tabulated at the taluk level by the Tahsildars and remitted to the office of the Economic Adviser where they were edited, processed and tabulated for the districts and the State as a whole.

Coverage of the Census.—The Quinquennial Census of 1951, has three major divisions: (1) Livestock, (2) Poultry and (3) Agricultural Machinery and Implements. The first division may further be divided into (a) bovine stock, (b) ovine stock and (c) other animals. The second division has two sections dealing with (a) fowl and (b) ducks. The third division has two sections, one for agricultural machinery and the other for ploughs and carts.

The present census shows that the total number of livestock in Madras State has risen from 40,249,760 in 1944 to 51,186,716 in 1951 or by 27.2 per cent. The total number of poultry has increased from 14,775,084 in 1944 to 18,709,382 in 1951 or by 26.6 per cent. The number of tractors has increased from 28 in 1944 to 624 in 1951 or 22.3 fold; the number of sugarcane crushers has increased from 27,282 in 1944 to 64,377 in 1951 or 2.4 fold; the number of oil engines from 3,690 in 1944 to 34,027 in 1951 or 8.2 fold; the number of electric pumps from 4,307 in 1944 to 20,798 in 1951 or 3.8 fold. The ghanis or checkus were enumerated for the first time and the total number of ghanis was 231,430 in 1951.

The number of ploughs has increased from 3,931,657 in 1944 to 5,549,154 in 1951. The number of carts has also increased from 1,179,013 in 1944 to 1,596,820 in 1951.

Figures representing the changes in the number of each category of livestock, poultry, agricultural machinery and implements in the year 1951 since the 1944 census are tabulated below:—

Categories of Livestock, Poultry and Agricultural Implements in 1944 and 1951 with percentage change in each.

Categories of Livestock, etc.	Population of Livestock as per the census in		Percentage variation.
	1944	1951	
1 Cattle ..	16,354,914	19,416,675	+ 18.7
2 Buffaloes ..	6,289,325	7,866,352	+ 25.1
3 Sheep ..	10,569,189	15,161,169	+ 43.4
4 Goats ..	6,687,650	7,424,842	+ 21.9
5 Horses ..	50,016	66,890	+ 33.7
6 Donkeys ..	154,534	247,910	+ 60.4
7 Mules ..	259	689	+ 166.0
8 Camels ..	119	18	- 84.9
9 Pigs ..	743,754	1,002,171	+ 34.7
Total livestock ..	40,249,760	51,186,716	+ 27.2
II			
10 Poultry ..	14,775,084	18,709,382	+ 26.6
III (i)			
Agricultural Machinery.			
11 Sugarcane crushers worked by power.	1,776	3,386	+ 90.6
12 Worked by bullocks.	25,506	60,991	+ 139.0
13 Oil Engines ..	3,690	34,027	+ 923.0
14 Electric Pumps.	4,307	20,798	+ 483.0
15 Tractors ..	28	624	+ 2,220.0
16 Ghanis ..	*	231,431	..
III (ii).			
Agricultural implements.			
17 Ploughs ..	3,931,657	5,549,154	+ 41.6
18 Carts ..	1,179,013	1,596,820	+ 35.4

* Census not taken.

Salient features of the Livestock position.—Of the total livestock in the State, the bovine stock consisting of cattle and buffaloes is 27,283,027 constituting 53.3 per cent; the ovine including sheep and goats is 22,586,011 or 44.1 per cent and the number of other animals including horses, donkeys, mules, camels and pigs is 1,317,678 or 2.6 per cent (in the last category pigs alone number 1,002,171 and rest 315,506 only).

The bovine stock is composed of 19,416,675 cattle and 7,866,352 buffaloes and there are 2.5 cattle for every buffalo in the State. Of the cattle 41.1 per cent are bulls, 33.8 per cent cows, and 25.1 per cent young stock and of the buffaloes 20.6 per cent he-buffaloes, 46.0 per cent she-buffaloes and 33.4 per cent young stock.

The total number of working cattle in the rural areas of the State was 9,244,672. There are, therefore, approximately 29.0 working cattle for every 100 acres of cultivated area or roughly a pair of bullocks for 7 acres.

The total number of cows and she-buffaloes in milk was 2,050,316 and 1,674,673 respectively and there are 36 cows in milk and 29 she-buffaloes in milk for every thousand human population in Madras State.

The total number of breeding bulls was 72,906 and cows in milk, dry and not calved 5,439,123. For every breeding bull there are 75 cows in milk, dry and not calved. Among buffaloes, the number of breeding bulls was 56,101 and she-buffaloes 3,359,429 and then for every breeding buffalo there are 60 she-buffaloes in milk, dry and not calved in the State.

Control of Poultry Diseases

The scheme for the investigation and control of poultry diseases has been taken over by the State Government as one of the permanent activities of the Animal Husbandry Department.

This scheme was initiated nearly seven years ago by the Indian Council of Agricultural Research. Investigation into the various diseases like 'Ranikhet,' 'Fowl-pox,' etc. was made and effective control measures were found out. So far the Indian Council of Agricultural Research was financing the scheme on 50 per cent basis. Now the entire scheme will be executed by the State Government.

Interim Payments on Under-Tenure Estates

On behalf of the Government, the Director of Settlements, Madras, has deposited certain additional amounts towards interim payments for fasli 1359 with the Chairman, Estates Abolition Tribunals, Vizianagaram, Chittoor and Madurai, in respect of certain under-tenure estates notified in the first batch and taken over by Government on September 7, 1949; in respect of some of these estates, the amounts already deposited have been withdrawn.

Certain additional amounts have also been deposited towards advance compensation as well as interim payments for fasli 1360, with the Estates Abolition Tribunals, Vizianagaram and Chittoor, in respect of certain under-tenure estates notified in the second batch and taken over by Government on September 7, 1950.

The particulars of the names of estates, amounts deposited, reason for the deposits, etc., have been published at pages 543-545 of Part II of the *Fort St. George Gazette*, dated April 30, 1952.

On behalf of the Government, the Director of Settlements, Madras, has deposited interim payments for fasli 1360 with the three Tribunals, in respect of the zamin and under-tenure estates notified in the II batch and taken over on September 7, 1950. The names of the estates and the amounts deposited for each together with particulars of amounts recovered by Government towards the rents collected by the landholders from the ryots up to the date of notification are published at pages 672-680 of Part II of *Fort St. George Gazette*, dated May 21, 1952.

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Interim Payments for Fasli 1360

On behalf of the Government the Director of Settlements, Madras, has deposited interim payments for Fasli 1360 with the three Tribunals in respect of the zamin and under-tenure estates notified in the II batch and taken over on September 7, 1950. The names of the estates and the amounts deposited for each together with particulars of amounts recovered by Government towards the rents collected by the landholders from the ryots up to the date of notification are published at pages 672-680 of Part II of the *Fort St. George Gazette*, dated May 21, 1952.

Recognition of Degree

The Government of India have decided to recognize the B.E. degrees of the Andhra University in Civil Engineering, Mechanical Engineering and Electrical Engineering as equivalent to corresponding degrees of recognized Universities, for purposes of recruitment to posts under the Central Government.

Grant for Relief Work

A grant of Rs. 1,00,000 was sanctioned to each of the District Boards of Anantapur and Cuddapah for road works undertaken for relief of unemployment among agricultural labourers affected by adverse seasonal conditions.

AGRICULTURE

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will comprise one or more of the items of work done by the Regulars. Auxiliaries receive suitable training before they take on the work they are expected to do.

Training Centres

There will be different training centres in each State for the different categories. As far as possible, both Regulars and Auxiliaries are to be trained together. The training of Regulars will be seasonal and will be done with the help of agricultural and other extension service staff.

A district non-official organiser will maintain proper co-ordination between the two units of the Land Army. He will be the Executive Secretary of the Board of the district in which the District Magistrate will be the Chairman. Approval of lands for village improvement formulated by the units of the Land Army lie with the Board. Each State has a Director of Extension to co-ordinate the activities of the Land Army in the various districts.

For its central authority, the Land Army has the Governing Body of the Indian Council of Agricultural Research. The Commissioner of Extension at the Centre and the Joint or Deputy Director of Extension in the General Staff, and all official and non-official workers connected with agricultural extension work in the districts constitute the corps of officials, who will study circles, compare notes, and evolve the best methods for stimulating agricultural improvement.



RECLAIMING WASTE LAND: Land Army workers reclaiming 43-acre sandy, weed-infested plot in the village Qomurudin Nagar. Tractors helped in it.

Post-Graduate Training Course in Soil Fertility and Rice Culture

A post-graduate training course in soil fertility, with special reference to rice culture, for the officials of the member-countries of the International Rice Commission, will be conducted at the Research Institute and Farms, Coimbatore.

The duration of the course will be about three months from the middle of July 1952 and would cover soil characteristics, with special reference to the paddy soils, the efficacy of various fertilisers with reference to soil and climatic conditions, techniques involved in designing and conducting field experiments on soil fertility in relation to rice culture. Some 20 to 30 officials of the member-countries in the South and South-East Asia are expected to take the training course.

The Madras Government will make available the existing facilities, including the required teaching staff. Sri K. Ramaiah, the Rice Consultant of the F.A.O., recently visited Coimbatore and Madras, to make preliminary arrangements in connection with the holding of the training course. It has been suggested that the training course should specially pay attention to the precarious conditions of moisture, resulting from droughts or unevenly distributed rainfall, which are becoming frequent in many parts of the world.

This action has been taken on the suggestion of the Government of India, made on behalf of International Rice Commission of the F.A.O.

FOOD

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at the most susceptible stage in its life history. In recent years marked advances have been made in the introduction of potent chemicals, both natural ones such as rotenone from derris and pyrethrum, and synthetics. Modern methods of applying them over a wide area have been developed, such as smoke candles and spraying or dusting from aeroplanes. Efficiency and costs per acre have been both favourably influenced. Here, however, there lies a danger that requires careful investigation. There are beneficial and harmless insects as well as harmful ones. Some are pollinators, others are predators and parasites of harmful insects.

There is, normally, a biological equilibrium between the various species, and a comprehensive reduction by a potent insecticide to deal with some outbreak, may, besides destroying many beneficial insects, change the biological equilibrium in an unfavourable manner, thus bringing in some fresh problem in place of the older one. A further aspect of some importance is that among the individuals of a given pest, there may be a few of a strain that has, or develops, a high degree of transmissible resistance to the insecticide. After the marked reduction in number due to the initial applications, these survivors will quickly increase their numbers, and restore the *status quo*, only in a more intractable form.

Besides destruction by chemical means there are also opportunities for biological control of a pest that owing to the absence of its natural predators or parasites has flourished beyond bounds. Such cases usually occur when a new crop is introduced into a country and is extensively grown, and there are a number of well-known examples of complete control of the pest by the introduction, breeding and liberation of its natural parasites. Attack by vermin and storage pests affects both the modern and the traditional type of storage. With modern types the task is made easier by developments in the design of storage buildings and materials used in their construction: angles and corners are avoided and hard smooth surfaces are provided. Thus prevention can be fairly complete.

Soil Classification

In the past twenty-five years great advances have been made in our knowledge of soils from the viewpoint of their genesis and classification. The general diffusion among soil scientists of the pioneer Russian work on the influence of climate in forming soil zones, and on the ecological aspects of these zones, provided a synthesis of a mass of apparently unrelated facts.

Marked progress has been made with soil classification and survey by these criteria and methods in Europe and the United States of America, but not in tropical and sub-tropical regions. It is now realised that there are big differences between soil formation under tropical and temperate conditions, and that the classifications suitable for the latter will not apply to the former, although the fundamental scientific principles still apply. Tropical soils are usually acid in reaction, except when formed from limestone, and weathering is much more rapid. Considerably more investigation is needed before a scheme can be created suitable for tropical soils and within the framework of a worldwide system.

Problems of soil maintenance in tropical soils have, in the past, been approached on the analogy of temperate soils; hence the insistence on increased organic manuring.

It appears that under the rotation of arable crops and grass ley, the fertility of the soil can be maintained at its present level. The problem of increasing the fertility has still to be solved, probably by the development of some form of mixed farming. This will have to be coupled with manuring because animals take from the land in meat and milk some plant nutrients, and only the balance is restored in their dung.

Erosion

In many areas these developments will give an increased liability to erosion and adequate preventive measures will be needed. Much has been written about the alarming spread of erosion as a result of increased land usage by a growing human and animal population, and the failure due to ignorance and lethargy to adopt suitable conservation methods required by the more intense utilisation of the soil. Erosion is, in general, influenced by four main factors: the method of land utilisation, the nature of the soil, the topography and the climate, and only the first of these, and to a minor extent the second, are within man's control. The understandable alarm at the obvious ravages of erosion and the urge to stop its spread by terracing, contour strips, watercourse control, etc., have rather obscured the important distinction between natural and man-made or man-accelerated erosion. The outlook usually is that erosion must be stopped wherever it exists, whereas in many cases it should be allowed to continue under control.

Where the land surface has an unstable topography, the forces operating to bring it to the new stability are irresistible. By suitable measures they can be checked for a time—occasionally for a long time—but sooner or later they must prevail. The more they have been checked, the worse (and probably the more sudden) the move to the inevitable new stability will be. For example, on slopes above a certain gradient (which gradient varies with the nature of the soil itself) where terraces have been built to stop soil down-wash and gullying, the soil inevitably builds up progressively at the outer part of each terrace at the expense of the inner part. Ultimately the terraces themselves may become unstable and slip down bodily in a landslide. Where this possibility exists there is little doubt that the better course is to accept the downward soil movement and to devise construction works that will merely control and not stop the movement.

In this connection it is of interest to note that native cultivators in a number of regions—India and the Aden Protectorate are examples—who are fully aware of the need for water-absorbent crumb structure in the soil under dry-farming conditions, have a general disinclination to use farmyard manure.

Hydrology

In temperate conditions, where evaporation is relatively low, the major agricultural problem is to encourage the escape of surplus water by percolation or drainage. In the wet tropics the problem is essentially similar, but over the greater part of the tropics and sub-tropics, evaporation is intense, and rainfall is often on the low side. Lack of water seriously affects both livestock and arable developments and points clearly to the need to make much more use of temporary surface water than is done at present.

Important as this utilisation of surface water is, it is only one aspect of the urgent technical problem which faces most tropical countries. This is to carry out a hydrological survey based on catchment areas, with the object

Development of Electricity

Electricity has come to stay as a powerful instrument for aiding social progress. It has been found to be a versatile magic tool of infinite potentiality. Not only has it become indispensable to run industries, big or small, but it has also become essential for the domestic needs of our homes. As an agency for invigorating rural life and improving rural economy, electricity stands unique.

The Government have not been slow in realizing this great power and a rational development of the natural power resources has been going on for a long time. The important water power sites where power could be developed economically are the Nilgiris, Palnis, etc., of the Western Ghats and the Agency tracts of the Eastern Ghats. The Nilgiris, of all other sources, has the advantage of height and heavy rainfall. Power development is comparatively economical and easy in this area and the Pykara system is a good example. Another scheme to tap the water sources in the Nilgiris, under investigation, is the one on the Kundah river near Coonoor. The waters in Visakhapatnam Agency area will be harnessed for power generation by the Machkund Project under construction. The storages built for large irrigation projects can also be utilized for power generation. The Mettur powerhouse is an example. When the irrigation projects like Tungabhadra, Krishna-Pennar are completed, we can tap large blocks and of power from these storages also.

Our Plan

At the cessation of hostilities in 1945, the installed capacity of the generating plants in the State was only about 150,000 K.W. The demand for power was great. Realizing full well that power formed the basis of industrialization, the Government drew up a five-year plan (1946-51) to produce an additional 180,000 K.W. of power. In other words, the intention was to double the power capacity of the State. The plan envisaged production from four new powerhouses at Machkund, Moyar, Nellore and Madurai and laying of new power lines and extensions to the five existing powerhouses at Pykara, Papanasam, Madras, Vijayavada and Visakhapatnam. Unfortunately, owing to the late delivery of steel, cement and power plant such progress could not be made and only 34,000 K.W. have been added to the State power capacity in all these years following Independence. The aim of the Government is to produce more and more of power and in the quickest possible time supply adequate power to meet the demand. The ultimate aim of the Government is the creation of a State Electric Power Grid, a network of transmission and distribution lines inter-linking several powerhouses and conveying their output of electricity to distant towns and villages.

The Madras Grid

The Madras Grid, as it stands to-day, comprises the three hydro-electric power stations (Pykara, Mettur and Papanasam), five thermal steam-stations (Madras, Vijayavada, Madurai, Visakhapatnam and Nellore), besides a number of diesel electric stations and over 11,000

miles of high-tension, transmission lines and low-tension distribution lines. The southern part of the State is very well covered by a network of power lines inter-linking four hydro stations at Pykara, Moyar, Mettur and Papanasam. The thirteen southern districts from Chittoor to Tirunelveli and Chingleput to Madras get a fair portion of their requirements. In the central and northern regions of the State, the Grid is in patches and is yet to be connected.

In the central and northern regions of the State the Grid is slowly taking shape. Already Rajahmundry and Kakinada are getting power from Vijayavada Station.

The Government are planning ways and means to meet the increasing widespread and insistent demand for power. The schemes already in execution and in progress under the State Five-Year Programme (1946-51) have been incorporated in the basic five-year plan of the Planning Commission for the period 1951-52. Most of the works, the total cost of which will come to Rs. 50 crores, will be completed by 1954. *Machkund Hydro-Electric Project* is the largest single item in the Electricity programme of the State, capable of developing ultimately 120,000 K.W. It includes provision of the first transmission lines, for carrying power from remote Machkund down to Vijayavada and supplying power to the entire Circars. This scheme is a joint undertaking of the Madras and Orissa States and is expected to be completed in 1954, adding 51,000 K.W. of power capacity.

The Moyar Hydro Scheme is nearing completion. One unit, out of the three units of 12,000 K.W. each, was already put into operation in April 1952. The other two generators are expected to be put into operation in the current year.

Orders for the power plant to be installed at the *Tungabhadra Power Station* have already been placed. When completed the power station will supply all the power requirements of Rayalaseema and also enable Government to stop the supplies of power they are receiving from Mysore. Many of the oil engine stations working in the area can then be closed down, as these stations will get linked to the Tungabhadra Grid.

Extensions to the *Pykara Hydro-Electric Station* are being made under the five-year plan with a view to augment the supply to the Coimbatore Mill area. This will add an additional power capacity of 27,000 K.W. by 1953-54.

The *Madras Thermal Scheme* will also be expanded and a sum of Rs. 1.27 crores has been proposed to be spent this year. This extension will be completed by 1953 and will add 50,000 K.W. of power capacity. This is expected to be just sufficient to meet the immediate demands from industrial centres in the City. To meet future demands, further development of the station is being planned.

A power capacity of 10,000 K.W. is also proposed to be added to the *Madurai Thermal Station* under the five-year plan and the scheme is expected to be completed by 1953.

Electricity Extension Schemes Sanctioned

The Government have sanctioned the following schemes:

Mettur Electricity System.—(i) Extension of supply of electricity to 40 agricultural pumpsets and flour mill at Cheruvanki, Talayatham, Gudaganagaram, Malmuthukur, Kuthukur, Cheddukkarai and Beemavaram villages in Gudiyattam Taluk, North Arcot District, at an estimated cost of Rs. 1,33,900; (ii) Extension of supply of electricity to 44 agricultural pumpsets and three industrial services at Mecheri and Randam villages in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 1,39,100.

Mettur Electricity System.—(1) Extension of supply of electricity to 48 agricultural pumpsets, three industrial loads (flour mills and decorticators) and ten house-service connections at Tadukupet, Saraswathivilasapuram, Veerakavirajapuram and Kilpattu villages in Puttur Taluk, Chittoor District, at an estimated cost of Rs. 1,31,000. (2) Extension of supply of electricity to 123 agricultural pumpsets and two industrial loads (flour mills) at Kavanur, Kilapakkam, Kilkuppam and Amavarthangal villages in Arkonam Taluk, North Arcot District, at an estimated cost of Rs. 2,74,100.

Pykara Electricity System.—Extension of supply of power to 37 agricultural pumpsets in Thullakunnathur and Iyyampalam villages in Avanashi Firkha, Avanashi Taluk, Coimbatore District, at an estimated cost of Rs. 1,10,400.

Mettur Electricity System.—Extension of supply of electricity to 112 agricultural pumpsets, three industrial loads and 35 house-service connections at Nagari, Mangadu, Kottur, Ananthapanaidukandigai and Chintalapattadai villages in Puttur Taluk, Chittoor District, at an estimated cost of Rs. 2,69,900.

Madras Electricity System.—Extension of supply of electricity to 62 agricultural services at Parivakkam, Panavudhottam, Pidarithangal and Kollapancheri villages in Sriperumbudur Taluk, Chingleput District, at an estimated cost of Rs. 1,70,100.

Supply of electricity was made to Achankulam village in Malli Firkha, Srivilliputtur Taluk, Ramanathapuram District, from the middle of June 1952.

Surcharge on Electricity Bills

Recently there have been comments in the Press about the continuance of the War Costs Surcharge on electricity bills. The reasons for the levy of this surcharge are as follows:—

A surcharge, called the War Costs Surcharge, of ten per cent on the electricity bills was levied, to meet the increased cost of generation and distribution of electricity during the war. It must be remembered that this surcharge was levied without revising the rates of supply of energy, which were fixed several years back when costs were low. As the abnormal conditions created by the war continue, it has been necessary for the Electricity Department to continue the surcharge which, though called War Costs Surcharge, is in reality an increased costs surcharge.

There is little likelihood of the surcharge being discontinued. It is worth mentioning that compared to other commodities, the increase in price of electricity is perhaps the lowest.

The programme also envisages the laying of 2,000 miles of new high tension lines and the required low tension lines under the rural electrification schemes for taking power to the ultimate consumer. When all these schemes come into fruition an addition of 185,000 K.W. capacity will have been made to the generating capacity of the State.

A supplementary programme of power development has also been proposed to the Planning Commission. The schemes included in the programme are those for the utilization of the waters of the Periyar lake in the Palni Hills, and the Kundah and Bhavani rivers in their upper reaches in the Nilgiris.

All these schemes when completed would form an inter-connected grid covering the entire State. As the demand grew in leaps and bounds power capacities of various stations had therefore to be increased; it was found to be absolutely essential to rationalise generation and distribution of power in the State as a whole and leave their management to a well-knit single unit. Accordingly the Government have decided on taking over private as well as municipal undertakings. In pursuance of this decision as a first step, the Government have been taking over only concerns which had not been functioning properly or giving proper service. In this year's Budget a sum of Rs. 20 lakhs has been provided for acquisition of electrical concerns.

Much progress has been made in this State with regard to Rural Electrification. More than 2,200 villages get supply of electricity. The policy of the Government in this matter has been to supply electricity to about 200 villages on the average every year. Power in rural areas is largely used to pump water for irrigation. Every year 3,000 new pump sets are being connected. It is a matter of pride to note that up to end of the year 1951-52 there were 19,000 pumpsets used for agricultural purposes in rural areas as compared to only 5,900 in 1948. Electricity is also advantageously used for cottage industries and innumerable other purposes as protected water-supply wells, street lighting, domestic lighting and cooking, radio, village club-houses, theatre, etc. A sum of Rs. 161 lakhs has been provided for in this year's budget for rural electrification.

When all these schemes fructify we hope that there will be enough power available to meet all the demands in the State.

Extension of Power to Narasaraopet

The erection of the 30-mile Guntur to Narasaraopet 11/33KV. power line was completed and the line energised initially at 11 KV. on June 30, 1952, enabling Narasaraopet town to be supplied with uninterrupted power from Vijayavada steam station.

The town continued to be supplied so far from the local diesel generating station after the electrical undertaking was taken over by the Government on February 28, 1951. With the extension of Vijayavada power to Narasaraopet, more power will be available for domestic, industrial and agricultural purposes in this town. The diesel station at this place has been shut down.

of assessing the surface and underground water resources, their inter-relations, and the possibilities of their conservative exploitation. The knowledge is as vital for agriculture as for industry.

Besides irrigation from surface waters, there is in the aggregate much use of underground water for irrigation. This ranges from the irrigation of a few square yards of soil with water from a single shallow well, to the extensive exploitation of an underground water table by pumping.

Land Tenure System

The peasant is imprisoned within the walls of his own agricultural system: year by year his numbers grow and the walls remain. The difficulties in attempting to break out are great. Except in areas where irrigation is possible, climatic conditions rule out any system of agriculture like the one now practised in climates with a well-distributed rainfall. The system has necessarily a low economic level, and the Government's income from taxes is insufficient to provide adequate agricultural and education services. There are no large industries to provide a big market for cash crops.

Admittedly the system, left to itself, could endure for a long time yet—at a cost: continued soil erosion; periodic removal of surplus humans and stock by famines and pestilence; the maintenance of high death-rates at all ages; and the acceptance of mere existence as a standard of living. But it has not been left to itself, since the days of the first impacts and infiltrations of the modern Western Civilisation, and the results have been portentous. Great irrigation schemes, with modern knowledge available to avert soil deterioration, have provided large new fertile areas—and the population has rapidly bred up to them. Medical science has eliminated many debilitating diseases and they saved great numbers of lives and intensified the pressure of population on the land. Veterinary science has countered the devastating stock diseases—and now millions of extra animals compete for the already inadequate and poor fodder. Thus, although the husbandry may be kept going by the resources of modern science, they are often only palliatives, and the price for surmounting a current crisis is the probability of having to meet the same crisis, magnified, in the future.

Economic Farm Units

Clearly, there is some fundamental difficulty in this system of agriculture which turns the edge of improvements, even though they are of self-evident value and have given highly beneficial results elsewhere. The difficulty is, of course, the trinity of the land-tenure system, the fragmentation of holdings, and strip cultivation—all of which prevailed in Western Europe until enclosures replaced the communal field system by separate and self-contained farms.

No system of agriculture can be progressive unless the holding can be worked as a unit. The size is relatively unimportant provided it is an economic unit. It may be a collective farm covering thousands of acres, as in the Russian Kolkhoz and the Jewish Kibutz, or a small holding linked with others by a co-operative society, as in Denmark.

Food Offences and Punishments Awarded

During the fortnight ending August 31, 1951, 170 cases of prosecutions against food offences were disposed of in the districts of South Arcot, Chingleput, Chittoor, Madras and Nellore. The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines, ranging from Rs. 2 to Rs. 300 and sentences of imprisonment up to one month, were imposed.

In Madras City, Sri Desikachari, Proprietor, Bangalore Cafe, Pycrofts Road, Triplicane, was fined Rs. 300 for possession of others ration cards and Ghillel Sowcar, shopkeeper, Peravallure, was fined Rs. 200 for import of 45 measures of rice and 126 measures of wheat.

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 departmentally in 94 cases to persons who were dealing in foodgrains.

During the fortnight ending November 15, 1951, 462 cases of prosecutions against food offences were disposed of in the Madras State, except in the districts of West Godavari and Ramanathapuram. The accused persons in these cases were people of all classes and most of them belonged to the poorer classes. Fines ranging from As. 8 to Rs. 250 and sentences of imprisonment up to four months, were imposed.

In Visakhapatnam District, Ruthalakithayya, Nookarapu Paidayya, Bollam Venkayya Lalem, Tatelu, Masurapu Appalasamy and Pamu Satyanarayana were each fined Rs. 250 or rigorous imprisonment for four months, for illicit transport of rice through rationed area or without permits.

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 218 cases to persons who were dealing in foodgrains.

So long as the laws of land inheritance, the custom of family division of property, and the unrestricted sale of land endure, land settlement is a Sisyphean task, and the goal—the creation and preservation of economic farm units—cannot be reached. The longer an equitable solution is deferred, the more likely it is that the peasantry will be driven to the brusque alternative of an agrarian revolution.

(Condensed from the booklet *Food and the People* published by the Bureau of Current Affairs, 117, Piccadilly, London-W. 1—A UNESCO project).

A Bridge for the Cauvery

By Sri M. BHAKTAVATSALAM, Minister for Public Works

The Cauvery River was bridged only at Bhavani and Tiruchirappalli. These places are about 100 miles apart and the absence of a road bridge across the river at an intermediate point caused much inconvenience, since there was no direct communication between the districts of Salem and Tiruchirappalli. There is a good deal of traffic across the Cauvery between these districts now carried by means of ferries and coracles.

A bridge across the Cauvery at the Velur-Pugalur ferry has been a long-felt want owing to its heavy passenger traffic and equally heavy transshipment of agricultural and commercial products, connecting as it does the three important agricultural and trading districts of Salem, Tiruchirappalli and Coimbatore. The measure of traffic can be best understood by the index of the high return of Rs. 30,000 per annum which the Government are realising from the ferry at this point. It was also recognised that a bridge across the Cauvery in this area would be of importance not only with reference to the needs of the two districts of Salem and Tiruchirappalli, but also from a general view of the traffic requirements in the whole of South India, inasmuch as a bridge would open up an entirely new traffic route from Salem on the north to Dindigul and Madurai on the south and would thus be of great value to trade and commerce.

From Vipan's Scheme

The proposal to construct a bridge across the Cauvery in this area took shape in Vipan's Scheme of Road Development for the Madras Presidency which was tentatively drawn up in 1936. Mr. Vipan, who was the then Special Engineer for Road Development, had selected a site at Pugalur for the bridge. There were the usual conflicting claims regarding the site to be adopted. In deciding on the Pugalur site, the merits and demerits of five alternatives were gone into in great detail.

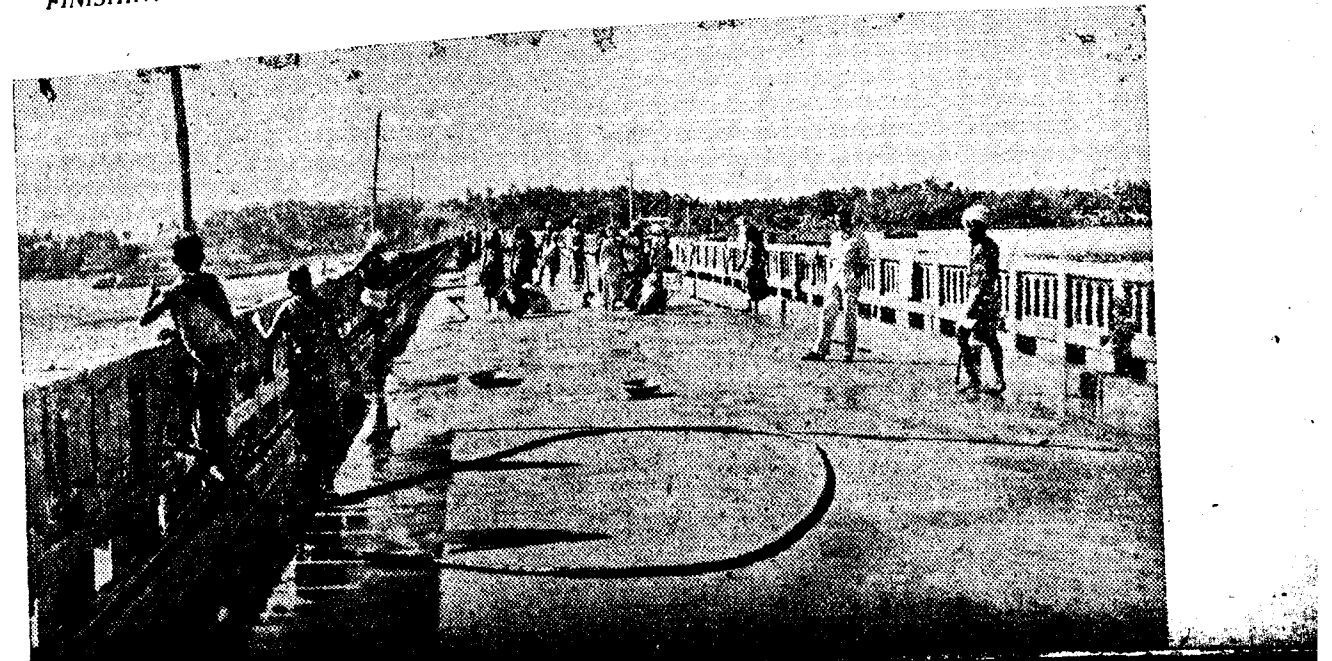
After thorough examination of the various aspects—the technical opinion of the successive Superintending Engineers and Chief Engineers, the economic and trade needs of the two districts, and the opinion of the various authorities concerned, viz., the District Boards of Tiruchirappalli and Salem, the Collectors of the two districts and the Agent, S.I. Railway, it was decided to construct the bridge at the Pugalur site as the great majority of opinion was in favour of this site. The preliminary survey and detailed investigation was completed in 1938, detailed estimates for a bridge with 48 spans of 60 feet with Pratt Truss girders and R.C. decking were prepared and the scheme was sanctioned for execution in 1940, but on account of the conditions created by World War II, its execution had to be postponed.

After the introduction of the National Highway Scheme, this bridge work was included in the Five-Year Programme of Post-War Road Development. The approved alignment for National Highway No. 7 (Benares-Cape Comorin Road) in so far as the three districts of Madurai, Tiruchirappalli and Salem are concerned, as one proceeds from south to north, is from Madurai to Salem via Dindigul, Karur and Namakkal.

Choice of Site

There was considerable discussion as to what alignment this National Highway should take between Karur and Namakkal—both obligatory points. A bridge was a necessity in this section of the route for the continuity of the National Highway and the question of site for the bridge once again figured in this discussion. While the Government of India suggested a bridge at Nanniur in pursuance of their policy to have the shortest route for National Highway, the State Government favoured the construction of the bridge at the present Velur-Pugalur crossing on the ground that it would substantially serve the Provincial interests of the country.

FINISHING TOUCHES: Construction is over, and the workers are giving finishing touches to the Pugalur Bridge, preparing for the opening ceremony.



Electricity—Review for April

A review of electricity work done in Madras State during April 1952 is given below:

Machkund Hydro-Electric Scheme.—Lands yet remain to be handed over. All the bridges and culverts in Lampaput headworks road were completed. In Soguru-Jalaput road, a length of 5 miles 5½ furlongs has been metalled and further work on bridges and culverts was progressing. In diversion dam, 19 per cent of work has been done and in flume channel, 64 per cent of work was completed. In tunnel pond dam excavation was progressing in left flank and 47 units of masonry was done in addition to 17 units of bucket and apron concreting.

In flume tunnel, 473 feet of lining was completed. In pipe tunnel, trimming was done in the area where gauges are to be erected. Reinforcements were being transported to site and erected. Bottom 5 feet was completed and further work was progressing. Grading of valve house was nearing completion and that on further reaches and penstock slopes was in progress. Haulage track was laid up to anchor No. 2 and trial run was made with no load on truck.

Levelling of Power-house area was completed and foundation excavation for Power-house and tail race was in progress. Excavation for Cofferdam and Jalaput dam was continued. Construction of temporary buildings at Jalaput and permanent buildings at Onukedelli were also continued. There were interruptions to work in diversion dam due to rains and floods in the river throughout the month. Total labour force during the month was 4,307.

Moyar Hydro-Electric Scheme.—All the civil works from headworks to Power-house have been almost completed. The first 12,000 K.W. generating set was commissioned and put into commercial service on 10th April 1952 bringing much needed relief. Erection work on II and III units was progressing.

Pykara III Stage Extensions.—For the Pykara dam, construction of masonry for main dam and wing walls was continued. Work on R.C.C. core wall for earthen dam was progressing. The new (4th) penstock line has been erected. Erection of differential surge tank was nearing completion. At Singara, work on foundation for the Power-house Extensions was completed and erection of steel structures remain to be taken up. Erection of outdoor switchgear for Moyar bay was progressing.

Madurai Thermal Scheme.—Component parts of the 10,000 K.W. set were being received and stored. The work on cooling water pond was progressing with earth work 70 per cent completed and 30 per cent of pad for flooring done. For the foundation for the 10,000 K.W. set, collection of materials was progressing and steel reinforcement for raft and mould planks for pedestals were being prepared.

South Kanara Scheme.—Alignment for 11½ miles in Hiriadha-Karkala 33 KV. line and 12 miles in Hiriadha-Coondapoor 33 KV. line was completed. Tree valuation along 56 miles out of 68 miles was done.

Tungabhadra Hydro-Electric Scheme.—Drilling operations for the investigation of soil conditions at the canal power-house site were being continued. Detailed survey for transmission lines was being continued. Seventy miles

of detailed survey was done in the reach between dam power-house and Guntakal. Staking of tower locations and checking of profiles were in progress.

Madras Plant Extensions.—Building steel work was practically completed and erection coat of red lead paint has been completed. Fixing A.C. sheets has been completed. On the completion of erection of boiler No. 4, fires were set in this boiler. Work on boilers 2 and 3 was progressing. Work on turbo-alternators was progressing. Work on coal conveyors 3 and wing tripper continued to progress. For the switchgear, the erection of control and relay boards in control room was commenced and was progressing.

Vijayawada-Visakhapatnam Power-house Extension—Vijayawada.—Works on Second raw water well were progressing.

Visakhapatnam.—Seven stanchions and trunks have been erected, on the south side extensions along with roof purlines.

Nellore Thermal Scheme.—Construction of staff quarters at Gudur was in progress. Sewage work at Nellore was progressing. Work on outdoor yard structure at Nellore and Gudur was progressing.

Operation Branch

Hydro areas.—The water conditions in hydro areas remained far from satisfactory and the inflows in the various reservoirs were very poor. The 25 per cent cut in consumption imposed from 15th February 1952 was continued during the month. The hydro systems continued to run in parallel with the Madras Electric System this month also. The number of units generated, peak load and services connected during the month in the three hydro-electric systems were as follows:—

Name of system.	System peak load in K.W.	Generation in millions of units.	Services connected.		
			Agricultural.	Industrial.	Domestic.
Pykara ..	40,000	22.056	86	..	137
Mettur ..	36,700	8.942	34	..	228
Papanasam ..	22,000	7.759*	50	..	380

* This includes 1.935 million units generated at Madurai Thermal Station during the month.

The first unit at Moyar was commissioned on 10th April 1952 and is working since then, giving relief to the hydro areas. The station peak and units generated were 12,800 K.W. and 5.647 million units.

The Chief Engineer, Electricity, Bihar, and Secretary to Bihar Government visited Mettur Power-house on 29th April 1952.

Thermal Areas and Ceded Districts.—The Madras System was giving continuous relief to the hydro systems (to the extent of 2.052 million units) except during the peak load hours in the evening.

Supply conditions in the areas were satisfactory.

Ex-Gratia Payment Ordered to Retrenched Staff

The Government have directed that ex-gratia payment should immediately be made to such of the temporary personnel (outsiders) who have been retrenched in the staff of the Civil Supplies Department and who have no lien, temporary or permanent, on any post in any department of Government, State or Central, and who have been thrown out of employment with effect from June 16, 1952, or later date, consequent on the abandonment of intensive procurement and statutory rationing in the State.

The scale of payment will be as follows: (a) Persons who have put in one year of service or less—One month's pay (excluding special pay and dearness and other allowances) which the discharged persons drew on the date of discharge; (b) Persons who have put in a service of more than one year but not more than two years—Two months' pay (excluding special pay and dearness and other allowances) which the discharged persons drew on the date of discharge; and (c) Persons with more than two years' service—Three months' pay (excluding special pay and dearness and other allowances) which the discharged persons drew on the date of discharge.

Ordinary Elections to Madras Corporation

The ordinary elections to the Corporation of Madras have been ordered to be held during August-September 1952. Consequent on the abolition of reserved seats in the State Legislative Assembly for labour, the four labour electorates relating to the Corporation of Madras have been revised and fresh directions have been issued to the Commissioner, Corporation of Madras, for the preparation and publication of the electoral rolls for the labour electorates in time so as to complete the elections before 1st October 1952.

Elections to Municipal Councils

It has been decided to conduct ordinary elections to all the municipal councils except the newly constituted the municipalities of Arni, Gudur, Bapatla and Salur, during the current year so that the new councillors may come into office on 1st November 1952. In the case of these excepted cases, the Inspector of Municipal Councils and Local Boards has been asked to take early action for the conduct of elections.

Sub-Committee for Panchayats Act

There has been a widespread feeling that some of the provisions of the Madras Village Panchayats Act, 1950, are unworkable. A Cabinet sub-committee has, therefore, been constituted to go into the question whether the Act requires any modifications to make it workable.

In Visakhapatnam division, High Tension supply was given to Balacheruvu Salt Factory. In Rajahmundry area, supply was given to supplemental water storage tank and Endrapalem. Electricity was extended to the distributions of Undi, Bhimavaram, Ganapavaram, Palacole, Narasapur, Kothapalli and Veeravasaram during the month. In Vijayawada division, supply was given to Kanhipadu village. A second point of supply was given to Masulipatnam Municipality. Extension of supply to Vaddeswaram was completed. Gannavaram railway station was electrified during the month.

The generation, peak load and the number of services connected up during the month in several areas were as follows:—

Name of system	Peak load in K.W.	Units generated in millions	Services connected		
			Agriculture	Industrial	Domestic
1 Madras ..	28,400	13.471	15	16	250
2 Vijayawada —					
Steam ..	8,209	3.739	3	1	19
Diesel ..	340	0.003			
3 Visakhapatnam—					
Steam ..	3,650	1.501	..	2	61
Diesel ..	960	0.108			
4 Kakinada ..	760	0.007	6	4	92
5 Rajahmundry ..	598	0.007			
6 Narasaraopet ..	88	0.016	..	..	2
7 Srikakulam ..	104	0.017	..	..	2
8 Ongole ..	92	0.019	..	..	13
9 Narasannapeta ..	15	0.003	..	..	..
10 Nellore ..	720	0.264	..	..	..
11 Proddatur ..	103	0.029	..	..	..
12 Kurnool ..	320	0.103	..	..	..
13 Anantapur ..	155	0.044	..	..	..
14 Cuddapah ..	225	0.079	..	..	..
15 Nandyal ..	115	0.021	..	..	..
16 Tadpatri ..	62	0.011	..	..	..

Power purchased from Mysore.

17 Hindupur ..	252	0.062	..	..	..
18 Ceded Districts ..	1,952	1.284	..	..	..

In the Madras Electricity System, 74 D.C. services with an approximate connected load of 94.3 K.W. were changed over to A.C. supply.

During the month, 30 extensions costing over Rs. 10,000 and less than Rs. 30,000 were sanctioned by the Chief Operation Engineers and Chief Engineer for Electricity at an estimated total cost of Rs. 10,05,990.

Scholarships to Eligible Communities

The Government have permitted the Director of Harijan Welfare to grant, with effect from the current year, non-recurring grants and scholarships to the students belonging to eligible communities, studying in Basic schools in Standards I to III and Standards IV to VIII, respectively. The rates and other relevant rules and regulations applicable for the grant of non-recurring grants and scholarships to students studying in the ordinary schools shall be applicable to those in Basic schools also.

Actually the engineering aspects of both the sites were considered more or less to balance, but the economical and commercial needs of the area outweighed all other considerations and became a deciding factor. As already stated earlier, the greatest possible agreement was in favour of the Pugalur-Velur site. The controversy of the recent years was finally settled, when our distinguished President of this function, the Hon'ble Sri K. Santhanam, Minister for State for Transport and Railways, Government of India, came at an opportune time to Madras and held a meeting on 24th January 1949, with the representatives of the State Government and finally decided on the Pugalur site.

After the question of site was finally settled, the plans and estimates were finalised by the Chief Engineer (Highways) with the concurrence of the Engineers of the Government of India, providing 40 spans of 60 feet, R.C. Tea-beams. Messrs. Gannon Dunkerley & Co., Ltd., Madras, who had already tendered for the original departmental designs, furnished their revised quotations for the new design for Rs. 26 lakhs.

Two Years of Intensive Work

The work was then put into execution, and it was my privilege to have a part in this. The foundation stone was actually laid on 9th May 1949. Difficulties were many and varied, such as lack of materials and transport, machineries and trained men. Yet, the work moved on and there was no pause in the activity, and the magnificent structure stands completed and the mighty Cauvery has been spanned to form a continuous highway from north to southern districts of our State. No more of tedious and risky crossings in flat-bottomed 'parshals'. Cars, buses and lorries can from now onwards whisk across the river, carrying passengers and goods, reducing the transport costs and thereby the cost of living.

Much of the credit is due to the austere devotion and skill of the Engineers and officers of the Department and even more to the energetic co-operation and team-spirit of the contractors. I would like to take the opportunity to pay a tribute to those officers and contractors and to state that the fact that it had taken just a little over two years of intensive work to build this magnificent structure is comment sufficient on their achievements.

I would also avail this opportunity to say a few words to the contracting profession. Our great handicap in the past has been the lack of planning which naturally resulted in a series of bottlenecks in the matter of equipment, plant and machinery, trained personnel, etc., which are absolutely indispensable for the successful and economical execution of public works, and there has been a general apathy on the part of contractors to equip themselves with all the necessary machinery and personnel and they often depended on the Department for assistance in this regard. In the new set-up, when plans are drawn up on long-range basis and programmes are worked out based on priority of construction, the contractors may, with confidence, make adequate investments in modern construction machinery and surround themselves with the best trained or skilled men and thereby contribute their part in effecting economy in execution of public works. If only they realise this responsibility and co-operate in the endeavours of Government, the day will not be far off when the contracting profession can look back with satisfaction that they have done a good service to the country.

First Major Bridge Work

The Cauvery Bridge at Pugalur is the first major bridge work to be taken up and completed by the Madras State under the National Highways Programme. The cost of the bridge as originally estimated was Rs. 26 lakhs but the actual cost of construction, I am told, is likely to be about Rs. 30 lakhs. The work being a National Highway, is a liability of the Centre. But in this particular case, it must be mentioned that the State Government stands in a somewhat disadvantageous position. This is as a result of the past controversy on the question of alignment of this route and the site for the bridge. The Centre's contention mainly was that besides increased length of road, the bridge at Pugalur would cost much more than a bridge at Nanniyur, but nevertheless they agreed to adopt the Pugalur route provided that Madras themselves met any cost in excess of what it would cost the Centre, if the Nanniyur route were adopted, from their own resources.

These conditions were not acceptable to the State as it appeared to them rather paradoxical, that although National Highways are a liability of the Centre, the State Government should be required to contribute a portion of the cost of the bridge, for the simple reason that they would like to have the bridge constructed at a site considered most suitable to them. After a good deal of discussion on this point by the representatives of both the Central and State Governments, an agreement was reached that the Centre would bear an initial expenditure of Rs. 24 lakhs (the cost of constructing a bridge at the Nanniyur site and of the approach roads thereto as estimated by the Centre), and any expenditure over and above this amount is to be shared equally by the Centre and the State. Subject to these conditions, the Government of India accorded their technical approval and financial sanction to an estimate for Rs. 26 lakhs for constructing a bridge at the Pugalur site. The above condition was agreed to by the Madras State in a spirit of accommodation.

Cost of the Scheme

It, however, appears to me that it will be but meet that the Centre bears the entire cost of construction as National Highways are a complete liability of the Centre. Taking the example of this particular instance, it would appear that the Centre's decision was mainly influenced by considerations such as simplicity of execution, cheapness of cost and geometrical alignment. I would like to stress here that local needs should also be considered in all such cases and the site so selected as to confer the maximum benefit, both Provincially and Nationally; in other words, Provincial interests are to be treated as identical with National interests and the latter cannot be achieved by ignoring the former. If this is conceded, I do not see any justification for the State Government to bear any portion of the cost of the Scheme.

It may be interesting to recall that it was only during the distinguished premiership of Sri C. Rajagopalachari, the Madras Government finally decided in 1939 to construct the bridge at the present Pugalur-Velur site. It is therefore a very happy coincidence that this bridge should be declared open by himself.

From the Address by Sri M. Bhaktavatsalam, Minister for Public Works, on the occasion of the opening of the Cauvery Bridge at Pugalur on 23rd December 1951.

Review of Electricity Work

A review of the activities of the Government Electricity Department for November 1951 is given below:

Machkund Hydro-Electric Scheme.—Lands still remain to be handed over on the Orissa side though acquisition proceedings were taken four years ago.

All the bridges on Lamptaput-Machkund road were completed and opened for traffic. Most of the culverts were completed and work is progressing on the remaining culverts; 50.24 units of masonry were laid during the month; 50.24 units of masonry were yet to be laid. Excavation in Flume channel was in progress and 13 units of concreting, i.e., for 120 ft. bed length were done.

Invert cleaning in the Flume Tunnel was in progress and concrete lining for a length of 2,563 feet in the pressure tunnel completed.

Levelling of powerhouse area and grading for penstock slopes were in progress. Track line for haulage track was laid from Winch House to Valve House.

At Jalaput, temporary buildings and collection of materials for dam and excavation of Jalaput dam were in progress.

Thirty-eight more penstock pipes and few packages of turbines, generators, haulage, winch, etc., were received during the month. Total labour force during the month was 3,700.

Moyar Hydro-Electric Scheme.—All the civil works from head works up to Frebay have been completed. The bigger diameter penstock pipes having been already laid, the smaller diameter pipes and the surge tank were under erection. The powerhouse building is nearing completion. The first generating unit and connected switch-gear were under erection.

Pykara III Stage Extensions.—Construction of Pykara dam involving excavation for foundation and masonry for main dam and wing walls continued progress. Work on earthen embankment on the right flank of the dam was progressing. All the pipes required for the erection of the 4th penstock line were received at site and about 65 per cent of the pipes were erected. Work on foundation for the extension of powerhouse at Singara was completed and erection of outdoor structure was in progress.

Madurai Thermal Scheme.—Erection of third boiler was completed and steam raised. Erection of minor accessories was being continued. Turbine parts for the 2nd stage work are being received at site, checked and properly stored.

South Kanara Scheme.—Survey of the line was completed and preparation of tree valuation schedule was in progress.

Tungabhadra Hydro-Electric Scheme.—Preliminary works such as detailed surveys and taking trial pit particulars of site, etc., were completed and drilling operations was in progress at the Canal Powerhouse site to fix the location of the powerhouse.

Detailed survey for the transmission lines was progressing and 91 miles of reconnaissance, 60 miles of theodolite alignments and 54 miles of levelling work were done during the month.

Vijayawada and Visakapatnam Powerhouse Extensions:
At Vijayawada.—Flooring work completed. Erection of overhead tank 90 per cent completed.

At Visakapatnam.—Painting third coat of the iron members of boilerhouse roof was nearing completion (about 90 per cent). The tender for the extension of south and west side of the powerhouse is under examination.

Adoni-Yemmiganur Extensions.—Survey for the 33 KV line from Adoni to Yemmiganur was completed. Erection work has just been started.

Rayadrug 11/33 KV Line.—Survey of the line has been completed; 60 per cent of the pole erection has also been completed. In Rayadrug Distribution, 24 poles were to be erected to complete the pole erection. Stringing for 77 spans was completed.

Nellore Thermal Scheme.—All works were completed except sewage arrangements. Supply at Gudur already commenced.

Madras Plant Extensions.—The construction work of 'B' Power Station at Basin Bridge is in progress. About 1,350 tons of steel have been received at site of which 1,300 tons have been erected. On boiler No. 4 now under erection fixing of blocks for front Bailey Furnace wall is completed and for the side walls is in progress. Capping up of boiler tubes has been completed and the boiler is ready for hydraulic test. In respect of boiler No. 2, erection of supporting steel work for economiser and assembling and expanding of boiler sections is in progress. The chimney No. 2, has been erected to a height of about 45 feet. Work on 4 and 5 conveyors is in progress.

Internal welding of baggles and other supports inside condenser of the new turbo-alternator has been completed. The inside of the condenser was painted and the pressure tested satisfactorily.

Erection of 11 KV, 250 MVA switchgear was completed except for cables. One pillar is being erected in the 5 KV, 350 MVA gear. Erection of battery is in progress.

Madanapalle Scheme.—Land has been taken over for powerhouse site. The construction of the powerhouse building will be taken up shortly.

OPERATION BRANCH

Hydro areas.—The three hydro systems continued to run in parallel with Madras Electricity System this month also. The number of units generated, peak load and services connected during the month for the three Hydro-Electric Systems were as follows:

Name of system.	Generation in units.	System peak load in K.W.	Services connected.		
			Agricultural.	Industrial.	Domestic.
Pykara ..	19,671,600	41,000	70	6	222
Mettur ..	19,273,970	43,500	86	5	136
Papanasam* ..	13,979,900	23,700	35	1	224

* This includes 1,067,000 units generated by the Madurai Thermal Station.

Thermal area.—Supply conditions in Madras and Andhra Systems were satisfactory. Madras System continued to take relief from Mettur Electricity System.

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Juvenile Delinquents in India

The first study of its kind, the publication "The Neglected and Delinquent Children and Juvenile Offenders in the States of Indian Union, 1949" brought out by the Bureau of Education of the Ministry of Education, Government of India, gives a survey of the legislative and administrative measures in force in the various States of the Indian Union in 1949 for the protection of young children from delinquency and juvenile offences.

The legislative measures enacted in the various States all over India vary in their scope and range. An example of enactment with a limited scope is the Assam Students and Juvenile Smoking Act, 1923 which provides for the prevention of smoking by students and other young persons. Under this Act it is an offence to sell or give tobacco, cigarettes, pipes or cigarette papers to any student (apparently under 18) or to any other young person (apparently under 16). Enactments with increasingly wider scope are the Bengal Children Act (Bengal Act II of 1922 as modified up to 1933) which provides for the custody, trial and punishment of youthful offenders and for the protection of children and young persons; the Bengal Orphanages and Widows' Homes Act of 1944 which

provides for the better control and supervision of orphanages, widow homes and marriage bureaux, and the Bombay Children Act of 1924 which deals with the custody, trial and punishment of delinquent children and provides for the establishment and management of Reformatory Schools for them.

Certain labour legislation also afford protection to children. Thus the Children (Pledging of Labour) Act II of 1933 penalises the pledging for the labour of a child below 15 years of age by his or her parents or guardians. The Employment of Children Act of 1938 prohibits employment of children under 15 years of age in any occupation connected with the transportation of passengers, goods or mails by railway and certain sections of the Indian Mines Act of 1923 prohibit the employment of a child in a mine or allowing him to be present in any part of a mine which is underground.

The nature of the administrative machinery set up in connection with these enactments also varies. For example, no special officers were appointed to enforce the Juvenile Smoking Act in Assam, but police officers in uniform, members of the Assam Legislature, members of

The Finance Commission held discussions recently with the Ministers and officials of the Madras Government at the Secretariat, Fort St. George. Sri K. C. Neogy, Chairman of the Commission, presided. Justice R. Kaushalendra Rao, Sri V. L. Mehta, Dr. B. K. Madan, Sri M. V. Rangachari, Member-Secretary, Dr. N. A. Sarma, Assistant Secretary, and Sri C. Rajagopalachari, Sri C. Subrahmaniyam, Sri T. A. Varghes, Finance Secretary, Sri R. Rangachari, Additional Secretary, and others attended the conference.



POWER

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MADRAS INFORMATION

In the Visakapatnam Division a 11 KV, 1000 KVA Booster was erected at Anakapalli and energised for improving the supply voltage conditions. Service connections in Rajahmundry, West Godavari, Vijayawada, Nellore and Anantapur Divisions were given.

The generation, peak load and number of services given during the month in the several areas were as follows:—

Name of System.	Peak load in K.W.	Generation in units.	Services connected.		
			Agricultural	Industrial	Domestic
1. Madras ..	28,300	10,043,620	14	23	260
2. Vijayawada :					
Steam ..	6,220	2,668,830	8	1	43
Diesel ..	770	127,700			
3. Visakhapatnam :					
Steam ..	3,990	1,364,470	..	2	32
Diesel ..	960	120,100			
4. Kakinada.	740	190,636	..	5	8
5. Nellore ..	710	234,180	..	..	..
6. Rajah- mundry.	765	152,634	..	..	1
7. Proddatur.	84	23,290	..	2	2
8. Kurnool ..	230	69,806	..	..	7
9. Anantapur.	165	45,394	..	..	16
10. Cuddapah.	161	42,105	..	..	17
Power purchased from Mysore :					
11. Hindupur.	116	43,400	..	..	..
12. Sokke ..	2,736	..	..	..	..
Total ..			22	33	386

The units generated at Madras includes 383,825 units given as relief to Mettur.

Also in the Madras System, 43 D.C. services with an approximate connected load of 43.81 K.W. were changed over to A.C.

During the month four extensions costing over Rs. 10,000 and less than Rs. 30,000 were sanctioned by the Chief Operation Engineer (South) and Chief Engineer at an estimated total cost of Rs. 84,100.

MADRAS INFORMATION

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Restrictions on Supply of Electric Power in the Hydro-Electric Systems

Owing to the weak South-west Monsoon in 1951 and the partial failure of the North-east Monsoon once again, the Mettur reservoir storage is less than half the capacity of the reservoir and the level is declining with supplies of water essential for irrigation. The inflow into the reservoir during ensuing 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 Electricity System has to be obtained from the Pykara and Papanasam Electricity Systems through the interconnected power grid. In addition, the maximum possible relief from Madras and Madurai Thermal Stations will also be obtained. Furthermore, the new Moyar Power Station with the first 12,000 K.W. generator is expected to go into service in March this year and it will relieve the power shortage to some extent.

Notwithstanding these factors, the demand for power will be much in excess of the power available for supply. It has, therefore, been found essential to impose a cut of 15 per cent on the power requirements from the middle of January 1952. If the irrigation draft has to be heavy this month, an enhanced cut may also be inevitable.

In the circumstances, the following measures are unavoidable and have to be adopted throughout the hydro-electric areas with immediate effect :

(a) Agricultural and other rural loads in each distribution area will be grouped into two batches and supply will be afforded to each batch only for 10 hours in the day outside the evening peak load hours, viz., 6 p.m. to 10 p.m. The batches will be rotated for day and night supply periodically, according to local convenience.

(b) Staggering of holidays and recess hours of textile mills and the H.T. industrial establishments not engaged in continuous processes and evening peak load restrictions on L.T. power loads already in force will have to be strictly observed.

(c) Holidays of L.T. industrial loads will be staggered, if found necessary.

There will be a small cut in power consumption of 15 per cent with effect from January 15, 1952, on all uses except very essential ones like agricultural pumping, hospitals, railways, drainage pumping, water-supply pumping, etc., and except small domestic consumers with a monthly consumption of 18 units or less each.

The above restrictions will be enforced throughout the hydro-electric areas served by the Pykara, Papanasam and Mettur Electricity Systems and the areas in Chingleput District receiving supply of Mettur hydro-electric power including the Licensees' areas receiving bulk supply from these hydro-electric systems.

The Government regret that need should have arisen for imposing restrictions on the supply of power in this manner due to unavoidable causes. Consumers in the hydro-electric systems are requested to co-operate fully with the Electricity Department in the measures proposed to be taken. The restrictions and cut will be withdrawn immediately after the water position has improved.

POWER

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MADRAS INFORMATION

Electricity for Villages

The Government have sanctioned a proposal for the extension of supply of electricity from the Pykara System to 28 street lights, 97 domestic services and two domestic pumpsets at Odayankulam village in Vettakaranapudur Panchayat area, Pollachi Taluk, Coimbatore District, at an estimated cost of Rs. 41,600.

The Government have sanctioned a proposal for the extension of supply of electricity from the Pykara System to 70 domestic services, including two domestic pumpsets and 50 street lights, in Kuniamuthur Panchayat area, Coimbatore Taluk, Coimbatore District, at an estimated cost of Rs. 35,100.

Sanction has been accorded to the extension of supply of electricity from the Mettur System to Samalpatti, Girgapalli, Papparpatti, Dasampatti and Kallavi villages in Harur Taluk, Salem District, for 50 agricultural pumpsets and nine industrial loads at an estimated cost of Rs. 2,12,600.

Extension of supply of electricity from the Mettur System to 1,255 domestic services, 208 street lights, Rs. 3,01,800, for 93 agricultural pumpsets at Velur, Perumbakkam and Parikkal villages in Tirunavalur firka, Tirukkoyilur Taluk, South Arcot District.

Extension of supply of electricity from the Mettur System to 1,255 domestic services, 208 street lights, 300 agricultural pumpsets and industrial loads has been sanctioned at an estimated cost of Rs. 10,342 lakhs, to Pallikonda, Tirumani, Agaramacheri, Chinnacheri, Vettuvanam, Kiluthinathankuppam, Mudinampatti, Virinchipuram and Kothamangalam villages in North Arcot District. This extension is expected to be carried out in ten years.

The Government have sanctioned the extension of supply of electricity from the Mettur System to 93 agricultural pumpsets, and 7 industrial loads at Nemili, Vettangulam, Kilvidlu and Punnai villages in Arkonam Taluk, North Arcot District, at an estimated cost of Rs. 2,41,900; to 87 agricultural pumpsets and one industrial load, at an estimated cost of Rs. 2,53,700, at Nallavanpalayam, Savalpoondi, Kilmakkara and Tikkan villages in Tiruvannamalai Taluk, North Arcot District; to 102 agricultural pumpsets and one industrial load, at an estimated cost of Rs. 2,67,800, in Tiruvannamalai Taluk, North Arcot District; to 141 agricultural pumpsets and 2 industrial loads, at an estimated cost of Rs. 2,26,200, at Kondancheri and Perambakkam villages in Mappedu firka, Tiruvallur Taluk, Chingleput District; to 141 agricultural pumpsets and 2 industrial loads, at an estimated cost of Rs. 3,49,000, at Ananthapuram, Pitchivakkam, Palayakesavaram and Sevithupalayam villages in North Arcot District; to 178 agricultural services, at an estimated cost of Rs. 3,45,200, at Veeramisettipalli, Narayaneri, Gajjalanaickenpatti, Kandili, Parandapalli, Kagapatti, Thokyan and Gummidikanapatti villages in Tirupattur Taluk, North Arcot District; and to 99 agricultural services and 4 industrial loads, at an estimated cost of Rs. 2,31,500, at Kothakota and Asanapuram villages in Chingleput District. The extension will be carried on in ten years.

Sanction has been accorded for the extension of supply of electricity from the Mettur System to 1,800 domestic services, 360 street lights, 460 agricultural loads and industrial loads, at an estimated cost of Rs. 13,807 lakhs, at Madurantakam and Karunguzhi villages in Chingleput District. The extension will be carried on in ten years.

Electricity in Jinnur village.—The Government have sanctioned a proposal for the extension of supply of electricity to 11 agricultural pumpsets, 4 industrial loads, 153 domestic services, 5 flat rate services and 21 street lights at Jinnur village, West Godavari District, at an estimated cost of Rs. 1,15,700.

During the week ending December 15, 1951, the Government have sanctioned a proposal for the extension of supply of electricity from the Pykara System, at an estimated cost of Rs. 3,46,150, in the first year, rising to Rs. 4,29,350 in the tenth year, for industrial, domestic and street lighting purposes at Mannalur, Kunisseri, Pallavoor, Puthiyankam, Alathur, Kavasseri and other adjoining villages in Palghat Taluk, Malabar District. The proposal envisages supply of power in the first year to 10 industrial loads, 330 domestic service connections, 50 flat rate services, 50 street lights (for Alathur Panchayat Board) and one cinema-house.

Sanction has also been accorded to the extension of supply of electricity from the Papanasam System, at an estimated cost of Rs. 79,850, to 29 agricultural pumpsets at Sammandi-Karisalkulam, Pattakulam, Sallipatti and Villupanur villages in Malli Firka, Srivilliputtur Taluk, Ramanathapuram District.

Electricity for Satyamangalam.—Supply of electricity to the town of Satyamangalam, a taluk headquarters in Coimbatore District, was switched on recently. The extension of supply involved the erection of about four miles of 11 KV lines from Shenbagapudur, where the supply is tapped off from the main trunk line from Moyar to Erode. The estimated cost of the scheme for this extension was Rs. 1½ lakhs. Power is now available in the town for domestic, industrial and agricultural consumers.

Sub-station at Dalmiapuram.—The Government have sanctioned the construction of a third transmission line circuit from Erode to Tiruchirappalli and thence to Dalmiapuram to cater to the increasing demand in the Tiruchirappalli-Tanjore areas. This section of the 66 KV line from Tiruchirappalli to Dalmiapuram, about 30 miles in length and costing approximately Rs. 13 lakhs, was completed in November 1951 along with a 66 KV sub-station at Dalmiapuram.

BOOKS

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Local Boards, teachers of recognised schools and colleges, lawyers, doctors, missionaries of recognised religious bodies, etc., were authorised to seize and destroy tobacco or tobacco articles from students and young persons. In Delhi, to look after the welfare of juvenile offenders a separate court was created in August 1948. A Lady Magistrate, a Chief Probation Officer, some Probation Officers and other court staff were appointed to enforce the provisions of these Acts.

The publication gives a list of the institutions established for the re-education and rehabilitation of delinquent children. The institutions include orphanages, borstals, juvenile jails, women's rescue homes, certified schools, etc. Bombay has the maximum of such institutions, the number being 150.

The publication which has been compiled for the use of State Governments, social organizations and the general public, is available with the Manager of Publications, Delhi, at Rs. 2-8-0 per copy.

STUDY ABROAD Volume IV (UNESCO)

International Handbook of Fellowships, Scholarships and Educational Exchange

The fourth volume of *Study Abroad*, Unesco's yearly handbook of fellowships and scholarships given by Governments and private institutions as well as by the United Nations and its specialised agencies, is now available for sale.

The present volume contains 38,000 opportunities and has an increase of nearly 3,000 more possibilities for study in countries other than one's own than those listed in Volume III, published in 1951.

It is divided into three parts, namely:—

(1) A detailed survey of fellowship programmes conducted last year;

BOOKS

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(2) Opportunities available in 1951-52; and
(3) A report contributed by the I.L.O. on opportunities available for young workers and students to receive vocational and technical training abroad.

In short the volume lists the international scholarship and exchange opportunities available during 1951-52 which have been reported by 60 different States and by a number of non-self-governing and trust territories. The information on annual and regular scholarships has been brought up to date and there are also reports on the programmes of several governments which have not previously been published in *Study Abroad*. There is an increase in the number of fellowships reported by the U.N. and its specialised agencies, mainly owing to the further development of the Technical Assistance Programme, and now reports from a number of non-governmental awarding agencies are also included.

As with Volume III of *Study Abroad*, the I.L.O. has again assisted Unesco by sending a report on the international exchange of trainees in Industry, Commerce and Agriculture and this year there is much additional information on these exchange opportunities for young workers.

In view of the very wide range of subjects for which scholarship or exchange opportunities are offered, the Handbook should be of interest and use to many persons and organizations working both in academic and non-academic fields.

MADRAS INFORMATION

A large number of enquiries from candidates for fellowships in research and other assistance are received. Such candidates would find this book extremely valuable in answering their questions, saving for them much time and unnecessary correspondence.

The book is priced at \$2.00, 7s. 6d. and may be purchased from either of the following two sale agents:—

1. Oxford Book and Stationery Co.,
Scindia House, New Delhi.
2. Vidya Bhavan Granthagar,
Chowpathy Road, Bombay-7.

CURTAIN CALL

(April 1952)

Biannual journal published by the Army Headquarters Dramatic Society, New Delhi.

Pages 58.

Price: Rupees two.

Besides performing with conspicuous ability its traditional duties of protecting peace and maintaining defence posts, the Army in India has so positively identified itself with the life and aspirations of the Indian people—witness its Grow More Food activities and Famine Relief work—that it is not surprising that the Indian Army should play a vital role in the cultural life of the country.

Through *Curtain Call*, a biannual journal, the first number of which is to hand, the Army Headquarters Dramatic

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The Bhairavanitippa Project

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

The inauguration of "The Bhairavanitippa Project" is a third big event in the history of Anantapur and Bellary Districts after the attainment of Indian Independence. The "Upper Pennar Project", the first large reservoir project at a total cost of nearly Rs. 84 lakhs, was inaugurated by the General Secretary, All-India Congress Committee, on the 4th of July 1949. The second one "The Pennar-Kumudavathi Project", at a cost of about Rs. 20.00 lakhs including all charges, was inaugurated the same day as the Upper Pennar Project by the Honourable Minister for Public Works. These two projects are across the River Pennar. The Bhairavanitippa Project inaugurated on December 28, 1951, is on the River Hagari, another big river in Rayalaseema and will be the second large reservoir project to be inaugurated.

This reservoir scheme will benefit portions of Rayadurg and Kalyandrug Taluks of Bellary and Anantapur Districts. These areas are representative of areas which are almost always hit hard by adverse seasonal conditions resulting in frequent famines and drought. The River Tungabhadra which runs in a deep valley in the Bellary District is too low to be of much use to these upland parts. The few other rivers that flow through these districts, have their sources in the comparatively rainless tracts or drain large belts of ploughed lands, the run-off from which is both small and precarious. Though they do not bring much water, what they do bring has nevertheless to be put to good use.

The River Hagari

The River Hagari across which the present reservoir is proposed to be built, starts in Mysore District in the Baba Budan Hills (near Chikmagalur in Kadoor District) about 138 miles above the proposed reservoir site and runs along the boundary between Anantapur and Bellary Districts and falls into the Tungabhadra river. The River feeds a large number of spring channels all along its course on either side both in the limits of Madras and Mysore. This river has been already dammed up in Mysore about 40 years ago at a place Marikanave which is about 68 miles above the Madras border.

Various proposals for an ancient scheme either at one place or other were considered in the past for utilising the Hagari waters for irrigation. But it was found that such anicuts would not be successful in a river subject to fitful flows and would confer no great benefit on lands which need water continuously for cultivation. Hence, a reservoir scheme has been proposed. Five alternatives were investigated as the present and finally adopted site involved protracted negotiations with Mysore. Finally Bhairavanitippa was chosen and detailed plans and estimates were prepared for this site.

The reservoir site is about a mile downstream of the Mysore frontier. The reservoir when built will submerge a sizeable area of occupied lands in Mysore limits including a few villages. A number of conferences were held lasting over years with Mysore and an agreement was only recently



BHAIRAVANITIPPA MODEL : Sri A. R. Venkatachari, Chief Engineer for Irrigation, explains the intricacies of the Bhairavanitippa Project, with the help of a model to the Public Works Minister.



THE BHAIRAVANITIPPA PROJECT : The Bhairavanitippa Project for Rayalaseema inaugurated on December 28, 1951. The scheme for River Hagari in the form of a reservoir project will benefit portions of Rayadurg and Kalyandrug Taluks of Bellary and Anantapur Districts.

The Project, estimated to Rs. 93.1 lakhs, will benefit in about 8,500 acres of old and new irrigation, and yield in normal years about 4,500 tons of additional grain. The work is expected to be completed in about three and a half years.



Society proposes, in the words of General K. M. Cariappa, C.-in-C., "to put over to the Army in particular, and the country, the need for the cultural development of our people, not only from the point of view of the necessity to revive the stage but also from the various other aspects of culture." The superb production of the first issue testifies to the fact that a very good beginning has been made towards achieving these very laudable aims. Printed on fine art paper, and containing a wealth of photographs of various theatrical performances staged by Army dramatic clubs, exquisite drawings and a choice selection of articles dealing with problems of the contemporary stage, *Curtain Call* is bound to be one of the prime movers in the creation of the National Theatre.

—P.V.S.

LAND AND SOCIETY IN MALABAR

By ADRIAN C. MAYER.

Published by the Oxford University Press.
Pages viii + 158. Price Rs. 7.

This short analytical study of the social structure in Malabar District has been issued under the auspices of the International Secretariat of the Institute of Pacific Relations, New York. The small compass of the book naturally precludes a detailed anthropological account, and the author makes it clear that the book is by no means the result of intensive investigations over a long period of time. He confines his study to an examination of the social structure with the attendant influence of economic action.

Withal, the book is a very ably written account of rural Malabar, and Mr. Mayer, while restricting his field to a short descriptive account of the region and the people, the social system, agricultural activities, land tenures and inheritances, and the inter-relation of Government policies nevertheless presents a precise picture of a particularly interesting area in Southern India. Salient points have been selected from a wealth of information in this rapid survey, which is at once concise and scholarly. The eight chapters of the book are excellent epitomes of the subject covered, and provide a useful introduction to the casual reader who seeks information for the first time about the people of this fascinating region.

While caste and kinship—with the attendant evils of untouchability and pollution—form in Malabar (as elsewhere) the main principles of social organization, the author perhaps does not recognise that in Malabar (as elsewhere) the caste system has weakened to a greater degree than he thinks. Mayer says: "Although the caste hierarchy has not disappeared, it is clear that its distinctions are lessening." Actually, the truth would go beyond this statement, and today the protagonists of the caste hierarchy are merely those who prefer a subdued social life, and untouchability is practised more on grounds of sanitation than religious orthodoxy. Again, the author lays great stress on the practice of magic, and wonders that the expenses on ritual spells are not included in the surveys on family budgets. This would be making much of stray rites of a traditional nature.

After a compact survey of Malabar agriculture, the author discusses the cumbrous handicaps of the Malabar

Reproduction of Bharathi's Works

The Government have authorised the Director of Public Instruction to deal with the requests from the authors and publishers of text-books for the inclusion of poems or songs of Poet Bharathi in their text-books, adopting the rates of royalty fixed in the Order, dated February 12, 1951.

Applications from the authors and publishers of publications other than text-books, will be dealt with by the Director of Public Libraries.

Application from film-producing concerns, gramophone companies, etc., for the inclusion of songs of Poet Bharathi in the films or for their reproduction in gramophone, will be dealt with and orders issued on them by the Government.

The rates of royalty to be charged in all these cases will be as follows, as already announced:—

For the inclusion of poems or songs in text-books; 4 as. a line, subject to a minimum of Rs. 5 for each poem or extract; for the inclusion of songs in films or for the reproduction in gramophone Rs. 200 for the reproduction of one song in a cinema film; and 2½ per cent of the sale price of a gramophone record, which reproduces a song.

land tenancy system. The new legislation brought by the Madras Government may force the *kanamdars* or intermediaries in the land system out of existence; while Mayer agrees this would be quite in order, he doubts whether the Act will aid the landless labourer as much as the cultivating tenant.

The two chapters "Changing Patterns" and "Government Policies" should particularly interest Government officials and legislators, for here the author has tried to give the people's reactions to the effects of mechanization, formal education, westernization, urbanization and other reformatory measures launched by Governmental decisions.

The footnotes and the bibliography indicate that the book is well documented, with facts and figures drawn from authentic sources. But one feels that the stray instances of the author's observations from life—as on pages 27, 35, 38, 44, 50, 73, 101, 102, 103, 107, and so on—may well be omitted. They cannot all be taken as typically representative of the contemporary scene, and such personal observations should be included in an anthropological survey only when they have the unbiased virtue of reflecting the characteristics of a carefully selected cross-section.

—P.V.S.

Books Received:

Sri Sankara's *Bhagavandam* (with meaning) in Tamil (Annas four).
Sri Sankara's *Stotra Mala* in Tamil (As. 2-6).
Published by Sri Akkur K. S. Srinivasan,
Suguna Publishing House,
60, Easwaran Koil Street, Mamhala—

Planning Machinery Constituted

The Government have decided that in supersession of previous orders, the following machinery should be set up for both planning and development and for community projects:—

STATE LEVEL

I. State Development Committee—

This will consist of—

1. The Chief Minister—*Chairman*.
2. Minister for Finance,
3. Minister for Land Revenue,
4. Minister for Agriculture and
5. Minister for Public Works—*Members*.

The Director of Community Projects will be the Secretary to the Committee. A senior officer of the cadre of District Collector has been appointed as Director of Community Projects for the State and he will work directly under the Chief Secretary to Government. He will also be Ex-officio Secretary to Government in the Public Department.

The functions of the State Development Committee will be those which are assigned to the State Planning machinery constituted in G.O. Ms. No. 1561, Development, dated 6th April 1951.

II. State Advisory Board—

The Board will consist of—

1. Chief Secretary—*Chairman*.
2. Secretary, Development Department,
3. Secretary, Finance Department,
4. Secretary, Revenue Department,
5. Secretary, Public Works Department and
6. One member of the Board of Revenue—*Members*.
7. Director of Community Projects—*Secretary*.

This will take over the functions of the State Planning Committee.

DISTRICT LEVEL

III. District Planning Boards—

A District Planning Board will be constituted in each district except South Kanara, Malabar, Madurai, Coimbatore, East Godavari, Kurnool and Cuddapah, with the following:—

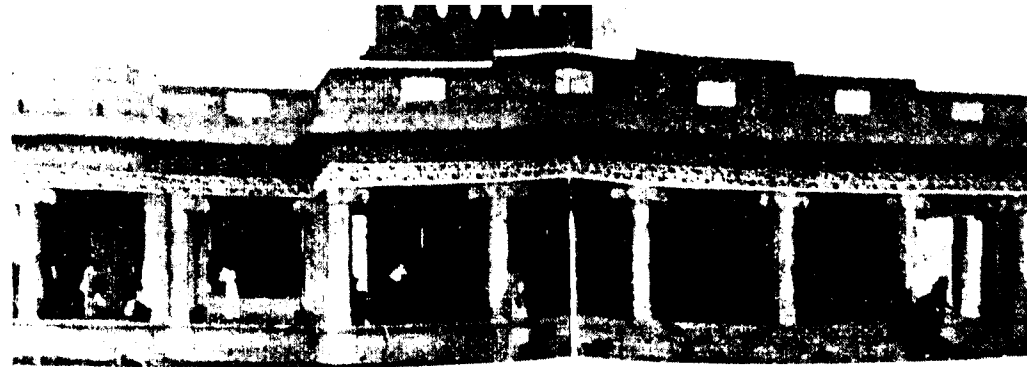
1. District Collector—*Chairman*.
2. President, District Board,
3. Chairmen of all Municipal Councils,
4. Executive Engineers for Irrigation, Highways and Electricity,
5. District Agricultural Officer,
6. District Veterinary Officer,
7. Deputy Registrars of Co-operative Societies,
8. Assistant Director of Industries,
9. Rural Welfare Officers—*Members*.
10. Revenue Divisional Officer at headquarters—*Secretary*.

The District Planning Board will take over the functions of the District Planning Committee also detailed in the Government Order first read above.

In the districts of South Kanara, Malabar, Madurai, Coimbatore, East Godavari, Kurnool and Cuddapah, the Project Executive Officers will work in close touch with the concerned Collectors. Project Advisory Committees will be set up in these districts. The Collectors will submit detailed proposals for the constitution of these committees in consultation with the Project Executive Officers. These committees will have the same functions as the District Planning Boards, to be set up in the other districts.



WASHERMEN'S CONFERENCE: Sri C. Rajagopalachari, Chief Minister, addressed the Tamil Nad Washermen's Conference, held recently at Tiruvannamur, Madras.



PROGRESS AT TUNGABHADRA

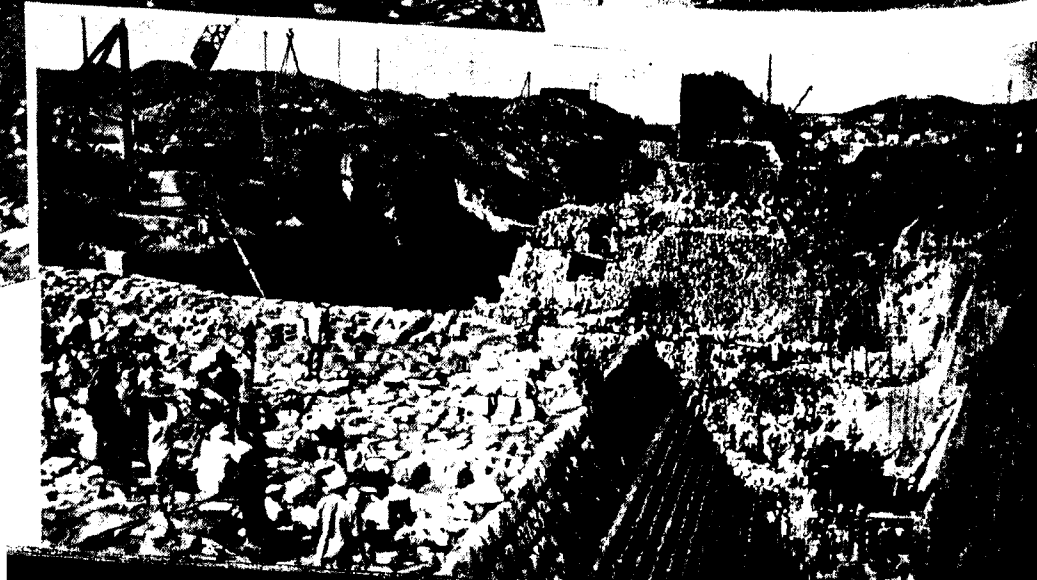
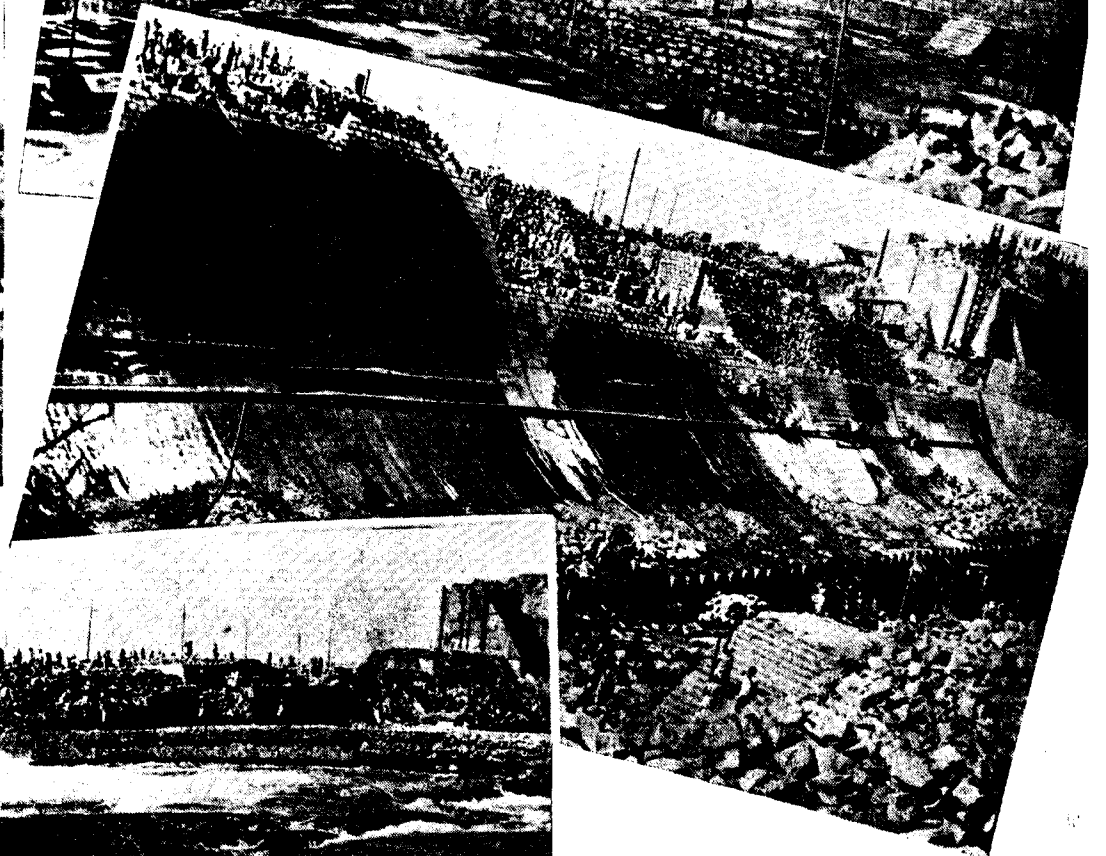
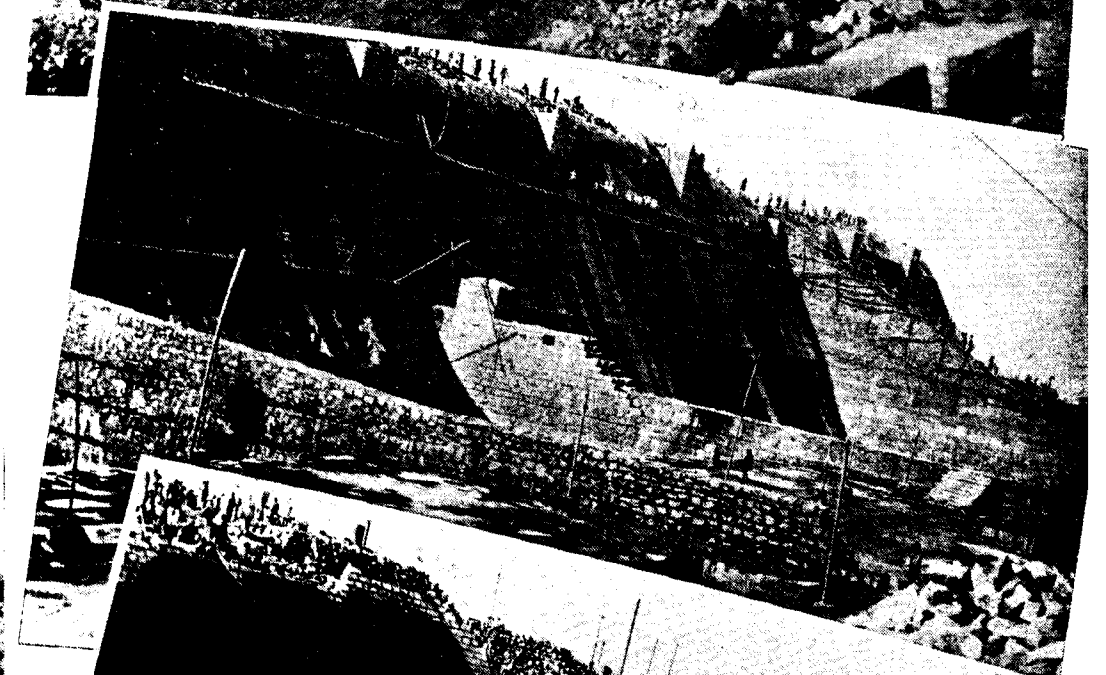
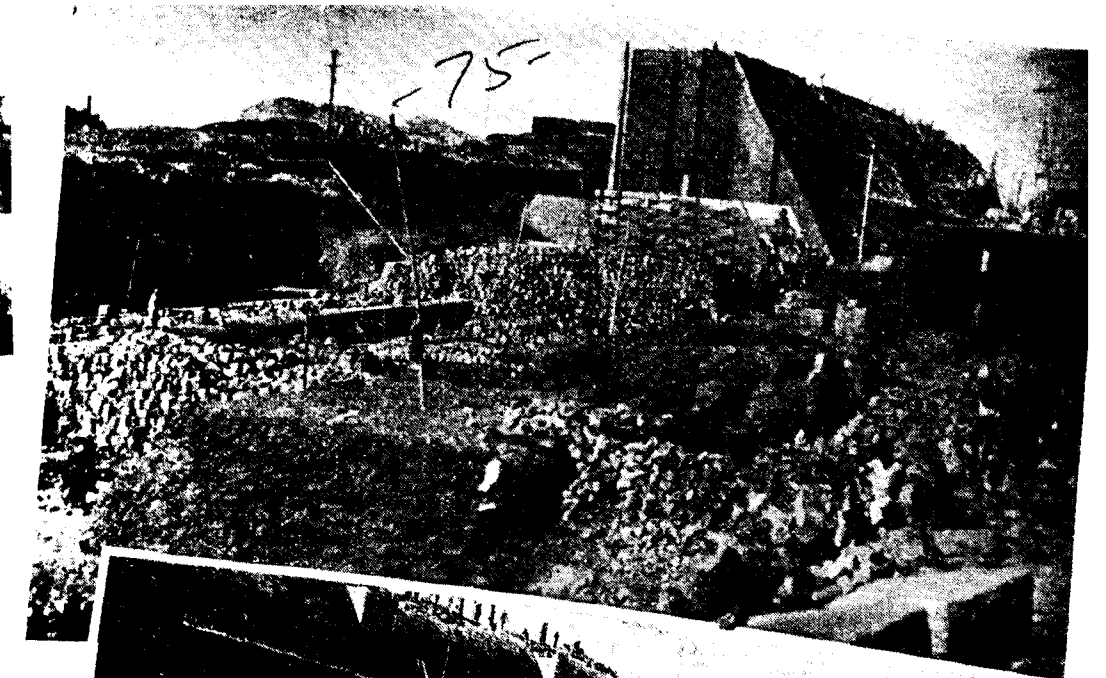
Steady progress is being made on the Tungabhadra Project, and the pictures on this page illustrate the various phases of construction.

Left (top to bottom) : (1) The Minister for Public Works and the Minister for Labour at the circular staircase leading to the Drainage gallery. (2) The Drainage gallery running alongside the body of the Dam. (3) Right flank of the Dam. (4) Gap for sluices.

Right (top to bottom) : (1) Masonry work in the Hydro-electric pipe section. (2) Rear face of overflow section. (3) The 'Bucke' for dissipation of energy. (4) River flow diversion over control portion of Dam.

Above : Circuit House on the top of the hill on the Madras side.

Below : Non-overflow section of the Dam.



NEWS AND NOTES

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MADRAS INFORMATION

Sanitation in Hotels

In October 1950, the Government appointed a committee consisting of the following members to go into the question of cleanliness and sanitation in hotels, canteens and other similar places of public resort :

Chairman.

- (1) The Director of Public Health.

Secretary.

- (2) The Sanitary Engineer to Government.

Members.

- (3) The Deputy Director of Public Health.
- (4) The Director of Industries and Commerce.
- (5) The Director, King Institute, Guindy.
- (6) The Government (Food) Analyst, Guindy.
- (7) The Health Officer, Corporation of Madras.

Later, the Joint Director of Industries and Commerce was appointed as a member in the place of the Director of Industries and Commerce and the Executive Engineer (Public Health), North Madras Division, and the Nutrition Officer, Office of the Director of Public Health, were appointed as additional members and Secretary (in the place of the Sanitary Engineer who continued to be a member) and Joint Secretary, respectively, to the Committee.

The terms of reference to the Committee were—

(i) to consider the state of cleanliness and sanitation in hotels, mobile and other canteens and places of public resort generally ; and

(ii) to make recommendations for—

(a) the removal of defects and deficiencies, and

(b) the revision of the existing by-laws and rules of the municipalities and local bodies framed under the various enactments applicable with a view to secure adequate standards of cleanliness, sanitation, health and quality generally, and particularly in the sale and consumption of edibles in those places.

The Committee has since come to be known as the Hotel Sanitation Committee; and its final report has been received by the Government. On a preliminary examination of the report, the Government consider that it should be published for eliciting public opinion before reaching conclusions on the recommendations of the Committee. The report is accordingly released for publication.

The Government are perturbed to find from the report that the standard of sanitation prevailing in hotels, restaurants, etc., leaves much to be desired. They would invite the particular attention of the proprietors of hotels and restaurants to the findings in the report that the arrangements made for washing of vessels, dishes, etc., are very primitive and that the water used for such purposes is bacteriologically equivalent to that of dilute sewage. They trust that pending orders on the report, the proprietors of hotels, restaurants, canteens, etc., and all local bodies would utilise their existing resources and powers to raise the standard of sanitation in the hotels, etc., to a much higher level than is prevailing now.

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Copies can be had from :

The Editor, *New Education*,
Teachers' College,
Saidapet, Madras-15.

MADRAS CITY BUS TRANSPORT

Pictures on this page show working of the nationalised bus transport system in Madras City.



1. Drivers and conductors check in for the day's work.
2. Reporting at the terminus the timekeeper.
3. Repairs are attended to at workshop.]
4. End of the day's run. The bus is brought back to the Transport Lines.
5. Getting the bus ready tomorrow. The buses are washed, cleaned, checked for minor repairs, oiled and refueled.



MRS. MUNSHI IN THE CITY

Mrs. Leevathi Munshi, wife of India's Food Minister and Vice-President of the All-India Women's Council, recently visited Madras City.

She inspected *Annapoorna*, the non-cereal cafeteria at the Government House Estate. The Women's Food Council, she revealed, planned to open such cafeterias in every city and town, and also supply nutritive non-cereal dishes to III class passengers in Janata Expresses.

Mrs. Munshi also visited the Training School for Social Welfare run by the Women's Welfare Department, a meeting of the Guild of Service and the Food Nutrition Department of the Women's Christian College.

IRRIGATION

reached between the two Governments—Madras and Mysore. Mysore has kindly agreed to acquire lands in Mysore territory at the cost of Madras and in return she is also enabled to carry out a scheme of extending irrigation on the river.

Scope of the Project

The special staff sanctioned by Government in G.O. Ms. No. 2143, P.W., dated 9th August 1946, for investigating the project, examined all aspects of the project: (i) availability of supply, (ii) suitability of site, (iii) submersion in Mysore State, (iv) availability of labour and materials, and (v) development of ayacut, etc., and submitted plans and estimate amounting to nearly Rs. 93.1 lakhs. These were submitted to Government and have been also sanctioned by them.

The project as sanctioned comprises the construction of a reservoir across the Hagari or Vedavati River near Bhairavanitippa village and excavation of two canals on the right and left margins of the river; the canal on the right will be 19 miles long and that on the left 26 miles long. The right side canal will irrigate 2,500 acres (2,000 acres new + 500 acres old) and the left side canal 6,000 acres (4,000 acres new + 2,000 acres old).

The following are the salient features:—

Useful capacity of reservoir	1,500 m.c. feet.
Annual storage	2,000 m.c. feet.
Total length of dam 2,780+3,940.	6,720 feet.
Length of earth dam including a composite dam for 400 feet from L.S. 4,315 to 4,715	2,780 feet.
Maximum height of earth dam above the deep bed level of the river about	60 feet.
Masonry spillways are proposed to be provided as follows:—	
L.F. oggee spillway about	960 feet.
R.F. oggee spillway about	330 feet.
L.F. narrow crested weir	1,650 feet.
R.F. narrow crested weir	1,000 feet.
Total length of surplus works	3,940 feet.

Benefits of the Scheme

The registered ayacut under spring channels of Hagari has not been fully developed and remissions are being granted annually on an average for 2,440 acres. It is expected that with the help of this reservoir the existing supply channels will get good and regular supplies and water will also be found for the 2,440 acres now granted remissions. The entire scheme will benefit in all an area of about 8,500 acres consisting of both old and new irrigation.

The nearest rail-head for the dam site is Rayadrug railway station, which is the taluk headquarters and is about 13 miles from the dam site. There is a second-class metal road connecting Rayadrug and Eradikera. This road to 8/4 mile will be improved into a good metalled road and a cart-track in continuation of it, about 4 1/2 miles long leading to the dam site, will be metalled during the execution of the project.

The work is expected to be completed in about 3 1/2 years. With the ryots' co-operation and with normal seasons, it should be possible to reap the full benefits of the scheme as soon as the project is completed. In normal years, about 4,500 tons of additional foodgrains are expected to be grown over the project-affected areas.

Tank Improvement Schemes

An estimate amounting to Rs. 35,000 for works or Rs. 45,000 inclusive of direct and indirect charges, has been sanctioned for the restoration of Edavalli Tank in Panniyur village of Tiruvannamalai Taluk, North Arcot District. The Scheme will provide assured supplies to the existing ayacut of 30 acres (with insecure supplies) and will also bring under irrigation an additional extent of 66.5 acres. The additional yield from the scheme is estimated at 37 tons of foodgrains per annum. This scheme is to be executed by the Chief Engineer (Grow More Food).

An estimate amounting to Rs. 1,52,000 for works or Rs. 1,97,607 including direct and indirect charges, has been sanctioned for carrying out special repairs and improvements to Mentada-Nellivada channel in Vizianagaram Taluk of Visakhapatnam District. The scheme is intended to bridge the gap of 2,100 acres of ayacut under the channel which is now without irrigation, besides benefiting an extent of 700 acres already under irrigation. The additional food production anticipated is 1,138 tons per annum.

Degrees of Sagar University

The Government of India have ordered that the provisional recognition accorded to the B.E. (Pass) and B.E. (Hons.) degrees of the Sagar University, be made absolute for purposes of recruitment to posts and services under the Central Government.

Iron and Steel Control

The Iron and Steel Controller, Calcutta, has since declared that "bars" whether bent or looped at either or both ends or elsewhere and called "Roofing Bars" or by any other name, are essentially "bars" falling under "Controlled categories" and therefore come under the purview of the Iron and Steel (Control of Production and Distribution) Order, 1941.

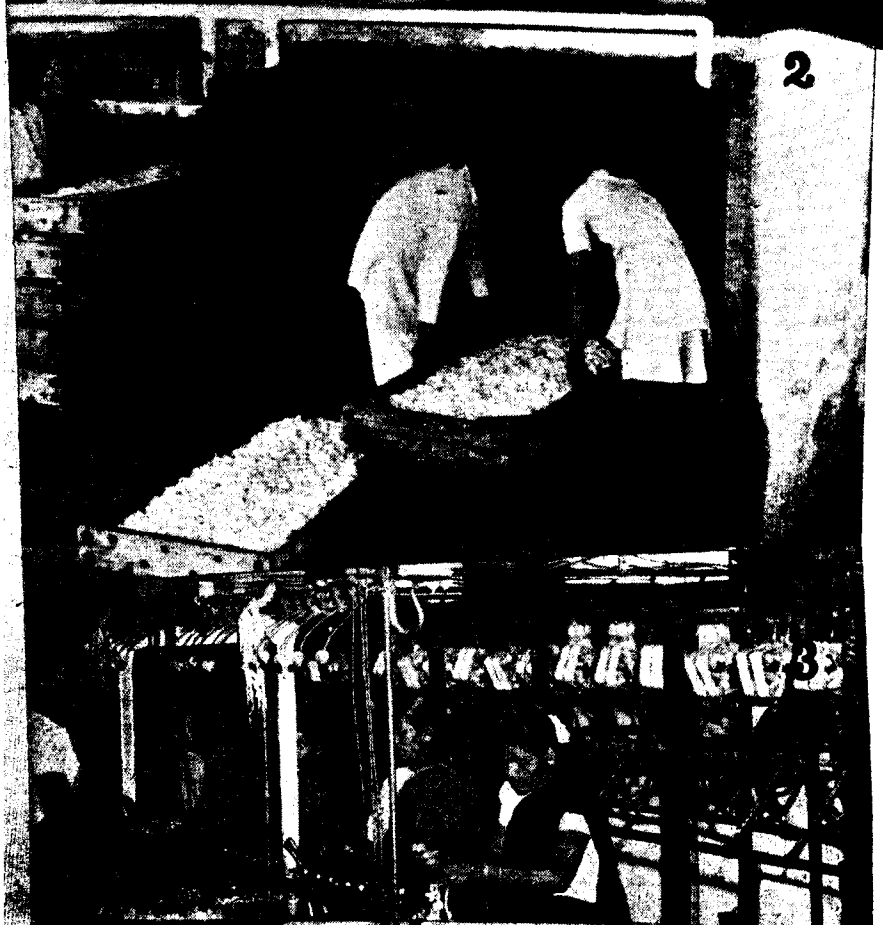
Survey into the Economic Utilities of Palmyra Palm

The Palm Gur Adviser to the Ministry of Agriculture, Government of India, suggested that it would be desirable to conduct a survey into the economic utilities of the palmyra palm in this State in the first instance as a preliminary to a survey of the economic utilities of all palm trees. In view of the importance of the palmyra palm in the agricultural and industrial economy of this State, the Government accepted the proposal. The Economic Adviser to the Government has prepared a comprehensive questionnaire for the use of the staff of the Co-operative Department who are entrusted with the work. The questionnaire seeks information on the extent of land covered by palmyra palm trees, the number of such trees, cost of cultivation, yield and income, industrial employment and output, marketing of the products and the role of co-operation in the rehabilitation of ex-toddy tappers.

The survey is now confined to the three districts of West Godavari, Ramanathapuram and Tirunelveli which are among the most important of the palmyra growing districts in the State. It was started on 1st August 1951 in the West Godavari District and on 1st September in the other two districts and is expected to be completed in all the districts soon.



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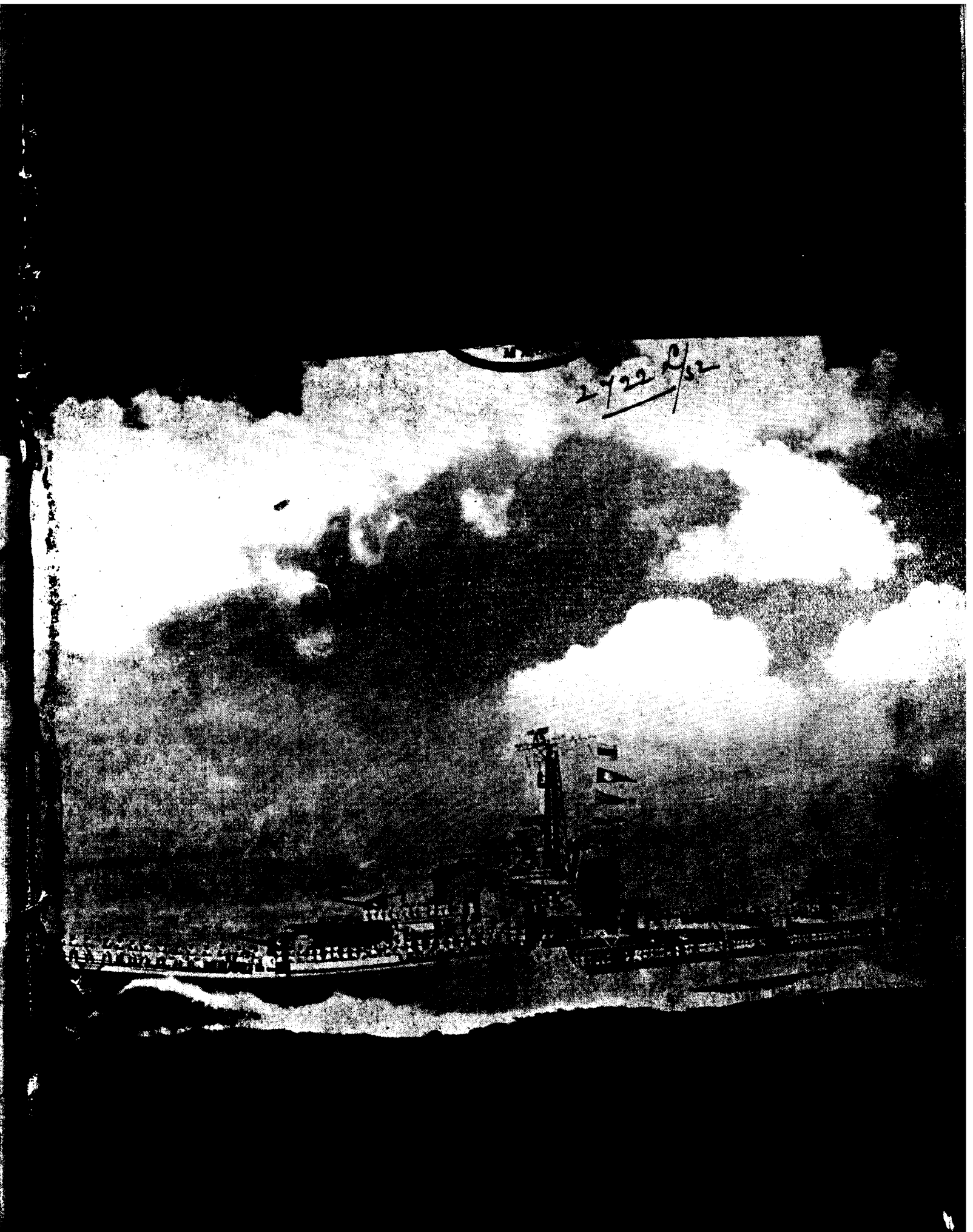


SILK FILATURES AT KOLLEGAL

The Madras Government affords all possible facilities to encourage silk industry in the State. The site of the Government Silk Filatures at Kollegal in Coimbatore District has been selected because the climate is suitable for growing mulberry plantations and rearing cocoons.

The pictures here show :

(1) The cocoons being sorted out by deft hands. Unsuitable ones are destroyed. (2) The selected cocoons are smoked in gas chambers to kill the worms inside; the cocoons are now ready for unreeling the silk filaments. (3) The reeled silk is very carefully tested under reflected lights, and the grade of the silk is determined by mechanical processes. (4) High graded silk is twisted into measured hanks and packed with a peacock label for despatch and sale.



The Rationalisation of Industry

By SRI J. M. LOBO PRABHU, I.C.S., Development Secretary, Government of Madras

The concept of rationalisation can be traced to the movement in Germany after the First Great War, to increase output of industry in terms of the input. In its original and strict sense, a rationalisation implied technical efficiency arising from scrapping of obsolescent plant and machinery. It was, however, quickly realised that machinery is only one of the agents of productivity, and that there was room to apply the scientific method to other agents also, notably, labour, the industrial organisation, the financial system, the supply of raw materials and marketing. In its extended sense, rationalisation of industry is indistinguishable from planning, labour, capital and natural resources being scientifically studied and consciously co-ordinated to yield the highest possible returns.

The importance of machinery is that it eases and intensifies human labour. To the extent horse-power is added to any operation, the manpower required is altered. The result of increasing the ratio of machinery is first that the volume of human labour required is reduced, second that the value of the labour employed is increased, third that prices are reduced, and fourth that profits are enhanced. The employees, employers and consumers are benefited, at the cost of some labour which is retrenched. If something is done to employ the surplus labour, the process of rationalisation would be welcomed on all sides.

Obsolete Machinery

The position of most Indian industries is that the plant and machinery are not only obsolescent now but were never anything else before. When the country was subject to foreign domination, Indian industries grew up only in the interstices which foreign supplies could not cover. Many of them started from equipment salvaged from the scrap heap. When the war widened the gap in supplies and assured a demand for local production, machinery was not available. Since the war, deliveries of machinery from abroad have been slowed and are now most expensive on account of currency and international complications. Generally speaking, except in the textile and steel industry, the efficiency of our machinery bears no comparison with that of industrialised countries. Consequently, the productivity of our manpower is a fraction of that of U.K., which itself stands in a ratio of 100 to 280 to the U.S. manpower more heavily aided by technical efficiency.

What has prevented improvement of industrial efficiency? In the first place, labour is so cheap that many industries find little advantage in employing machines to save it. In a sense therefore the recent increase in labour cost is pressuring industry to employ more efficient machinery, which in turn will appreciate the wages of labour further. Secondly, technical efficiency belongs to the context of general industrialisation. In India various industries have been planted to meet certain sheltered demands, without reference to capital industries for absorbing their bye-products. In such lonesome conditions not only the impulse but the means to move from change to change, do not exist. Thirdly, many industries have started with such poor equipment that it is better scrapped than improved.

And this leads to the question of cost. In spite of concessions the income-tax absorbs a good part of the money that could be available for reinvestment in industry. Again, awards of bonus by Industrial Tribunals have reduced profits capable of reinvestment. At the same time new capital is difficult to attract under the prevailing adverse climate. And with all these facts is another, the cost of repair and replacement which has arisen steeply due to international conditions, so much that the Planning Commission estimates that a minimum of Rs. 150 crores will be necessary in the next five years. Lastly, rationalisation has been opposed by labour as reducing employment.

Political or Economic Remedies

What are the remedies? In respect of cheap labour, the end seems to have begun from the political, if not the economic end. Under Democracy, an increasing share of the national dividend will be claimed by the actual workers. Economics will also reinforce this tendency because the redistribution of incomes and the creation of purchasing power in the end increases the demand for consumer goods, which should stimulate industrialisation. It is claimed, however, that some measure of planning is required if industrialisation is to possess a natural roundness and integrity. Certain basic industries to supply capital goods and a large class of industries to supply standardised fittings and equipment are necessary.

In this connection, there is criticism that the Five-Year Plan has dealt with industry in the abstract, without taking any help and advice from technicians about the structural necessities. After the war, in England, a committee on Industrial Productivity was formed from by prominent persons in industry and scientific research. Working parties, Development Councils and the Anglo-American Council on Productivity, all in their turn aligned the wide field of industry, strengthening weak sectors with subsidies. Regarding obsolescent machinery also, the example of U.K. is important. For instance, in the textile industry a subsidy of 25 per cent involving a total cost of 13 millions was given for modernising-spinning.

In respect of finance, detailed examination will be made later. The present climate for investment is no doubt unfavourable, but the Planning Commission has not suggested what should be done. The attitude of labour to rationalisation seems to rest on some misunderstandings. Labour has everything to gain from the introduction of machinery which intensifies its effective power and by increasing profits, ensures better wages. No doubt some unemployment of labour may result but to the extent that efficiency adds to profit, industrial expansion can take care of much more than the total labour now employed. A long range-view point is necessary on the part of labour, while employers and Government can take various measures to retrain and re-employ surplus labour.

Labour is a Vital Factor

Labour is a very important agent of productivity in respect of which considerable rationalisation is possible. In this both capital and labour have to co-operate. As far as capital is concerned, it is now generally recognised that a healthy, contented and loyal labour force makes a return

far and above extra payments made to it. Unfortunately, what is indisputably sound theory is not even uncommon practice. Most employers pay labour as little as possible and that only to stave trouble. In this also they fail because under the general awakening, labour is now resorting generally to Industrial Tribunals to obtain a share in the profits.

The employers therefore lose first the grace of giving and second the incentive which a prospective share in profits can give to labour. Some general scheme for partnership between labour and capital is necessary in the interest of both. If, as recommended by the Planning Commission, basic wages over the entire industrial field are more or less equalised and differences are related to the special contribution made by individuals or bodies of labour, not merely ethics but economics will be served. Whether the differential wages should be individual or to the whole body of labour employed will always remain a matter of dispute.

It is important, however, to note that England, which is the home of trade unionism, is rapidly passing over to payment of individual incentive bonuses. In the iron and steel industry 63 per cent of the workmen were paid on the piece-work basis. In the engineering, motor vehicles, textile, building trades, incentive bonus payments are increasing. According to recent surveys 80 per cent of the manufacturing firms have some form of payment by results. It would appear that both employees and employers are recognising their mutual advantage in doing their best by each other. In India also, if the general test of productivity is applied, some of the existing systems of wages will have to be revised.

Industrial Organisation

In respect of the industrial organisation, the rationalisation which has been taking place in U.K. is of guidance. Government action has been threefold: first, distribution of raw materials, investment and manpower according to plan, second, statutory bodies to investigate and promote efficiency, and third, publicity to induce efficiency consciousness. Other corporate action has been through the Anglo-American Council of Productivity, through Trade Associations and Trade Unions. Action within the industry at factory or equivalent level is in main the responsibility of the management. The result of these three agencies has been first to increase the ratio of capital investment per worker. Government have stimulated investment by initial tax allowances of 20 per cent later increased to 40 per cent on new plant and machinery and 10 per cent on buildings. Industrial consultants and production engineers have been extensively used to realign plant. There has been a marked increase in mechanical handling.

In respect of labour, time and motion studies have enabled the best use of the available labour skill. Education and training facilities have been created in 50 sectors of the industry. Training of supervisory grades has been considered to be of great importance. Facilities for labour like better lighting, canteens have won a large measure of the willingness and have enabled increase of the length of the working week. In respect of land and raw materials, controls and co-operative action have enabled the best use of the little the U.K. has and the large quantities she must import. The same co-operative tendencies are apparent in two other directions, first simplification and standardisation of production, second research. Standardisation brings about economies both to the manufacturer

through simplification and the user through lower prices for given quality, improved availability of replacements and spare parts and the need to carry smaller stocks.

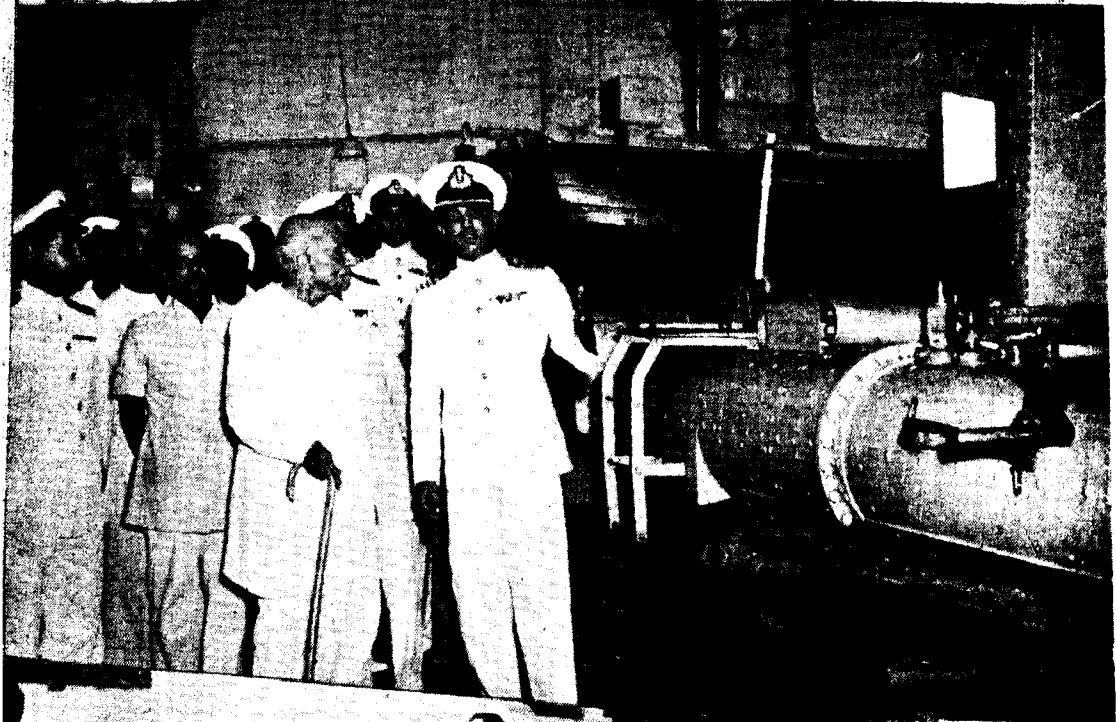
In India, the need for standardisation is fortunately matched with the opportunity for the same. As a late starter, India can take advantage of the standards reached by other countries and can enforce them, as a condition for starting the industry. In respect of consumer goods also standardisation appears necessary, because the variety of lengths and sizes is one of the principal handicaps for our trade abroad. In research, the U.K. Department of Scientific and Industrial Research, with 40 Research Associations covers almost all industries. The National Research Development Corporation takes over inventions of commercial value development to the point they are capable of being used, on the basis of licences.

In India, since Independence, there has been some consciousness of the necessity for research. The Planning Commission has also recommended development councils. What seems to be lacking is an impulse for improvement. The account as far as industries are concerned is to make the work easy money. As far as Government is concerned, the work has been too much on the top, with little or no extension of activity. More co-operation between Government and industry is necessary. It may be desirable for development councils to examine production in detail and to suggest improvements, which may be pressured by the grant of subsidies or remissions of tax. At the same time, the Industries Development and Regulation Act, 1951, should enable that extension of capacity should be associated with certain standards of production. In any case, the time has come to apply the test of productivity more positively to industrial production, as this is necessary not only in the interest of the country, but of labour whose outturn depends to a great extent, on the methods of production employed.

The Financial System

The Financial System has a great deal of influence on production. The Planning Commission has advocated a disinflationary policy coupled with a system of controls. The recent increase in bank rates and the restrictive curbs on bank credit seem to be conceived for disinflationary purposes. The result has been a fall in the prices of shares without any corresponding fall in the value of commodities. There is a school which maintains that inflation is not the result of the volume of money in circulation, so much as the quantity of consumer goods available. It is maintained by them that restrictive credit measures communicate a hesitant effect on all lines of production reducing enterprise with corresponding increase in prices.

Alternatively, it is pointed out that increase in prices has shown no actual relation to the note issues, but a definite relation to the food policy of Government. Throughout the war, in spite of the larger volume of notes in circulation, the general price level remained low because the food prices were relatively low. Since food production declined due to controls and prices were raised, the general price level has been rising in spite of a reduction of money and credit. The rationalisation that is pressed in respect of finance is that it should be related to encouraging production, on the theory that in an undeveloped country, expenditure on production can never cause inflation.



I.N.S. RAJPUT IN MADRAS CITY

For the first time since it was commissioned in the Indian Navy, the destroyer I.N.S. *Rajput*, senior ship of the Destroyer Squadron, came to Madras on a ten-day visit.

Here Sri C. Rajagopalachari, Chief Minister, is seen with Captain R. D. Katari, Captain of the Destroyer Squadron, and other officers of the *Rajput* (top).

The Chief Minister took keen interest in inspecting the various parts of the ship, including the ratings' quarters and galleys. Here he is seen studying the working of the torpedo-firing mechanism (centre).

Sri Chintaman Deshmukh, Union Finance Minister, who recently visited Madras City, evinced great interest in the working of social service organizations. Here he is seen at the children's section of the Service Home run by the Women's Welfare Department (bottom).

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"WE SEEK TO SERVE AND NOT TO COMPETE"

September 19

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Cover page: An exciting view of the destroyer I.N.S. *Rajput*, which recently came to Madras on a ten-day visit.

One of the reasons assigned for the poverty of production is the system of controls. In the first place, the vexatious nature of these controls discourages the majority of producers naturally prone to be content with what they have. Secondly, to the extent that prices are immutably fixed, they do not stimulate increased efforts. It is pointed out that agricultural production reached its peak in 1943 under the stimulus of increasing prices and have since declined due to the efficiency of prices control and procurement.

Basic Ration for Non-Producers

The position however is that the non-producing population has to be fed and cannot be exposed to such prices as the producers could now dictate in conditions of shortage. The solution offered is a general system of levy sufficient to provide a basic ration to the non-producers. Anything that remains over the levy, including production from new areas, should be free of all controls, the presumption being that the producers will eat less or produce more in order to obtain high prices available in the free market. It is assumed that the incentive could stimulate production to meet the whole of the efficient demand, wiping out the black market at the same time. The mechanics of this change are established by the experience of the free market allowed to sugar production.

It is claimed that not only to agricultural production but also for industrial production, a free market should be allowed, after specified supplies are delivered. The proposal of the combination of controlled and free market is one that deserves more consideration than it has received. In some countries, notably the Communist countries, the free market has been used to stimulate production as the controlled market is maintained to secure basic needs of the population.

Thirdly, controlled prices are stated to discriminate in favour of trade against industry. By assuring a safe margin, sometimes enhanced by black market dealings, trade attracts capital away from industry. There is no comparison in the level and pace of profits from investment in trade and from industry. Apart from the waiting required for returns from industry, there is a cast-iron limitation of the rate of profits arising from controls, which takes no account of the risk involved from investment at the present high level of cost. This reaction of controls on industry is probably one of their most disastrous consequences. At least in respect of new industries, assurance of some free market is necessary. Otherwise there is little prospect of investment in industry.

Supply of Raw Materials

Supply of raw materials for industry is capable of considerable rationalisation. There appears too little planning in this respect. Even in respect of controlled commodities, many industries are not assured of raw materials according to their capacities. The same is the story in respect of structural and consumable stores required. Steps require to be taken at least in two directions. First, there should be definite production, aided if necessary by subsidies of raw materials required to keep existing installations working to capacity.

Second, if shortage cannot be immediately reduced, it should affect least the more efficient units. In fact, a certain discipline will be enforced, which will lead to

higher technical efficiency if distribution of materials in short supply is related to the use made of them. Under conditions of free supply inefficient units would never be able to compete for short supplies with efficient ones, which would mean in practice they would otherwise become efficient, or shut down. Controlled distribution has supported inefficiency to the extent that it enables many factories to exist by advantage only of controlled prices of raw materials on one hand and of finished products on the other.

In respect of marketing, rationalisation in many industrialised countries has led to the formation of combines and cartels, controlling prices. The position in India is, though it is a sellers' market, the demand is still short of its proper dimensions. In other words, the people must buy more, if they are to produce more. At present their consumption of essential goods is restricted by their purchasing power. The first step there is to create new purchasing power. The slight redistribution of incomes which has followed higher wages for industrial labour and higher prices for agriculturists has created some new purchasing power. This has to be augmented, if industrial expansion is to be sustained by growing markets. But purchasing power cannot be created by only raising wages and prices, as this would be defeated in the end by inflation.

The proper strategy is to raise productivity of both the industrial and agricultural worker. The industrial worker may respond to schemes of profit sharing and other incentives. The agriculturist has to be pressured to change his inefficient methods. The Planning Commission has recommended, "Village Production Councils," to maximise the yield of labour and land. That proposal may require to be enlarged by providing incentives, which may be in the shape of remission of revenue or preference for State Services like irrigation, seed and fertiliser supplies. An element of barter, that the cultivator does his own part in following the approved agricultural discipline in return for which the State will give preferences for his requirements, seems to be necessary. If this barter is worked on a collective basis, the village and not the individual only being measured for State service and favour, a natural but large force will be enlisted for introduction of efficiency in our agriculture. This efficiency and the consequent purchasing power is the best foundation for industrial progress.

Spending and Credit

There are two other factors in connexion with marketing which have not received sufficient attention. First, while we are teaching the submerged classes how to earn, we have not taught them how to spend. In consequence, much of the increased income of cultivators goes underground or is wasted in socio-religious ceremonies, while the gains of the industrial labourers are spent in hotels, cinemas and other distractions. There is little improvement in the living standards of these classes. There is a proposal that a part of the increased wages and prices should be paid in commodities essential to the health and welfare of the workers. A list of consumer goods could be prepared against which pay coupons would be encashable. This has the advantage not only of enriching the standard of the worker's life but of giving industries an assured demand. The proposal is well worth considering.

The second factor is about credit. In the U.S.A., a very considerable part of the workers' purchases are on the hire-purchase system. This not only swells the demands and quickens turnover, but has another effect, that it binds the worker to a certain volume of effort to repay his purchase. There is, so to say, a mortgage on his abilities to earn, which keeps him on the toes throughout. And the process grows on what it feeds, one item of purchase leading to another, so that the urge to spend and earn becomes continuous. The demands of the whole population get, so to say, on a conveyor belt, against which there is a corresponding assembly line in the production.

Rationalisation of industry therefore appears to cover a much wider field than individual industries. It is a strategy to streamline the entire economy to produce and to consume more. In this connexion not merely the mechanical but the human factors have to be organised. A purposive study of causations is required. The motto of that great institution, the London School of Economics, *Cognoscere Rebus Causas*, is most applicable to our economics. We must know the cause of things. So far, even economists have tended to accept Government decisions as economic principles. It is time that economic principles should become the basis of Government decisions. This is the rationalisation which our industry, our economy needs, organised action on reasoned deductions.

Rice Ration Restored to 6 oz. in Malabar, Nilgiris and South Kanara Districts

The Government have directed that the rice content of the ration for the rice eaters in the informally rationed areas of Malabar Nilgiris, and South Kanara Districts be restored with effect from January 13, 1952, to 6 oz. per adult per day. The overall ration in these areas will be maintained at 12 oz. per adult per day.

Conviction Set Aside

T. Bisavaramiah, M. Narayanamoorthy and K. Satyanarayanamoorthy who were charged with contravening condition 6 of the licence issued under the Madras Foodgrains Control Order, 1947, and Shaik Subhan Sahib and Ch. Veeraraghaviah who were charged with abetting the contravention, were convicted and sentenced on July 28, 1950, by the Additional First-class Magistrate, Gannavaram. The particulars of conviction were reported in Madras Information of November 1950 (Volume IV, No. II).

On an appeal preferred by the accused, the Sessions Judge, Krishna, set aside the conviction and sentence of the lower court on September 27, 1950. On October 16, 1951, he also directed the refund of the cost of the stuff seized.

Dispensaries of Indian Medicine

The Government have approved the conversion of the rural dispensaries of modern medicine at the following places into dispensaries of Indian Medicine:—

Padalam in Chingleput District, Tirupoondi and Semiamahadevi in Nagapattinam Taluk.

Revised Prize Scheme for Vanamahotsava

The following is the revised scheme of the Government of India for the award of prizes, in connexion with the Vanamahotsava celebrations; There will be four All-India Shields as follows:—

(1) *The All-India Rajendra Shield*.—It will be awarded to the district in the Indian Republic, whose effort in tree-planting is adjudged to be the best. In arriving at this decision, the area, population, climatic conditions, and above all, the number of trees that survive at the end of the year, will constitute the main considerations.

(2) *The All-India Jawahar Shield*.—This Shield will be awarded to the village in the Indian Republic, whose effort is adjudged to be the best in the country for planting the largest number of trees and protecting them with thorn or other guards put around them.

(3) *The All-India Sardar Patel Shield*.—To be awarded to an institution, such as a court, district board, municipality, hospital, Public Works Department, Railway, forest or other college not affiliated to a University, research institute, military academy, Association, etc., whose effort at planting and guarding trees is adjudged to be the best.

(4) *The All-India Munshi Shield*.—To be awarded to a University (inclusive of affiliated colleges) for planting and protecting the largest number of plants.

There will be 20 State Shields. For this purpose, the States have been grouped as under: (1) Assam, Manipur and Tripura, (2) Bihar, (3) Bombay, Madhya Pradesh, (5) Madras and Coorg, (6) Orissa, (7) Punjab (I), (8) Uttar Pradesh, (9) West Bengal, (10) Hyderabad, (11) Jammu and Kashmir, (12) Madhya Bharat, (13) Mysore, (14) P.E.P.S.U., (15) Rajasthan and Ajmer, (16) Saurashtra and Kutch, (17) Travancore-Cochin, (18) Himachal Pradesh and Bilaspur, (19) Vindya Pradesh and Bhopal, (20) Delhi.

With regard to the 20 State Shields referred to above, the State Vanamahotsava Committee, in collaboration with Van Premi Sangh, where it exists, will select the district which puts in the best effort in connexion with Vanamahotsava. On the basis of the recommendations of the Van Premi Sangh, where it has been set up, or without it, where there is none, the State Government will select the district in each State, which has put in the best effort in connexion with the Vanamahotsava and report to the Government of India. On approval, His Excellency the Governor of the State will make a ceremonial presentation of the shield to the Collector of the district.

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FOOD

Srikakulam District Fruit Exhibition

A large-scale Agricultural Exhibition was conducted in the premises of the Municipal High School, Srikakulam, recently. Dr. R. Nagan Gowda, Minister for Agriculture, opened the Exhibition and delivered a lecture on the importance of planting fruit trees and the methods followed in America for encouraging the fruit industry. The District Agricultural Officer spoke on the activities of the Agricultural Department with regard to the development of the fruit growing industry.

During the show many choice varieties of mango, plantain, guavas, cucumbers, papayas, sapotas, jack, etc., were displayed. Besides the fruits, fruit preserves in the shape of pickles, jams, jellies, mango pulp (Thandra) prepared locally were put on show. Grades of cashewnut, dry kernels of coconut and coconut oil were some of the by-products exhibited. Varieties of honey with live-colonies were exhibited by the ryots.

Nearly 45,000 people visited the Exhibition. Officers of the Agricultural Department conducted demonstrations on the selection of seednuts, methods of raising nursery, selection of plants for planting, grafting, budding, layering, etc. At the Exhibition nine rolling cups, 26 silver articles, 40 silver medals and 25 certificates of merit were presented to the winners. The fruit show has given wide publicity to the several aspects of horticulture and disclosed the potentialities of growing fruits in that district.

Agricultural Exhibition conducted in the Araku Valley

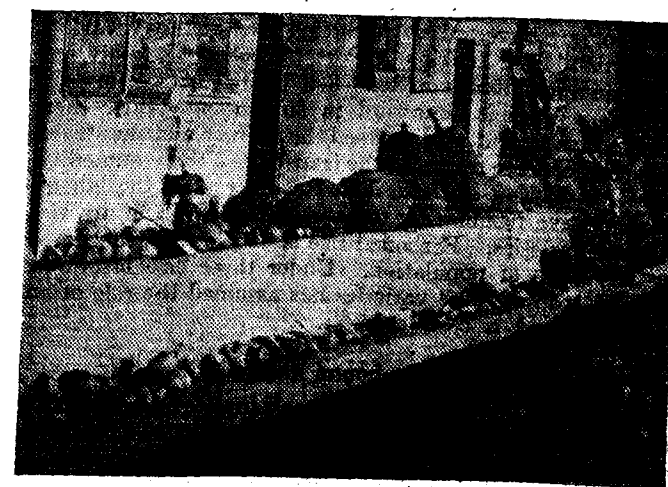
A large scale Agricultural Exhibition was conducted in the office premises of the Special District Agricultural Officer, Araku Valley, Visakhapatnam District. The Health, Medical, Revenue, Women's Welfare and Rural Development Departments also participated in the show. About 200 visitors, mostly the hill tribes, visited the show. Demonstrations were conducted with tractors and improved implements, and were greatly appreciated. Paddy, ragi, samai, vegetables, fruits, subsidiary food crops and green manures were displayed. Live specimens of green manure crops like Sunhemp, Glyricidia and Sesbania were put on show.

White Leghorn eggs, birds and Mandya sheep were exhibited. The Special District Agricultural Officer explained to the ryots the various aspects of improved agriculture and requested them to take advantage of the same. Special propaganda was done on the Vanamahotsava celebrations in that area and the ryots were specially requested to plant fruit trees during the Vanamahotsava Week.

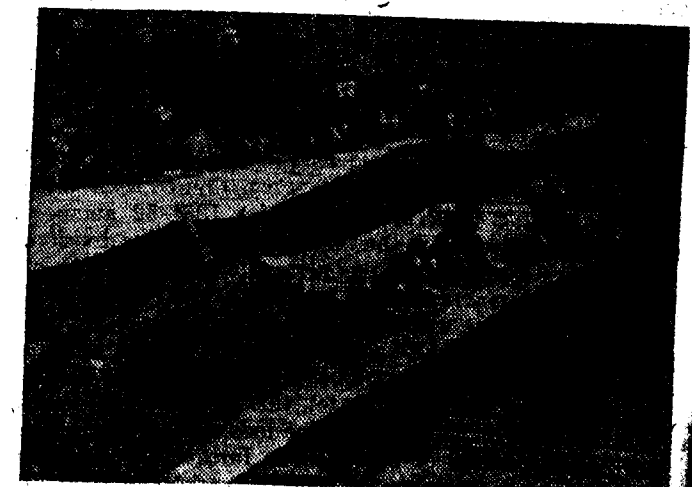
Sri Swabhi Chandrapradhan, Headman of Padmapuram village, explained to the ryots the different aids to food production accorded by the Agricultural Department and requested them to grow more food and improve their lot. The Rural Development Officer, the Medical Officer and the Women's Welfare Organizer also addressed the ryots on the activities of their respective departments. Such propaganda activities really help to create an enthusiasm and earnestness in the ryots to improve their economic and social conditions.



PLANTAINS : Displayed at the Srikakulam Fruit Exhibition



JACK AND MANGO : Prize specimens exhibited at Srikakulam



PINEAPPLES AND PUMPKINS : On show at Srikakulam

RURAL RECONSTRUCTION

26

MADRAS INFORMATION

Rural Reconstruction Week in Srikakulam

With a view to give a fillip to the Rural Reconstruction programme in the Firka Development area and to arouse the enthusiasm of the people in the scheme by their active participation, a Rural Reconstruction Week was organised by Sri N. Bhagwandas, I.A.S., District Collector, Srikakulam, in the district. The Week was celebrated in 60 different villages within the Firka Development area. The Week commenced with Sanitation Day when, in spite of heavy rains and expected cyclone, most of the District officers took part in the celebrations and the Week was inaugurated. The next day was celebrated as Communications Day when, with the active help of villagers, the village communications were improved by either improving existing roads connecting the villages or building up new roads.

The third day was Agricultural and Veterinary Day, when the modern methods of agriculture were explained and practically demonstrated. Exhibitions were organised and emphasis was laid on compost-making and green-leaf manure. This was followed by a Health and Child Welfare Day. Baby shows were organised and health pictures shown. The fifth day was Co-operation Day when co-operative institutions were newly organised in places where they did not exist and dormant co-operative societies revived. Harijan Uplift and Education Day was celebrated in all the villages on November 30, 1951. Night schools were started on this day. The Week came to an end with Industrial Day when a Cottage Industries Exhibition was organised.

Films shows were organised in the villages throughout the Week with the aid of the propaganda van leased by the District Board and instructive and educative films lent by the United States Information Services. The District Officers of the various branches organised the efforts in many villages and the Grama Sevaks with the aid of the Revenue staff attended to the celebrations in other centres. The people were greatly enthusiastic and the success of the Week owed much to their zeal and wholehearted support.



CATTLE SHOWS: Many cattle shows were organised in the villages and cinema shows exhibited to the villagers where the Srikakulam Rural Reconstruction Week was celebrated. Picture shows two pairs of prize winning cattle in one village, and the Propaganda Van.



AGRICULTURAL DEMONSTRATIONS: The Rural Reconstruction Week was celebrated in sixty villages in Srikakulam District. On the Agricultural Day compost pits, silage pits, and slit latrines were dug in all the sixty villages.

A brief description of the celebrations in certain selected villages is given below.

Sanitation Day at Ippili

The Rural Reconstruction Week was inaugurated at Ippili on November 11, 1951, by Sri N. Bhagwandas, I.A.S., District Collector. In spite of the heavy rains and the fact that the officers had to wade through knee-deep water and walk a few miles through slippery mire with no other form of conveyance possible, the programme was kept up.

A public meeting was held in the local school building with the Collector presiding. In the course of his speech, the Collector appealed to the villagers to avail themselves of the opportunity and enjoy the fullest benefits specially provided to them under the Rural Development Scheme. He expressed the hope that the celebration of the Rural Reconstruction Week in the villages would give an occasion to the villagers to come into closer contact with the officials and to the officers an opportunity to study and understand the difficulties and needs of the rural population first hand. Explaining why village sanitation was given first preference, he declared that the first need of India was good sanitation in the villages. He regretted that due to rain already having done the work it was not possible for the officers to take up the broom and sweep the village clean as they had intended to do, "an ounce of practice" being better than a pound of advice.

Sri Krishnamurthi, Divisional Engineer (Highways), explained the significance of the Rural Reconstruction Scheme. The National Savings Organisation spoke about the Small Savings Scheme. Sri B. Iswarappa Rao, a local school-master, spoke on behalf of the villagers. Clothes were distributed to the needy and children were given sweets.

Communications Day at Salihundam

The celebration of Communications Day at Salihundam on November 26, began with the Collector declaring open

RURAL RECONSTRUCTION

27

MADRAS INFORMATION



CHILD AND MATERNITY WELFARE DAY: Children being examined; about 100 children and 20 expectant mothers were examined and given cards so that they could be examined periodically.

a small ghat road built to connect Salihundam village with the main Gira-Chintada road. This road had been formed within five days and made a hitherto remote village easily accessible. Though the construction of the road had been proposed a long time back, the scheme was on the shelf as an apparently impossible task. That this should be done in so short a time and so successfully is a happy augury for the provision of good communications in the village in the future.

A well-attended public meeting was held in the village under the presidency of the Collector. In his speech, the Collector explained the need for better village communications to improve village economy and pointed out that it was not an impossible task for the villagers to build their own roads by co-operative effort. Thanks to the celebration of Communications Day many roads like the one he had opened were being constructed and several others being repaired. He congratulated the Divisional Engineer on having built an "impossible" road. The Divisional Engineer (Highways), Executive Engineer, the Deputy Registrar and the National Savings Officer also spoke.

The function ended with a vote of thanks after some refreshments were partaken by all the road-workers.

Agriculture and Veterinary Day at Ragolu

On November 27, 1951, Agriculture and Veterinary Day was celebrated at Ragolu village, under the direct supervision of the District Agricultural Officer, Srikakulam. The day was organised and celebrated like a festival by all the villagers, women and children also taking part in the celebrations. The programme started with early morning prayer, bhajanas and village sanitation. Every house was cleaned and decorated. An Agricultural and Livestock Exhibition was organised in the village and practical demonstrations on the preparation of compost, silage, slit latrines and all the modern methods of Agriculture were held. A few thousand vegetable seedlings were planted and green-manure seeds sown. The benefits of green-manuring, compost making and trench latrines were explained by the Agricultural Officer. A Cattle Show was organised. A camp veterinary hospital was organised and more than 10 animals were treated.

A public meeting was arranged under the presidency of the Collector who was taken in a procession through the village. The Collector in his speech advised the villagers to develop the spirit of self-help and co-operation for the common benefit of the village and to make the best use of the Government Rural Development Scheme. The District Agricultural Officer and the Veterinary Assistant Surgeon spoke on their departmental activities and impressed on the villagers that Government officials were always ready to give their advice and services. Prizes were distributed to the best cattle and poultry by the Collector. Films loaned by the United States Information Services on agricultural development in America, tuberculosis and its prevention, spread of disease and other educative subjects were screened in the village.

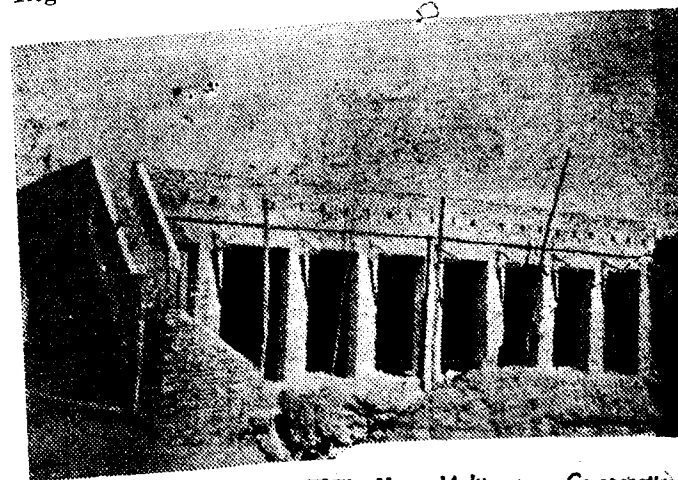
Health and Child Welfare Day at Singupuram

The Health and Child Welfare Day of the Week was inaugurated on November 28, 1951, at Singupuram by the Collector under the auspices of the Red Cross Association and the Guild of Service of the District Branch. A continuous whole day programme was fixed. The programme commenced with a prayer and flag-hoisting by the President, the Collector, Srikakulam. The Collector explained to the villagers the importance of health and the crying need for maternity and child welfare. The District Health Officer, the President of the District Board and Sri B. Apparao Pantulu spoke on the importance of health and the welfare of children. A Health Exhibition and Baby Show was organised in the village. Expectant mothers and children were examined and given cards to enable monthly continuation of the examination.

Rural sports were organised and milk was distributed to the children. In the evening, prizes were distributed by Srimathi Bhagwandas to the best baby and the most healthy expectant mother and to prizewinners in the rural sports. Educational films were screened.

Co-operation Day at Krishnapuram

Co-operation Day was celebrated under the presidency of the Collector in Krishnapuram village. The Deputy Registrar of Co-operative Societies, the Deputy Superin-



GODOWN FOR CO-OP: The Virur Multipurpose Co-operative Society has undertaken the construction of a godown at an estimated value of Rs. 5,800. The Society was sanctioned a Government grant of Rs. 2,900. The grant of the Society have contributed Rs. 2,900.

Growing More Paddy in Godavari and Krishna

By SRI MULUKUTLA SATYANARAYANA, B.A., B.Sc. (Ag.), Deputy Director of Agriculture, II Division, Eluru.

In the districts of Godavari and Krishna, the dry paddy variety *Budama* and the irrigated varieties *Basangi* and *Rasangi* are raised under cultivation early in the season commencing from May-June and the produce is obtained by September-October. This produce is mostly utilised for issue as wages in kind to the farm servants and to the harvesting labour, of the chief medium and late duration varieties. These *Budama*, *Basangi* and *Rasangi* varieties occupy nearly a fourth to a fifth of the paddy area of these districts. After meeting the wages of the labour in kind, in the manner aforesaid, the surplus is not consumed locally but is converted to parboiled rice.

Till the beginning of World War I (1914) all this surplus used to be converted to parboiled rice and exported to Ernakulam from Kakinada Port by coastwise boats and ships, on a freight rate of Re. 0-6-3 per bag of two Imperial maunds. At that time and in subsequent years, there used to be a freight war between the railway and the steamship companies in regard to the transport of this commodity. Local population of these districts other than the labour, fear digestive troubles by the consumption of the raw rice of these varieties. Parboiled rice is not locally consumed by any class of population. Under these circumstances, the rice crop of these varieties has assumed the role of an industrial and a cash crop.

Season-bound Nature

The season-bound nature of these varieties and the earliness in start so essential for potential production, sometimes clash with the belated south-west monsoon or late freshes in the rivers Godavari and Krishna. In the present year, for instance, the late supplies of water in the Godavari river system (unprecedented for the past 23 years) affect the productive capacity of the *Basangi* and *Rasangi* varieties, on their consequent late start. A solution to overcome this handicap and to maximise production by a spread of the *Basangi* and *Rasangi* varieties without interfering with the crop calendar of the districts between November and April, rests with tapping the underground water system existing independently of the surface river system.

The potential productive capacity of *Basangi* and *Rasangi* varieties is exemplified by the Crop Competition prize won by MTU. 3 (*Potti Basangi*) during 1951-52 amongst all the varieties raised in the three districts of this division. The yield of the prize-winning plot, of the village of Palakoderu in Bhimavaram Taluk of West Godavari District, is 9,400 lb. (green weight). This roughly works out to 56 bags of two Imperial maunds each. Deducting nine per cent for dryage (a figure based on ten crops of a five-year period for the whole State), this yield roughly works out to 50 bags (of two Imperial maunds each) of dry grain. The reliable nature of this yield is further enhanced by the same land, winning for another variety in 1950-51, the division prize for the three districts. Similar experience was obtained with a yield of 45 bags of dry grain for this

strain MTU. 3 in the village of Vendra adjoining Palakoderu, in the same taluk of Bhimavaram, in 1935 when the crop was planted in May with water made available from a canal lock, due for repair soon.

The existence of seed-bed tanks in the West Godavari District makes possible the starting of nurseries for this variety towards the end of April. The non-existence of such facility in the other districts of the division is nowadays being met by tapping the underground artesian bed through tube wells. In this year of drought, some of the existing tube wells brought forth incomes of nearly Rs. 2,000 each by lifting water through motive power, and discharging the same into existing distributaries of the surface river system; and irrigating nurseries, situated alongside the distributary channels to lengths of one to two miles.

Hydrology of Underground Water Bed

Nearly 80 years ago, the Geological Survey of India indicated the existence of an artesian bed between Kakinada and Eluru. This was utilised by the Madras Railway in supplying water to locomotives from borewells through overhead tanks and water columns, by about the year 1890, at the Railway stations of Kakinada Port, Samalkot and Eluru. The same supply was tapped by Messrs. Deccan Sugar and Abkari Co., Ltd., for use of their factory at Samalkot, by the year 1902. The rise in the price of paddy to Rs. 7-8-0 per bag of two Imperial maunds during World War I created an impetus in the landholders resident in the area lying between Rajahmundry and Samalkot, to put bores that effected over-ground deliveries and raise two crops of paddy per year, in their holdings.

The cost of a tubewell ranged from Rs. 1,500 to Rs. 2,000 and it was realised by four crops taken in a period of two years. This impetus has reappeared in the war and post-war years of World War II, in all the three districts of the division and sporadic efforts have been made to increase production and reap heavier returns on existing holdings, by resort to these tubewells, which are now situated in the taluks of Vijayavada and Gannavaram in Krishna District; in Eluru, Tanuku, Tadepalligudem and Kovvur of West Godavari and in Rajahmundry, Ramachandrapur, Kakinada and Pithapuram of East Godavari. This contiguous zone is 130 miles in length and 30 miles in width, embracing an area of 3,900 square miles.

The underground water bed, forcing up the spring, is met at depths varying from 60 feet to 160 feet. The delivery under this forcing up is either above ground, or to ten feet below ground level. This artesian bed is definitely connected with the river water of the Godavari and Krishna. For laying foundations in the river bed of Godavari, at Alamur, for a road bridge across the river, the water shot up from a bore of 60 feet depth. This artesian bed in some localities runs to nearly five miles off the flood bank and parallel to it, as between the villages of Dulla and

Alamur, in Ramachandrapur Taluk of East Godavari. Confirmatory evidence is available from a bore in the premises of the factory of the Andhra Sugars, Tanuku, situated by the side of Gosthanadi, a mouth of the River Godavari. Water shot up to 10 feet from ground level in this bore, run to a depth of 85 feet from ground level.

To these bores are constructed reservoirs of 20 feet depth and of diameters ranging from 15 feet to 30 feet. Existing supplies from these reservoirs are utilised either through oil engine pumpsets or through motor pumpsets, for raising vegetables for the Vijayawada market or for growing the strain MTU. 3. With 3-inch deliveries, 20 acres are tackled under a tubewell, to raise the paddy of this strain.

Scope for Maximisation

Experiments conducted nearly 30 years ago in the Agricultural Research Station, Samalkot, at the instance of the Collector, Krishna, laid manifest that the earlier start of paddy cultivation from April onwards up to June is attended with the highest yields as against starts during other months in these trials. If with strains in *Basangi* and *Rasangi* like MTU. 3, 4, SLO 9, etc., crops are finished by September-October, the rest of the year can accommodate the cold-weather cropping, or an intermediate or a second crop of paddy. In this cold-weather cropping, Virginia tobacco can be fitted in. An instance has come in the factory zone of the sugar factories at Tanuku, of the harvest of a crop of sugarcane in September and of a ratoon by April following, with standards of purity of cane juice to the mark. This is a fresh field in this scheme. Cottons and groundnut, gingelly and onions can also be suitably fitted in. Plantains to the market from both the "Seethakattu" and "Tholakari" seasons arrive between January and June.

September-October planting immediately after the *Basangi* and *Rasangi* harvests can lead to a fresh supply of plantains to the market between June and December. Perennial supplies of green leaf can be secured with the planting of *Sesbania* and *Glyricidea* on field bunds under the ayacuts of these tubewells that admit of the new crop calendar under a perennial source of water-supply.

Financial Implications

Excepting the floating capital to be issued under takkavi loans, there is no financial commitment to the State. The sum of Rs. 3,000 per tubewell may be recovered in 20 instalments of Rs. 150 each. The existing establishments of the Agricultural and Revenue Departments will respectively issue and recover the loans. The District Agricultural Officers may be empowered to grant loans up to Rs. 3,000 per individual; and the Takkavi Manual may be suitably amended in this regard. The Co-operatives may take up the supplies of the materials required in the scheme.

The extra food production per unit of 500 wells, per district, for the three districts of the Eluru Division, works out to 500 wells $\times$ 20 acres $\times$ 18 bags, or 180,000 bags or 12,857 tons of rice-in-husk.

With the prospect of at least ten such units, in this area of 3,900 square miles, the extra production is estimated at 128,570 tons. This covers a pretty good fraction of the existing deficit of Malabar, Travancore and Cochin that consume parboiled rice. The extra production for the ten units, estimated at a moderate rate of Rs. 15

per bag, may be valued at Rs. 27 crores of rupees annually. For this, a floating capital of $3,000 \times 500 \div 10$, or 15 crores of rupees, which may be spread, if necessary, conveniently to a number of years, is all that is required.

Unit of 50 Wells

These tubewells may be connected to oil-engine pumpsets or motor pumpsets with the electricity connections now granted from thermal stations, to be changed over to hydro-electricity, from Machkund, from 1953 onwards.

Estimates.

(i) Expenditure—	
(a) Non-recurring—	RS.
(1) Boring charges and cost of pipes from lengths ranging from 60 feet to 100 feet.	400
(2) Reservoir in 15 feet diameter and 20 feet depth	1,800
(3) Motor pumpsets with 3-inch delivery ..	800
Total ..	3,000
(b) Recurring—	
(1) Running of the installation at Rs. 3 per day, for 90 days between the months of May and October, excluding the rainy days of the South-West Monsoon ..	270
(2) Interest at 4½ per cent on Rs. 3,000 to be secured under takkavi loan ..	135
(3) Cost of cultivation, at Rs. 150 per acre, on 20 acres of the MTU. 3 crop ..	3,000
Total ..	3,405
(ii) Returns—	
(a) Gross—	
Produce 300 lb. per acre (18 bags of two imperial maunds each) at Rs. 15 per bag, 20 acres	5,400
(b) Net—	
Gain from the MTU. 3 crop alone in the cropping calendar of the year, under one tube well	2,000

Revised Orders on Prevention of Smuggling of Foodstuffs During Nights

The Government have passed the following order, in supersession of the Order, dated 3rd April 1947, in respect of prevention of smuggling of foodstuffs by motor vehicles during nights:—

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 paddy, rice, millets and their products excluding products of foodgrains which are used as cattle foods, viz., rice bran, wheat bran, bran and husks of millets and maize, drive it or cause it to be driven between the hours of 7 p.m. and 6 a.m. on any road or land situated in a district which is notified by the Collector in the District Gazette.

This order takes effect from the date of its publication in the Fort St. George Gazette.

tendent of Police, the Rural Welfare Officer, the Tahsildar and other officials took part in the celebrations. The Collector stressed the importance of Co-operation and Co-operative activities for rural welfare work in villages. The Deputy Registrar of Co-operative Societies spoke on the benefits of the Co-operative movement. Sports and games were conducted, hundi boxes were distributed and a scout troop inaugurated in the village. In the evening, a demonstration was given by the Fire Brigade, and film shows on health were screened.

Harijan Uplift and Education Day at Purushottapuram

On November 30, 1951, Harijan Uplift and Educational Day of the Rural Reconstruction Week was inaugurated in Purushottapuram village. The programme commenced with prayer and procession by the school children. Common feeding of Harijans and Caste-Hindus was organised and observed without any difference. Games and sports were conducted with Harijan and Caste-Hindu children taking part. An Adult Education Centre and a Reading Circle were opened in the village. Speeches were made on the importance of education and removal of untoucha-

bility. A film show was organised to educate the masses on health, agriculture and education.

Cottage Industries Day at Srikurmam

The Cottage Industries Day was inaugurated in Srikurmam village by Sri N. Bhagwandas, I.A.S., the District Collector, on December 1, 1951. The function commenced at 10.30 a.m. with the opening of a Cottage Industries Exhibition, where the products of various cottage and home industries manufactured in the village were displayed to encourage the industries and the local artisans. A public meeting was held in the evening when the Collector presided. Speeches were given by the Collector and other officers on the importance of the development of cottage and home industries. Prizes were distributed to the best exhibits by Srimathi Bhagwandas.

A "Burra Katha" on the various activities undertaken by the Women's Welfare Department for the uplift of the women folk in the rural areas was staged by the staff of the Women's Welfare Department. There was a demonstration by the Fire Services and instructive films of educative value were screened.



KRISHI PANDIT VELLAYYA GOUNDER: The title of "Krishi Pandit" and cash prize of Rs. 1,000 each were awarded by Sri Jawaharlal Nehru, Prime Minister, to the three champion farmers of 1951 at a ceremony held in New Delhi, on December 19. The three successful farmers this year are Sri K. Vellayya Gounder of village Shattampatti, Salem District, Madras State; Sri Madho Kripal of Hapur (U.P.) and Ch. Padum Singh of village farmers who have made outstanding contributions to the cause of Indian agriculture. Photo shows the Prime Minister making the award to Vellayya Gounder. He produced 150 maunds of paddy per acre, the average Indian being 12.5 maunds per acre. He holds the world record for a yield of 12,000 lb. of paddy per acre.

Bumper Yields of Paddy Crop

Tanjore District

It is generally known that the yield from land can be increased by the adoption of improved methods of agriculture and better soil nourishment. It will be of interest to cultivators to know that six ryots of Tanjore District have secured bumper crops of paddy producing an yield of more than 6,000 lb. of paddy per acre. The methods adopted and yield obtained by these six ryots are described below:—

1. **Sri N. Swaminatha Athiamar of Vadaver** after sheep penning at the rate of 12,000 herd and applying 60 cartloads of cattle manure to his main field, gave four ploughings for eight times and puddling for four times to the entire field and sowed Co-25 of improved paddy variety. He also applied 700 lb. of green leaves and 30 lb. of Ammonium Sulphate and 112 lb. of Superphosphate for top dressing the crop. By applying these methods he got an yield of 10,852 lb. of paddy per acre and won the District and Regional prize.

2. **Sri R. Ramani Iyer of Mayuram** after applying 30 cartloads of manure to his double crop land comprising 1.21 acres, sowed Co-25 of improved paddy variety. He also applied 75 lb. of Ammonium Sulphate a week before flowering and got an yield of 10,640 lb. of paddy per acre.

3. **Sri G. Vinayakasundaram Pillai of Thiruppanipettai** sowed Co-25 of improved paddy variety in his fields comprising 1.17 acres and after 25 days of planting and weeding, applied Ammonium Sulphate at 112 lb. per acre, Ammonium Phosphate at 100 lb. per acre and 320 lb. of groundnut cake per acre. He applied 112 lb. of Ammonium Sulphate once 50 days after planting and secondly 75 days after planting. These methods helped to produce an yield of 10,476 lb. of paddy per acre.

4. **Sri S. Sappani**, one of the members of Land Colonisation Society of Kangampatti, after applying 40 cartloads of farmyard manure and after sheep penning at the rate of 400 herd for three times to his main field, applied two cartloads of Kolinji leaves and 20 bags of pig manure to his field and sowed Vellaikodi of paddy (ordinary variety). After transplanting the seedlings, he applied 224 lb. of Ammonium Sulphate. He also applied 320 lb. of groundnut cake during the time of weeding. These methods helped him to achieve an yield of 8,040 lb. of paddy per acre.

5. **Sri P. Kandaswami Mudalsar of Mariammankoil** after applying 15 cartloads of cattle manure and after sheep penning at the rate of 800 herd to his field, and giving four ploughings to the field, sowed Co-19 of improved paddy variety. He also applied 87 lb. of Ammonium Sulphate twice after transplanting, once 40 days after transplanting and second time 90 days after transplanting, as top dressing for the crop. The yield was 6,922 lb. of paddy per acre.

6. **Sri T. Venkatesam Pillai of Achalapuram** applied 200 lb. of bonemeal during the time of first puddling to his field. He also gave ploughing after applying 4,000 lb. of Kolinji seeds and sowed Co-19 of improved paddy variety. He applied 200 lb. of Ammonium Sulphate after removing weeds. He secured an yield of 6,410 lb. of paddy per acre.

East Godavari

Thirty ryots in East Godavari District are reported to have secured bumper crops of paddy. Among them seven outstanding ryots produced an yield of more than 5,000 lb. of paddy per acre. The methods adopted and the yield obtained by these seven ryots are described below:—

(1) **Sri Goli Veeraju of Peddapuram** after giving four ploughings to the main field and after goat penning and sheep penning at the rate of 300 herd for 15 days and applying five tons of cattle manure, sowed S.L.O. 18 (Peddakitchilli) of paddy variety. By applying these methods the yield of paddy was 7,900 lb. per acre.

(2) **Sri Bapiraju of Nayakampalli** gave four to five ploughings to his field and applied 7½ tons of cattle manure per acre. He sowed S.L.O. 18 variety of paddy. He got an yield of 7,700 lb. of paddy per acre.

(3) **Sri Satyanaryana of Kothanuru** gave five ploughings to his main field and applied pillipesara at 3,000 lb. per acre. He also applied Superphosphate at 90 lb. per acre and Ammonium Sulphate at 50 lb. per acre. He sowed a variety known S.L.O. 15 (pure seed) of paddy and transplanting was done one month after planting. These methods helped to produce an yield of 7,600 lb. of paddy per acre.

(4) **Sri A. Thataraju of Kakkavaram** gave six ploughings to his main field comprising 15 acres. He applied pillipesara at 25 lb. per acre six months before raising the nursery. Irrigation facilities from Godavari channel were obtained. He sowed Akkullu variety of paddy at the rate of 21 lb. in 10 cents. He transplanted the seedlings at a distance of 10 to 12 inches a part. By adopting these methods, the yield was 5,976 lb. of paddy per acre.

(5) **Sri B. Sathyanarayana of Razole** gave three ploughings to his main field comprising 50 acres. He applied 220 lb. of Ammonium Sulphate to his field. Irrigation facilities were obtained from Godavari channel. He sowed Guttikichilli (S.L.O. 17) paddy variety. The yield was 5,700 lb. of paddy per acre.

(6) **Sri G. Chandra Rao of Katamuru** gave three ploughings to his field and applied five tons of cattle manure per acre. He sowed pure seed of paddy S.L.O. 18 variety. He secured an yield of 4,700 lb. of paddy per acre.

(7) **Sri P. Veerajulu of Nayakampalli** gave three ploughings to his main field and applied 5½ tons of cattle manure to his field. About 500 lb. of gingelly leaves were also applied to the field as manure. He then sowed S.L.O. 18 paddy variety. He secured an yield of 4,700 lb. of paddy per acre.

Renovation of Tanks

The Government have sanctioned the carrying out of repairs and renovation to 25 tanks, for irrigation purposes, at an estimated cost of Rs. 2,21,610, in the districts of North Arcot, Tirunelveli, Salem, Ramanaipet and Nellore. An additional extent of 1,079 acres will be benefited and an additional yield of 540 tons of foodgrains is expected, as a result of carrying out the repairs.

Restoring Sight by Corneal Transplantation

You can get back your sight if you have lost it on account of a corneal opacity.

The cornea is what is commonly known as the 'Black' of the eye. It appears black on account of the pigmented iris diaphragm behind it. The cornea is really transparent and it has to be clear for purposes of good vision for light rays to pass through. If the cornea loses its transparency, light is interfered with, the degree of visual disability depending on the density, the situation and size of the opacity. The cornea may become opaque from injury or as the result of disease. A very common cause of opacification of cornea is an ulcer of the cornea leaving behind an opaque scar when it heals.

Prevention is always better than cure and prevention of the conditions or prompt treatment of these which result in corneal opacities should receive the foremost attention. Preventive medicine has reached such a high pitch of efficiency in the Western countries that corneal scars are comparatively rare to come across there. However, we are not concerned with prevention at the moment.

Here, in our country, corneal opacities are extremely common. In other words there are many blind or partially blind from this cause and the curative aspect of this is of greater importance here than elsewhere. Thanks to modern surgery, it is now possible to restore sight to many of these unfortunate persons hitherto doomed to blindness for life.

Corneal Grafting

The operation is corneal transplantation (corneal grafting, keratoplasty). It consists in removing the central portion of the opaque cornea of the patient (recipient) and replacing it by a clear piece of cornea (graft) of equal size from the eye of a dead person (donor). A live person whose eye with a clear cornea has to be removed for some reason or other, e.g., a malignant growth in the eye, can also be a donor. The operation is done under local anaesthesia. The graft is helped to stay in place by supporting sutures which are removed on the 8th day without any anaesthesia.

The graft takes easily but it is more difficult for it to remain clear. For corneal grafting to be successful as a

sight restoring measure, the eye of the recipient must be healthy apart from the opaque cornea. The operation is of no use where parts of the eye other than the cornea, e.g., retina or the optic nerve or its connections are diseased. It is not also possible to perform it in all cases of corneal opacities. The scope of the operation is therefore somewhat restricted but this does not detract from its utility. Where the operation is indicated, the result is spectacular, the vision improving practically from blindness to normal.

The donor's eye is removed as soon as possible after death and is preserved in a refrigerator till it is required. It has to be used in a day or two. A place for the storage of such eyes for keratoplasty is an 'EYE BANK'. Selected patients are kept in readiness on a waiting list and the operation is performed at the earliest opportunity when a graft is available.

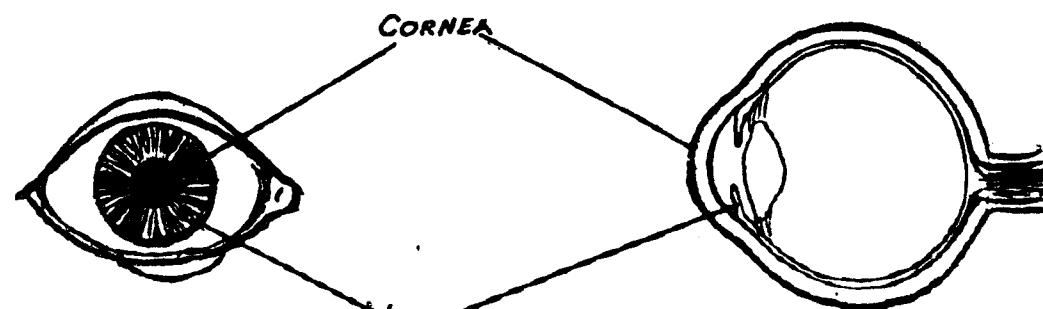
Eye Bank at Egmore

The public are hereby informed that an eye bank was opened at the Government Ophthalmic Hospital, Egmore, Madras, early in 1948 and that corneal transplantations are being performed in the same institution.

One young man had an injury to his eye with a piece of steel, which resulted in an ulcer of the cornea. With energetic treatment the ulcer healed and the eye was saved, but the scar left behind by the ulcer reduced his vision to practically nothing and so he was thrown out of his job. Now after corneal grafting, he has almost normal vision (pictures on page 9) and has returned to work.

If your sight is defective on account of a corneal opacity, seek the advice of the Government Ophthalmic Hospital, Egmore. You may be a suitable case for corneal grafting. You may be destined to regain your lost sight.

In U.S.A. and other Western countries, some persons about to die make provision in their wills for the presentation of their eyes after their death to the Eye Bank. These men have set an example for others to follow. In death, you can give light and bring happiness to your less fortunate fellow beings who tread the path of life in darkness and in distress.



BEFORE : An eye with an extensive and dense corneal scar.



AFTER : An eye after operation. The clear dark circular portion in the centre of the cornea is the graft.

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COMMERCIAL DIRECTORY MADRAS, 1952

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Role of the Farm Mechanic

By JOHN HARRIS, of the *Farmer and Stock-Breeder*, London

Recent years have seen the number of tractors in Britain rise from 55,000 in 1939 to 330,000 at the last census in 1950. In point of machinery per acre, England has become the most highly mechanised country in the world. These years have seen also the emergence of a new group of workers in Britain's farmlife—those who drive and tend the tractors and other machines.

That is not to say that farm mechanisation is something born of the last decade, for it has steadily developed over the centuries from the day primitive man invented his first-hand machine, and in any event farm tractors were being made in Britain 50 years ago. But it was the overriding need for more human food, and the consequent ploughing up campaign which came with the war, that gave such a fillip to mechanisation as to cause a virtual revolution in farm technique.

The work of such old-established callings as cowman or shepherd vary little from farm to farm, but there is less rigidity and more variety in the pattern of the newer mechanised farming. In giving an idea of the work of the farm mechanic, the first necessity is to make it clear that this term does not always mean exactly the same thing. The true farm mechanic is a man fully trained in those repairs to implements and tractors such as can be carried out in the farm workshop, and in the setting, care and maintenance of machines. That means a basic training in fitting, welding, electrical work and so on.

Training

The farm mechanic will almost certainly have the responsibility for everything mechanical on the farm, including even the farm car and the lawn-mower. In addition to his normal work he will be expected to do a certain amount of carpentry, to undertake such things as fitting water pipes and bowls, and a dozen other jobs from making latches for field gates to helping his boss design and erect some particular kind of grain store thought to be suitable for conditions at that time.

After his basic training, the mechanic may well have specialised in a particular range of implements, for the one in Britain today is to standardise in machinery of having little or no variation. The old idea of the tractor maker having today implements "made to order" is gone, and we have the largest plough to the small "made to order" machine.

The farm mechanic may obtain his training in a variety of ways. A good deal is now being done to provide a better educational facilities for the technicians of mechanised farming, both the operators and mechanics on the farm and the engineers, field servicemen and mechanics of the agricultural engineering industry itself. The likelihood is that the farm mechanic of today received his training with an agricultural engineering firm. Such a mechanic is, in effect, a development out of the village blacksmith. The firm will have the agency for one or more of the big manufacturers, who have in turn their own training schools where the dealer's men may be trained.

Manufacturers' Courses

Some manufacturers also run courses for machinery operators from farms. Then the Rural Industries Bureau

has for some years been running courses which cover welding technique, implements repairs and bench fitting. Similar training has been provided under the Government Vocational training schemes, hitherto for ex-servicemen but now to be open to others. The Rural Industries Bureau also has field instructors who cover certain areas, giving lessons in implement repair work.

Certain farm institutes are now devoting special attention to training in power farming, and at least one has a year's course in farm machinery, to be taken after a general agriculture course and designed primarily to train farm mechanics.

Consideration is now being given to establishing standards of qualification for the various specialists in the rapidly developing industry of power farming. At the top of the scale it is now possible to take a degree in agricultural engineering at Durham University; the Institute of British Agricultural Engineers has recently issued its first certificates of proficiency to machinery operators (jointly with a County Education Authority) and has also introduced a diploma in agricultural engineering. To its existing certificate for blacksmiths and general mechanics the City and Guilds Institute may decide to add a more advanced standard which would cover the farm mechanic.

Full organisation of training facilities and proficiency standards for farm mechanics, as well as all the other grades of specialists within the agricultural engineering industry itself, are in course of development. Experience has indicated what is required.

Of this, however, there is no doubt, power farming in Britain offers tremendous opportunities. For, as mechanisation proceeds further, the more vital than ever becomes the role of the mechanic in this farming revolution which has taken so much of the drudgery out of everyday work on the farm. In ten years also, wages have been doubled, hours of work decreased and holidays with pay established for all regular farm workers. (B.I.S.)

Village Roads

A total length of 111 miles of road, out of a target of 151 miles, originally sanctioned, has been completed in 52 villages in Tiruchirappalli District, at an estimated cost of Rs. 3.99 lakhs.

L.C.E. Diploma Examination

The Government have directed that holders of the Minor Irrigation and Road Construction Diploma of the Annamalai University, who have put in two years service, in the aggregate, in the Public Works, Highways, Revenue or Electricity Departments or such other approved service, be permitted to appear for the L.C.E. Diploma Examination, conducted by the Technological Diploma Examination Board, Madras.

Holders of the Minor Irrigation and Road Construction Diploma of the Annamalai University, who do not possess two years experience, will be permitted to appear for the examination, after completing two years service.



FARM MECHANIC TRAINEE LEARNS HOW: Farm students at the tractor repair section of the United Kingdom Government Training College at Letchworth, in the county of Hertfordshire, being instructed in the assembling of a track tensioner wheel of a track laying tractor.

THE FARMER AND HIS TOOLS: Britain has become the most highly mechanised farming country in the world from the point of view of acreage. Here Mr. Francis Balfour, whose family has been farming in the Strathardle district, Scotland, for 400 years, is seen in his fluorescent lighted implements shed.



"DIAL 93"

It was past midnight on a new moon day in February. It was quite dark and the silence of the night was broken only by the murmur of the distant waves of the sea. The residents of Triplicane had retired to bed and the streets were quite deserted. Except for the glimmer of the street lamps, the night was enveloped in utter darkness. A bright light from a powerful 60 candle-power bulb was piercing the darkness from an upstairs room of a house in a not-very-prominent street in the locality. The sole occupant of that room, a young man of 19, was engaged in a losing struggle to shake off the slumber that was creeping over him. A book lay open on the table in front of him and he had been trying to cram the facts, figures and dates in that book; he was appearing for the Public Examination a few weeks hence.

His eyelids involuntarily closed and he was just beginning to dream. He was jerked out of this drowsy state by something which disturbed the stillness of the night. The strange noise of the friction of rubber tyres on the surface of the tar-road and the sudden jamming of the brakes of a car which stopped abruptly brought him to the world of reality. His attention was irresistibly drawn to the direction from which the sound came and he looked down through the window into the street. A car was drawn up at the opposite house. Ordinarily Gomes, the young man, would have passed the incident by but for some strange happenings. He suddenly remembered that the occupants of the opposite house were away from town and were not expected back so soon. He thought for a moment whether they could have changed their mind.

But what was the train by which they could have arrived at dead of night? Even the Grand Trunk Express was keeping time these days! And then he noticed three strangers getting down from the car hurriedly. Now all his attention was rivetted on that scene. And he watched with interest. One of the men tried the lock, shook it and then turned to his comrades and nodded his head. Then the trio produced something which looked like a bunch of keys, and Gomes was certain that they were now trying to break into the house. Now he was certain that these nocturnal intruders were no bona fide visitors and that they were up to some mischief. What was Gomes to do? Any other young man in his circumstances might have thought, "What matters it to me; the Police will look after these fellows," and would have gone back to his studies or sleep.

Sense of Public Duty

But Gomes, who had the laudable ambition of becoming a Collector or a Police Officer, had a sense of public duty. So, without a second thought, he bounded out of his room and rushed to the nearest telephone. In his hurry he opened the telephone directory, not knowing to whom to telephone. On one of the pages of the Directory was printed in bold letters "DIAL 93—POLICE—in case of EMERGENCY." So, Gomes dialed 93 and at the other end, in the Control Room of Police Headquarters, the officer on duty alerted himself and received the message. In a few seconds an armed police party shot out of the Control Room, and proceeded in a wireless van towards the scene of occurrence.

Meanwhile, the culprits had completed their nefarious job and were driving towards Mount Road via Wallajah Road. There was no difficulty for the mobile police party to locate the taxi in which the culprits were fleeing, for Gomes had the presence of mind and resourcefulness to note down the number of the car before he went to telephone the Police. The Police party had spread its net out and the car with the miscreants drove straight into the arms of the law. The culprits were arrested. Subsequent investigation disclosed that the party was also responsible for other burglaries. Full marks to Gomes, who had passed his Civic test in Law and Order; thanks to him, the criminals were booked.

Night Hold-up

Gomes at least was a young man endowed with courage, resourcefulness and a strong sense of duty. Not so the man who on the night of 4th March 1952 was going along a road in Egmore in a rickshaw, with thoughts of building up a business of his own. He was, of course, a practical man and along with his thoughts he carried also various articles of grocery and other accoutrements with which he intended to open a coffee hotel, the next morning, in a busy locality. But someone else had other ideas about making money and getting rich quickly. This other body accosted our prospective coffee hotel proprietor and won his confidence. He took him along to a desolate road and suddenly attacked him. He deprived him of all his possessions, grocery and all, and sent him away walking.

The prospective coffee hotel proprietor, though meek was no martyr. Having shown that discretion was the better part of valour and having submitted himself to the hold-up man, he ensured his personal safety. Now, free from that threat, his mind began working; he began to act quickly now. He hailed a passing taxi and rushed to the Police Control Room. He narrated his experience to the officer there. It did not take long for the ever alert Police party with the wireless van to spot the robber and recover all the stolen articles intact. And now the robbed man is the owner and proprietor of a flourishing coffee hotel.

These are but two typical instances which show that with a little presence of mind and a civic sense, crimes could be detected or prevented. Not everyone, however, can be a Gomes or a prospective coffee hotel proprietor with even a belated sense of duty; very often when a crime is committed before our very eyes and sometimes even at our cost, many of us think, "Why all the bother of reporting to the Police and invite trouble and nuisance of appearing in a Magistrate's Court?" But this shirking of a primary duty to yourself and your fellow citizens, may cost you or your neighbour quite a lot.

HOW TO OPERATE

"DIAL 93" is quite easy to remember and operate in times of emergency like the ones narrated above. You may be the next victim; and you may find yourself in the unenviable position of being held up by desperadoes and robbed of your belongings. In such emergencies don't feel helpless and don't lose hope. In "DIAL 93"

To Protect Life and Property

The Emergency squads and the Wireless patrols do not exist only for the purpose of chasing motor car bandits or smash-and-grab men. Detection of crime is not their only job. They are there to protect human life and property and are at your back and call in times of need. If you see, suspect or are informed reliably that a crime has been committed, or is about to be committed, dial 93 immediately. Whether you phone from a public call office or from a private line, you can always get 93 without any difficulty.

Remember, the sooner you dial 93 the more difficulty for the criminal to make his getaway. The more popular "Dial 93" becomes, the tougher will become the criminal's job.

Every intelligent citizen will surely concede that the Police can do little if the public is apathetic. The Police are at your service and they do their job in your interests and unless you, as an individual citizen, take that little and active interest in combating crime, the job of the Police becomes more difficult. The strong arm of law and order is stretched out for your own benefit. Take it in a friendly spirit and help the Police in liquidating crime and criminals.

"Dial 93" is at your service.

Criminal Courts in Madras State

The following are the salient features of the statistics of Criminal Courts in the Madras State for the year 1950:—

Courts: The Judicial Officers employed in the State during the year 1950 and engaged wholly or partly in criminal cases were 16 High Court Judges; 37 Sessions Judges (this includes one permanent Additional Sessions Judge, three Agency Sessions Judges, three Additional Agency Sessions Judges and five temporary Additional Sessions Judges); 40 Assistant Sessions Judges; 25 Temporary Assistant Sessions Judges; 41 District Magistrates including 20 Additional District Magistrates; seven Presidency Magistrates; 97 Sub-divisional Magistrates, two City Magistrates; 97 Sub-divisional Magistrates, one at Coimbatore and the other at Madurai; 75 Additional First-class Magistrates (including District Munsifs-cum-First-class Magistrates); 477 Sub-District Magistrates consisting of Tahsildar-Magistrates, ordinate Magistrates, Stationary Sub-Magistrates, Deputy Tahsildar-Magistrates, exercising magisterial powers; 73 and other officers exercising magisterial powers; 73 Special Magistrates; and 17 Honorary Special Magistrates sitting singly. In addition, 181 Benches of Magistrates constituted from among 1,292 Honorary Magistrates, 1,520 Village Magistrates' Courts and 757 Panchayat Courts tried criminal cases.

Original Cases: The number of cases for disposal in Village Magistrates' Courts was 2,779. Of these, 2,171 were disposed of. The percentage of conviction was 37.47 as against 40.27 in the previous year. The cases against 764 persons out of 2,763 persons tried were compounded and withdrawn. The number of cases for disposal in Panchayat Courts was 3,046 as against 5,054 in the previous year. The number of cases disposed of was 2,326. The percentage of conviction was 34.49 as against 43.22 in the previous year. There was a fall in the number of cases instituted in the Presidency Magistrates' Courts from 163,710 to 152,322.

The number of persons under trial in the mofussil Sessions Courts was 7,165. Of these, nine died, 3,409 were

acquitted or discharged, 2,394 were convicted, the cases of 176 persons were referred to the High Court. There were 46 cases for disposal in the High Court Criminal Sessions and 42 disposed of and four were pending at the end of the year. The average duration of cases disposed of was 41 days.

Appeals: Five thousand five hundred and four appeals concerning 8,523 persons were decided in Magistrates' Courts. The percentage of appellants whose convictions were set aside or against whom proceedings were quashed was 30.49; 562 appeals concerning 1,096 persons were pending at the end of the year. The number of appeals disposed of in mofussil Sessions Court, was 3,443 as against 3,100 in the previous year. In the High Court, 244 appeals were pending at the beginning of the year, 956 were preferred during the year, and 769 were disposed of, leaving 431 pending at the end of the year.

Crime: The number of offences under the Indian Penal Code reported in the year was 136,911. As regards the offences under the Special and Local Laws, there was an increase from 767,831 to 827,773. There was an increase of 12,025 cases under the Prohibition Act, 16,738 cases under the Motor Vehicles Act, and 13,471 cases under the City Police Act.

Punishments: The sentences and orders passed by Courts other than Village and Panchayat Courts on persons convicted were as follows: Death (Confirmed or imposed by the High Court) 67; Transportation 368; Rigorous Imprisonment 69,762; Simple Imprisonment 22,599; Forfeiture of property, in addition to other punishments 370; Without other punishments 4; Fine, in addition to other punishments 2,488; Without other punishments 780,463; Security to keep the peace, in addition to other punishment 856; Without other punishment 822; Security for good behaviour 3,462; Imprisonment in default of security for good behaviour 2,246.

Food from the Land

By B. A. KEEN, F.R.S.

The emphasis rightly placed on agriculture as a way of life often obscures, and sometimes ignores, the even more important point that it is also an industry. Much has been written about the danger to national welfare of a decaying or derelict rural community in an industrialised nation. At the other end of the scale, greatly increasing attention is being given to the formidable problem of raising the agriculture and living standards of the backward peoples still existing in an economic environment that is essentially similar to that of Western Europe before the advent of the Industrial Revolution. But, in the industry of agriculture, just as in any other industry, no improvement, great or small, can be permanently absorbed unless it is economically sound. It must offer increased returns for the same expenditure of money or effort, or reduce the expenditure for a given return. Very often it is expedient, or even necessary, to introduce the improvement on an uneconomic basis, by the inducement of an open or disguised subsidy or bonus; but, sooner or later, it will disappear with the termination of the inducement, unless it is economically sound.

Agriculture, as an industry, is open to all scientific improvements and by its very nature, makes wider call on the various branches of science than does any other industry. Steel making, for example, rests primarily on physics and chemistry and their daughter-science, metallurgy, whereas, in agriculture, the whole of the biological and non-biological sciences are directly needed in soil, crop and animal problems. In addition, problems lying on the boundaries of two or more sciences are of the greatest importance. This applies specially, but not only, to mixed farming or animal husbandry; in these matters, team work by groups of researchers trained in widely differing sciences, e.g., animal physiology and physics, is usually required.

Scientific Improvements

In general, the introduction of scientific improvements into agriculture implies a sequence from the laboratory to the field which is divisible into three stages. First, basic or fundamental research; secondly, technological investigation; thirdly, introduction into practice. Each requires its own special type of practitioner, but each stage is equally important. There are formidable problems for both scientists and administrators in securing an uninterrupted flow through the stages from research to practice, as well as the equally necessary reverse flow by which new or changed practical problems can quickly be brought to the notice of the technologists and the research scientists for investigation.

There is no greater need at the present time than the scientific study of those obstacles; the new sciences of anthropology, sociology and psychology enter as importantly into agricultural betterment as do plant breeding and genetics. Even though the prosecution of fresh agricultural research remains as a necessary insurance against future perils, it cannot be doubted that, over the next ten or twenty years, the immediate need is to introduce the technical and economic improvements that are already available from the results of past research. This implies

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a study, with the aid of these newer sciences, of the obscure obstacles that hinder, and often prevent, their adoption.

Plant Nutrition

Agricultural science in its modern form can perhaps be dated from Liebig. Liebig's researches on plant nutrition led him to the confident conclusion that plants obtained their nitrogen and carbon from the air and that a manure need contain only the mineral ingredients found in the analysis of the plant ash. The investigations of Lawes and Gilbert led directly to the now universal use of artificial fertilisers and, in their own lifetimes, to a spectacular increase in yields. Without doubt, it is the greatest single contribution so far made to agricultural science and practice. One incidental but vital result of their work was that they developed the only possible technique for successful agricultural research—the intimate association of laboratory work conducted by research scientists with field experience designed to test their results on a practical scale.

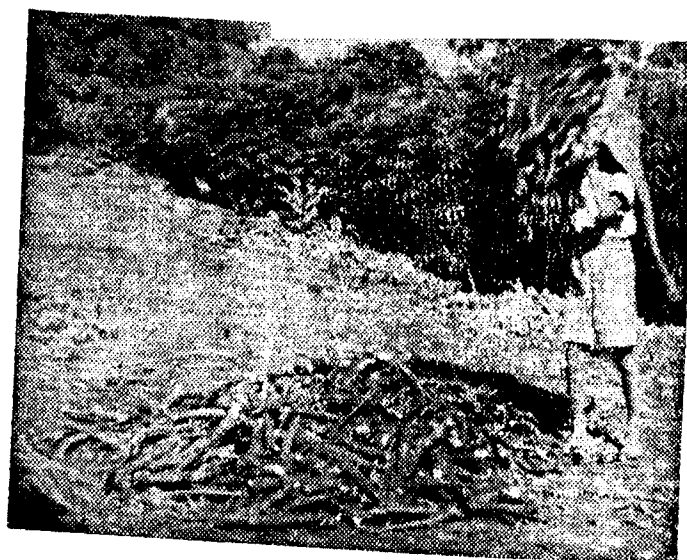
This combination of science and practice is so self-evident to us today, after nearly a century of use, that we are apt to overlook the great advance that Lawes and Gilbert originated. Their field experiments were simple, even crude to our modern eyes. It is only in the past twenty-five years that R. A. Fisher, working at the Research Station at Rothamstead, developed the theory of the mathematical-statistics of small samples, which has revolutionised the design and analysis, not only of field experiments, but of biological experimentation in general. These methods have been generally adopted in Great Britain, and the Commonwealth and Colonies, and in the United States and many other countries.

Nutritive Elements

Chemical analysis and plant physiology with, later, the use of statistical technique in the design of pot-culture and field experiments, have produced steady advances in our knowledge of plant nutrition. The simple conception that nitrogen, phosphorus and potash nutrients are essential has been extended in several directions. Plant physiologists have investigated the period, or periods, of plant development at which particular nutrients are most necessary, and their findings alike led to practical recommendations on the time of application and amounts of manure, notably in the case of cotton. The earlier knowledge that other elements besides nitrogen, potash and phosphorus entered into plant growth has been greatly extended by the discovery of the importance of "trace elements"—required in the most minute proportions and essential for proper development, but often lethal if the minute percentage is exceeded.

There is no sharp line between elements required in quantity and those needed only in traces. Many elements

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Left: A fully grown Tapioca plant.

Right: Collecting the Tapioca bulbs.

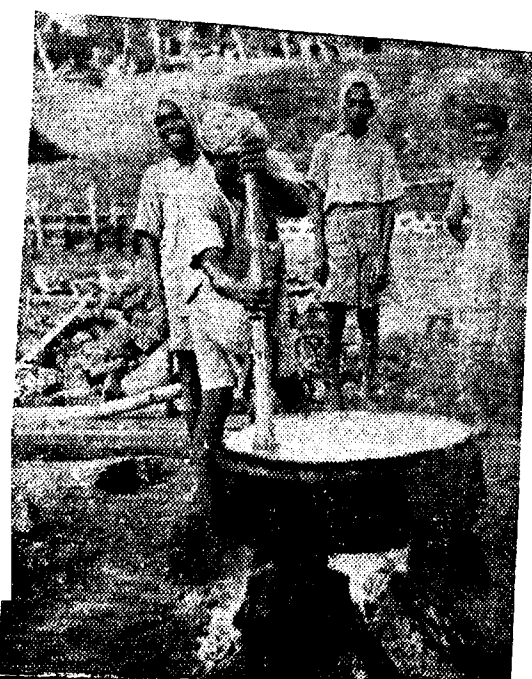
Centre, left and right: Cleaning and cutting the bulbs into small pieces. Both men and women are busy on the job.



Left: The chips are then boiled for about ten minutes.

Right: The boiled chips are spread on the mats and dried in the sun. The chips are then stored in gunny bags for powdering purposes.

These photos were taken at Gundukutty (Coorg), where Sri G. M. Manjunathayya grew the Tapioca plants in an area of six acres.



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Preservation of Fish by Pickling

By SRI R. VENKATARAMAN, M.Sc., A.R.I.C., and SRI A. G. VASAVAN, B.Sc.,
Fisheries Technological Station, Kozhikode

Fish is a highly perishable commodity. It starts putrefying the moment it is out of water and if no step for preserving it is taken it becomes inedible in the course of 16 hours. Various methods are in vogue for preventing the fish from spoilage. To mention a few, salting, pickling, smoking, dehydration, icing and refrigeration are practiced to a large extent. In India, icing and refrigeration are only in the infant stage. Each method of preservation has its advantages and disadvantages. The trade adopts a number of recipes suited to the taste of the consuming public of the locality.

The Fisheries Technological Station, Kozhikode, recently conducted some experiments to evolve a formula for pickling of fish in general, particularly sardines and mackerels, which could be carried out easily by the housewife on a domestic scale.

Method Outlined

The method adopted consists of the following steps:
(1) Preparing a saturated solution of salt (brine). (2) Selecting absolutely fresh fish and gutting and cleaning it. (3) Adding the fish to the brine to which has been added spices and vinegar.

1. *Preparation of the brine.*—The brine should be kept ready prior to the purchase of fish and good quality salt which contains at least 92 per cent sodium chloride must be used. This may be dissolved in lukewarm water until no more of it goes in solution. The quantity of water to be taken and the salt to be used will depend on the amount of fish pickled. For every 100 lb. of water 33 lb. of salt will be necessary. This solution must be allowed to settle overnight and the insoluble substances in the common salt like mud will get deposited in the bottom. The clear solution above may be decanted and stored.

2. *The selection and dressing of the fish.*—The fish intended for pickling has to be selected with special care. The tainted or bruised fish has to be rejected. The fish is cut open and the intestines are removed carefully. Large fishes have to be sliced. Then the fish is washed well in fresh water removing all the blood stains.

3. *Pickling.*—Wooden barrels, earthen jars or glass vessels can be used for this purpose. For 100 lb. of fish about 120 lb. of brine will be necessary. This brine is first poured into the barrel. Vinegar (6 lb.), pepper powder ($\frac{1}{4}$ lb.), curry leaves ($\frac{1}{4}$ lb.), ginger ($\frac{1}{4}$ lb.) and garlic (1/16 lb.) are added and mixed well with the brine. The quantity of brine, vinegar and spices prescribed for 100 lb. of fish should be altered proportionately according to the weight of the fish used. The fish is then stacked in the brine and weights placed on the top so that the fish is always under the brine. The barrel is closed tightly.

Within a fortnight salt, vinegar and spices will penetrate into the fish muscle and a characteristic flavour will be observed. Afterwards this can be used for the table when necessary. The flavour and taste of the pickled fish as described above is found to be much better than that of ordinary salted fish, which is generally very hard

and has a bitter salt flavour not relished by many. The muscle of the pickled fish is very soft. It contains about 65 per cent water and eight per cent salt whereas ordinary salt fish contains only about 40 per cent water and has salt content as high as 15 per cent to 20 per cent. The keeping quality of the pickled fish is also considerably better. It does not spoil as the result of mould or red attack.

Precautions

The following precautions have to be taken in storing the pickled fish. Vinegar is acidic and this acid atmosphere helps to preserve fish since most of the fish spoilage bacteria does not thrive in acid. But the spoilage products of the fish like ammonia which are alkaline gradually neutralise the action of vinegar and excess vinegar should be added every month. After some time this brine may become foul, because of the formation of spoilage organisms. Sometimes worms or larva may be noticed in the brine. If brine shows the signs of spoilage it should be changed adding fresh vinegar and condiments. This may be necessary after two months.

Pickling of Prawns.—They should be boiled in dilute brine (5 per cent) till they assume a pink colour and float on the surface. They should be ladled out, cooled and shelled. The pulp could be used for pickling as in the case of fish.

Preparation for the table.—The fish taken out of the pickle may be washed well and fried in oil, adding excess spices according to the taste. It can also be made into curry like fresh fish.

Corruption Cases

During the month of April 1952, one Assistant Surgeon was removed from service, one Stationary Sub-Magistrate was compulsorily retired and his pension reduced. Ten Constables were dismissed. One Field Surveyor was discharged from service. Three others were given less severe punishments.

During the month of May 1952, one Deputy Superintendent of Police was compulsorily retired, one Assistant Surgeon, one Head Clerk and one Typist in a District Educational Office and five Prohibition Guards were removed from service, eight Constables were dismissed and one Constable was discharged from service. The punishments awarded to five other persons were less severe.

Chillies : Combined Scheme Continued

The Government have sanctioned the continuance of the combined scheme for the multiplication of H.S. 9 tobacco seed and G1 chillies seed in the Guntur District during 1952-53.

The seeds produced in the scheme will be sold to the ryots for sowing, at the same rate as the departmental seeds of the same variety.

Marketing of Fish

By SRI K. CHIDAMBARAM, Deputy Director of Fisheries (South), Madras.

In the reconstruction of the Far Eastern societies attention has to be paid to the native peasantry. They form an integral part of the economic fabric. Yet their needs have often been looked upon as more social and administrative than economic. Legal, educational, medical and nutritional problems have often been tackled without a full realization that these are bound up with fundamental difficulties of income, depending in turn on difficulties in the organization of marketing, the supply of capital and the technical utilization of resources. These problems have become more urgent with the entry of large-scale development by Western interests. The impact of new techniques of production, a more widespread use of money, and a greatly increased range of consumer's goods and offer and a closer dependence on the price fluctuations of international markets in commodities are new factors challenging the traditional way of life of the peasant and set him problems of adaptation.

The more successful he is in inducing his economic universe and moving away from his basic subsistence economy, the more he is liable to be faced by insecurity. The claims of the peasant fishermen have got to be borne in mind; and they play an important part in the total economy in this part of the country. Their importance lies not only in their actual population, but also in their contribution to the economic and nutritional system of the community.

Problems of the Fishing Industry

Before the war the fishing industry was not ignored but by comparison with peasant agriculture, it was late in arousing official interest; the range of its problems was slowly realised, especially on the economic side, and the funds and personnel allotted to assist it were small. The fishing industry is not an easy one to help in any country and the problems are more difficult to tackle in this part of the world. Many of the fishing communities are small and scattered, most of them are relatively isolated. It is hard to disseminate ideas through printed material among fishermen and hard also to get personal contact with them, when they are so often at seas. Their many local variations of equipment, technique and organization make it difficult to work out a policy and adapt it to their requirements. All such factors in the past have tended to inhibit any speedy comprehensive plans for the improvement of their conditions.

In the planning of development of fisheries in any region, it is essential to understand the nature of the industry and its problems. It is necessary to know the answers for certain questions of a general nature. What is the productivity of the industry? Is there full utilisation of the natural resources of the waters? How efficient is the use of equipment and of labour? What is the regularity of employment and what are their occupations? How is capital supplied to the industry? Is the industry under-capitalised or over-capitalised? Are marketing facilities well developed? How well are the consumer's interests served? How do the income and standard of living

of the fishermen compare with those of other groups? Some aspects of these had been taken up, but very little detailed systematic work has been published on the subject.

Primary and Secondary Phases

When the development of fisheries elsewhere is viewed historically and its economic conditions considered carefully, it is seen that "progress has been and in the present form of civilization must be, from the independent fishermen with a single boat and petty local trade to the capitalist employer with his fleet of large boats and his wages paid crew...." and it will be so in this country, the more so because the actual seafaring fishing population in India is born and not made. These people are wanting both in the capital and the business capacity and initiative necessary for a real exploitation of the harvest of the sea.

The fishing industry, like others, is divided into primary and secondary phases, the primary phase indicating the activities concerned with actual fish production and the secondary phase concerned with the handling of the fish. This secondary phase of handling in fish relates to the various stages from the producer to the consumer and involves equipment for transport, storage, marketing and processing.

Fishery is conducted in two ways: (1) fishermen themselves engaged in fishing with their own boats and nets and (2) the capitalists who are interested in the fishing industry hiring labour from among the fishermen and entrusting them with all the fishing implements on share basis.

Credit System in Fishing Economy

There are three main spheres in which the credit system is important in the fishing economy: (1) in financing the poor workers, especially during seasons of unemployment or low yield, (2) in facilitating the purchase of capital equipment and (3) in facilitating the marketing of the product, and they are:—

(1) *Through co-operative societies.*—Temporary loans from Rs. 50 to Rs. 250 are given to the fishermen according to the number of each man's shares in the society on personal security of some other members, and it is collected by instalments in full, in the course of one year. Some of the fishermen who are licensed fish curers in the Government Fish Curing Yards established throughout this coast repay their dues to the societies in the shape of cess.

(2) *Through boat owners.*—Boat owners generally advance money to the ordinary labour fishermen mostly on promissory notes to be repaid in the course of one year in cash from the income they get. The fishermen are allowed half the share of the catches for their labour by the boat owners, the other half being enjoyed by themselves towards the fishing implements supplied by them. The first half given to the labourers are equally distributed among them; and then each labourer, if he is a debtor to the boat owner, gives a percentage of his share

are required in varying amounts—calcium, silica, magnesium, manganese, iron, sodium, cobalt, nickel, etc. The functions of some of these is fairly well known, e.g., iron, in the formation of chlorophyll, and magnesium as one of its constituents. Magnesium is also associated with oil formation; oil seeds contain more of this element than starch seeds do. Some of the substances seem to be relatively inert; others, in excess or in deficiency, cause serious injury.

Although the knowledge of plant nutrition is not complete even in major directions, and will not be for a long time ahead, a large body of facts and restricted generalisation is now available. In the case of fruit trees, for example, a valuable series of relations between colour and morphological characters of the trees and deficiencies of a number of elements have been worked out and used in practice. Diagnostic aids, such as injection and leaf tissue tests, and X-ray and spectrographic examinations now afford a wide cover of the experimental field. Recently, developments in atomic physics have placed a powerful new tool in the hands of agricultural scientists. Radioactive isotopes of phosphorus, carbon and other elements of importance in plant nutrition can now be prepared, and their movements in the plant can be traced easily by electrical means. This work is in its preliminary stages, but it has high promise. The movements of elements of vital importance in photosynthesis, storage, maturation, etc., are often in such minute quantities that chemical analysis is difficult or impossible; in addition, every such analysis involves the mutilation or destruction of the test plant.

The above discussion has dealt mainly with the aspects of plant nutrition concerned in yield, or quantity of produce. But equally important, although perhaps less urgent, is the question of the quality of the produce.

Quality Factors

Quality bears both on the nutritional value and palatability of foodstuffs and on the improved receipts obtainable for better class produce. With cash crops for industrial use such as textiles, certain quality factors as strength and length of fibre can be accurately defined by the industry and agricultural scientists can direct their manurial and plant breeding work towards these clear objectives. With food crops, including beverages, the trades have devised a number of tests for quality that are used not only in blending or grading the produce for the consumer's market, but also for fixing the price received by the grower. The tea-taster and the coffee-liquorer are well-known examples. Although the tests usually contain some quantitative elements, their most important aspects deal with elusive factors such as 'body' and 'aroma', that are essentially subjective and acquired only by long training and experience. As long as this continues the growers and agricultural scientists are severely handicapped in their endeavours to raise the quality of the produce. There is a real need for biochemical and related investigations into these subjective quality factors so that—as in the simpler example of cotton—they can be expressed in more objective terms.

For food crops in general there is a general association between quality factors and the three main nutrients, nitrogen, potash and phosphate, at any rate for temperate climate conditions.

Nitrogen manures, besides giving a marked increase in yield, promote rapid vegetative growth and are therefore useful for those crops where a good bulk of tender leafy

growth or succulence is desired; examples are cabbages, and grass pastures for animals. In the latter example considerable research and practical trials have been made to extend the supply of young leafy herbage throughout the growing season.

Phosphatic Nutrients

Phosphatic nutrients are generally held to promote maturity and ripening and to give a good root development. In products in which the vague but recognisable maturity factors associated with 'quality' are important, there is an association of vintages for different years differed little from the order of their phosphate contents, which diminished progressively from the best to the poorer wines. The effect of phosphatic manuring on root development is particularly noticeable on heavy soils where roots do not naturally form well; but on lighter soils, although these usually contain less available phosphates, phosphatic manuring is less needed since the physical condition of the soil facilitates good root development. Its effect on root development revolutionised arable agriculture on heavy clay soils; its effect in hastening maturity enables an earlier harvest to be taken in areas of early and heavy autumn rains, as in the western and northern districts of Great Britain. Hence the limits of growth of several crops have been appreciably extended in a number of countries.

Potash nutrients are considered to be associated with certain quality factors, especially in relation to market, garden and fruit crops, and more general farm crops such as potatoes and sugar-beet. The effects are believed to be bound up with the amounts and composition of the plant sugars, although, in practice, more importance is attached to the acid radicle of the potassic manure than to the potassium itself.

Potassium has a marked effect on leguminous crops. Where they are growing in competition with grasses, as in a pasture, they are depressed unless any potassic deficiency is set right by manuring. Conversely, in a pure stand of a legume, e.g., a lucerne crop, the winter hardiness of the crop is enhanced by potassic fertilisers.

Increased Productivity

A review of world agriculture over the past fifty or hundred years discloses a great increase in the total production. Part of this was due to an increase in the cultivated area by the opening up of virgin lands, notably by the flocking of immigrants to the United States. But a very appreciable factor in increased total production was general raising of the yield per acre, achieved by improvements in the plants themselves and in their cultural conditions.

Plant improvement by selection is as old as agriculture itself and its effects have been enhanced with the coming of the science of genetics. The yield of sugar-beet has been raised in a few decades from a ton or so per acre to 10-15 tons, and its sugar percentage has also been greatly increased. Even more striking, because of the relatively short time taken in the work, is the development of sugar-cane varieties by the Dutch in Java, with yields of many tons of sugar per acre. The tomato has, in our lifetime, been changed from a plant that was sometimes grown for the pleasing colour effect of its bright red fruits clustered, to one that gives, even in the open, 5 lb. or more of edible fruit, and under glass-house conditions several times that quantity.

In the space of a generation new varieties of wheat have spread over millions of acres, one outstanding example being Marquis wheat in Canada. The selection or breeding of varieties possessing some special features such as hardness, a shorter growth period, or stiffer straw in cereals, has led to important changes in the areas under staple foods. In the United States the upper boundary of maize growing has been pushed steadily northwards into the wheat belt, which, in turn, has extended northwards into areas where, a few years ago, no variety of wheat then known could have reached maturity in other than exceptionally favourable seasons.

Cultivation

Soil cultivation is one of the oldest arts in the practice of arable agriculture. Beginning in the mists of antiquity with a pointed stick, the implements slowly evolved through hard-hoes to large models drawn by animals. These remained cumbersome and crude in design until the Industrial Revolution. The Industrial Revolution provided the designing and engineering skill to produce efficient metal implements to perform a variety of operations that their predecessors were incapable of doing well: subsoiling, deep ploughing, inter-row cultivation all improved in efficiency, and soil tillage became a highly developed art. Steam power was applied to cultivation, especially for the ploughing by contract of large fields on the heavier soils. Finally, the invention of the internal combustion engine resulted in the almost complete mechanisation of arable agriculture in the more advanced countries.

One fundamental consequence of this change is not yet fully appreciated. In the days of animal-drawn implements, especially before the implements were of efficient design, frequent cultivations were necessary to obtain a satisfactory tilth and to cope with weeds. The actual cost of extra cultivation to the farmer was negligible, for the animals had to be fed whether they were working or idle. The tractor, unlike the animal, costs nothing when idle, but each time it is used, there is a cash expenditure on fuel and oil. Hence the economics of mechanised agriculture must be based on finding the minimum tillages for good farming. The tractor-farmer cannot afford, like the horse-farmer, to be an artist in cultivation.

Further, field experiments in a wide variety of soils and climates have shown that crop yields are remarkably insensitive to cultivations. Deep ploughing and subsoiling, that were commonly believed to be especially necessary for root crops, are generally without effect.

Rotary Cultivation: Dry Farming

Two developments in cultivation methods are of some interest. One, known as rotary cultivation, is based on the use of revolving tines to comminute the soil so producing a seed-bed in one operation, and saving both time and money. Comparisons of the method with the normal operations show that the new method has still to overcome certain difficulties.

The second development is being tried in dry-farming areas where conservation of soil moisture is specially important. It aims at disturbing the soil as little as possible, i.e., at obtaining the necessary friability for seeding operations without inverting the soil, thus avoiding the moisture loss by evaporation that occurs when the lower

damper layers are brought to the surface. It is a kind of sub-surface cultivation such as would be done by a plough share, only without the mould-board. This exercises a lifting action on the soil above the implement and disintegrates it. Trash and vegetable debris are left on the surface where they can act as a hindrance to evaporation and the seed is sown through the trash by drills of modified design.

One unexpected but very important result that has emerged from this work concerns the effect of weeds on crops, when both are in the early growth stages. The normal sequence of good farming is to encourage weed seeds to germinate during the preparation of the seed-bed, so that they can then be killed in the seedling stage by a light surface cultivation. Thereafter, inter-row cultivations are given whenever later growth of weeds becomes noticeable until the crop has grown too big to admit the passage of implements. A tall crop or one that spreads over the ground can be expected to smother and thus keep in check any later weed growth; after harvest they grow again and are dealt with by suitable cultivations.

In more advanced systems, weed control by implements necessarily produces a soil mulch in the operation, and for the reasons given above, virtues were ascribed to the mulch itself. This was especially so in intensive farming and in itself, a standard injunction in many text-books on gardening was 'keep the hoe moving among the plants.' Now that it is known that the real purpose of the operation is weed control and that the mulch is merely an incidental consequence, the question arises of controlling weeds by other means than by cultivations. Already chemical control is used in certain cases.

Manures and Fertilisers

The second broad division of cultural improvements deals with the enhancement of soil fertility by manuring. It is instructive to review briefly the historical development, because obstacles long since overcome in some countries still exist today in others.

The mediaeval 'three-field' system that lasted so long in Western Europe was, in essential, as follows. It was a three-course rotation of wheat, barley and fallow. The fallow was necessary as a resting period when it was hoped that the land would recover somewhat in fertility after the two straw crops. The fallow field, like the two undercrops, was very weedy for the reasons discussed above, and it was used together with weedy post-harvest stubbles of the cropped fields, as grazing for the animals, to augment the common land grazing. It therefore received a certain amount of organic manure from the droppings of the animals. Crop yields were low, and there was no possibility of raising them within the framework of the system; it seemed to have reached finality, and the precarious margin between a meagre sufficiency of food and actual want, for both human and animals, had to be accepted.

Enclosures

The enclosures represented the social and economic changes from the old three-field system. In theory, there would have been no insuperable difficulties in bringing about the technical changes just outlined within the framework of the existing system of land utilisation. The biggest obstacles would have been the universal custom of allotting

towards his loan and thus adjusts it completely by the end of the year or renews the bond every year if the arrears are still pending.

(3) *Through capitalists*.—Some capitalists advance money to the boat owners on the security of the catches in the respective boats. On landing, the catches are surrendered to the capitalists who fix the price of the fish on the basis of demand and supply and either sell it or take it themselves for curing. The cost is paid to the boat owner then and there or sometimes within a week, taking a percentage of commission which is always likely to fluctuate according to circumstances. Thus the capitalists are actually benefited in both ways by getting the interest of the amount lent by them and also by getting a profit by the sale of cured fish. Until the loan, thus taken, is repaid in full to the capitalist by the boat owner, the above arrangements regarding the disposal of the catches will continue.

Channels of Disposal

The fishing on this coast of Madras State is not a purely subsistence occupation; it depends for its prosperity on market conditions. There are three principal channels of disposal of the catch viz., (1) as fresh, (2) as dried and salted and (3) as manure.

It is estimated that less than 50 per cent of the total production is consumed fresh. A proportion of the catch is sold by the fishermen family, who remove the catch in baskets of various sizes frequently on head loads and take it direct to the retail markets or elsewhere or convey it to markets, where it is auctioned. The range of the fresh fish market, locally and in inland centres, is governed by the range of available means of transport varying from the *kavadi* to lorry and railway. Since fish will not keep fresh long in the tropics, speed is essential in supplying this market.

Another important type of market is for cured and dried fish. Curing and drying allows the fish to be transported great distances and held in reserve against periods of bad weather or seasons when fish are scarce; it also provides the means of dealing with the surpluses.

Functions of the Middlemen

The scope of the whole system of fish marketing has led to the development of various types of middlemen, who are often specialists as wholesalers or retailers, as handlers of fresh fish, or in cured and dried fish. The system of marketing is the most intricate and fascinating of all the aspects of this industry in India. The market is a diverse one, with middlemen of several types, each performing a specific function, though not exclusively. Moreover, the system is so fluid that as there is prospect for profit, people, who are normally producers or consumers, act for a time as middlemen; they are not regarded as infringing the privileges of any corporation. Marketing of the fish does not take place on any system of fixed or conventional prices, such as might be expected in a community attaching importance to traditional forms of social intercourse.

There are definite conventions, but they apply to the process of bargaining and not to the prices as such; they are characterised by great sensitivity of response to changes

in supply and demand. While retail sales are for cash, the credit system is well developed for wholesale purchases. The capital of the middlemen is small and they tend to operate on narrow margins. The economic organization depends largely on production in other fishing areas, and growing facilities of transport and communications tend also to increase the inter-dependence of the different local markets.

Four Lines of Action

The Department of Fisheries, Madras, is tackling the problems relating to marketing mainly on four lines, viz., rapid handling, processing, setting up organizations and eradication of literacy. Before formulating the channels for marketing, a comprehensive knowledge of different consuming centres, markets, local conditions and customs is essential. To cite an instance, fish are not consumed by certain communities on certain days a week and in certain months. This lack of demand in particular periods in particular localities will direct the movements of fish for marketing. The various functions of marketing are assembling, grading, sorting, packing, storing, processing, transporting, distribution and sale.

The assembling, grading and sorting are usually done at the landing centre and the packing has to be done according to the type of market, the distance of the market from the landing centre and the mode of transport available and also the way in which the fish is desired by the consumer. In some places fish packed with ice are not liked, though it is the best way of arresting decomposition in fish within a limited time; some consumers cannot reconcile themselves to purchase fish which are gutted and cleaned, even though scientifically gutted fish keep better for a longer time and the decomposition does not set in for a long time.

Question of Packing

No doubt, it is necessary to educate the consumer and to remove all the prejudiced ideas from his mind. These points, which though apparently minor, can assist the producer in supplying better fish, and the consumer can get the benefit of a better quality of fish. The distance and the mode of transport influence the way of packing. It will be sufficient if fish is packed in ice in baskets for a shorter distance and when the container is not handled more than twice. Otherwise wooden containers will answer the requirements. If fish are to be taken for a longer distance, insulated boxes will be found necessary. If insulated van or railway car is available, packing may be in the simplest manner possible.

The ways in which the various difficulties met with at different stages of marketing by the Department in the landing, distribution and marketing of fresh water fish from Mettur to places within a radius of 250 miles are available for the fish merchants, and the successful experiments conducted in the packing and transport by the insulated van in the railway will be valuable lessons for the trade.

Transport of Fresh Fish

Regarding transport of fresh fish, the places where restricted facilities of communication by road are available, the Department is exploring the possibilities of running motor vans to assist the transport of fresh fish quickly and in time to reach the market at a reasonable cost. The

quantities of fish transported by Departmental vans in 1950 and 1951 were 400 tons and 845 tons respectively.

The information gathered by the Marketing section in the City of Madras revealed that on an average about 15 tons of fresh fish are received in the City every day; about 10 tons are brought by train from the West Coast. Now with the exploitation of the Mettur Reservoir through the Department about two tons of fresh fish come into the City. This supply has been increased by four tons by the provision of quick transport vans of this Department. This includes fish brought from Pulicat, Ennore, Lattice Bridge, Tiruppur, Covelong, etc. During the year 1951, more than 750 tons of fish were transported into Madras and these are transported at a nominal cost of about Rs. 15 per ton based on the distance and quantity. They are from producing centres to consumption centres where communication is not easy; this facility aids in bringing the fish to the market in time and this fetches a better price for the producer and gives a better fish to the consumer. The introduction of these vans constituted an improvement of the socio-economic conditions of the fishermen.

Programme of Development

Any programme of development of fisheries has to be treated broadly under these heads, viz., technical, economical and social. The various technical changes involving power fishing, increased production, extending the fishing intensity, better methods of preservation, transport and marketing will mean economic changes. Any radical change in the fishing industry will almost certainly lead to far-reaching changes in the way of life and social institutions of the fishermen, e.g., any system of deep-sea fishing would involve changing their established patterns of behaviour and economic relationship in the community. Where there is such a development programme, there will still be room for individual fishermen, but the men who secure larger boats and nets will face a more complex problem, one of the chief factors being the supply of capital. State assistance in some form would perhaps be necessary. In a few cases this may be done by direct cash advances in easy terms, but this system is open to gross danger that such advances may in fact go to improve the position of the middlemen instead of the producer.

A more effective way would probably be to make the capital advance in the form of actual equipment and to issue this to fishing units or associations of fishermen rather than to individuals. This might be combined with a form of co-operative investment in which the majority of the capital is put up by the State through the Fisheries Department while the fishermen themselves put in small amounts either by subscription or by allocation of a portion of their earnings.

Role of Co-operative Societies

It may not be out of place here to mention the potentialities of marketing through co-operative societies. Co-operative buying and selling is a world-wide movement varying largely in the degree in which it has become established in the different countries. Co-operative purchasing among farmers or City consumers has developed extensively in some countries, notably in England, Scotland and Sweden, while co-operative societies of farm products is most common in other countries, such as Denmark, Finland and Canada. The co-operative credit

movement is extensively developed in Eastern countries such as Japan, China and India. A fair proportion of the retail trade in many European countries passes through co-operative channels, e.g., 1/5th of Danish, 1/4—1/3 of Finnish, 1/7th of British and 1/10th of Swedish. Wholesale houses organized on a national and international basis are also operated successfully by co-operatives. The result of the functioning of the various co-operative organizations in different parts of the world have indicated that:

(1) Co-operative principles can be successfully applied to the marketing of any kind of commodity, perishable or non-perishable, staple or non-staple, seasonably produced or continuously produced goods.

(2) The characteristics of the people are significant in determining the extent of co-operative organizations.

(3) Most successful co-operative organizations in different parts of the world are organized on a single commodity basis, but organization on a multiple commodity basis does not in the least spell failure.

(4) In most European and Asiatic countries co-operative agricultural credit associations were basic to co-operative marketing associations.

(5) Public policy in practically every nation of the world has favoured the development and progress of co-operative marketing.

(6) There is general acceptance of the principle of co-operation as adopted by the English societies.

(7) In many places, State control or positive State encouragement of co-operative marketing is found.

It will be quite appropriate here to mention the success of such working on products of fishing industries in Japan, Canada and Scandinavian countries.

Extent of Governmental Responsibility

In developmental activities there may be wide differences of opinion as to the scope of Governmental responsibility, some people holding that Government should leave the field to private enterprise, whilst others argue that Government should undertake the major work of this kind. It is probably a matter of degree of development of the industry at the time at which the scope for specific developmental measures is recognized; in some countries private enterprise leads strongly in such advances, in others Government may have to take a lead and provide stimulus to private enterprise.

Of this developmental work there are two special fields in which it is fairly obvious that Governments of this area may take a lead. These fields are: (1) the development of some form of organization in the industry, (2) the establishment of orderly marketing arrangements. It might be, and in some quarters is held, that these are essentially aspects of the same problem. There are three most illuminating instances of Governmental intervention to impose a form of orderly operation of the industry. These are those of Hong Kong, Batavia and Queensland:

Hong Kong.—The Hong Kong Government has set up a wholesale fish-marketing organization through which all the fish must be sold; the fish is brought to market by the organization's own lorries and carrier vessels, from collecting centres operated on behalf of the scheme by fishermen's committees. The fish is auctioned and is delivered from

each year strips within each field to each cultivator, and the practice of giving common ranging to the animals. The practice of strip cultivation arose from the desire to give everyone his fair share of the better and poorer areas, but it was cumbrous at the best and was economically indefensible. The common ranging of the village herds and flocks not only restricted the arable work in various ways, but also made impossible for all practical purposes, any attempt to improve the quality of the animals. Much has been written about the motives and effects of enclosures, and the sociological consequence of the movement. In essence, it replaced communal ownership by private possession. In doing so it created a class of landless peasants, who became paid labourers on the private farms.

This brief outline of past changes has urgent topical importance. In many parts of the world land utilisation customs still exist, that closely resemble the three-field system, notably in the Middle East; in North-East Syria, strips only a few feet wide but over half a mile long, are not uncommon. Elsewhere, and especially in India, as well as the Middle East, the fragmentation of holdings among heirs under the laws of inheritance produces grave technical and economic handicaps to farming.

The four-course system showed the manurial value of dung and the means of producing it in adequate amounts. It also showed the value of organic manure as a soil improver; it improved the physical condition and its moisture relationships and, especially on heavy soils, reduced the difficulty of getting a good tilth. It was natural, therefore, that the deficiencies of agricultural systems abroad, especially in sub-tropical and tropical climates, particularly poor yields and soil erosion, should be ascribed to the very low quantities of organic manure given to the soil. It has only recently been realised that the problem is not as simple as that.

Climatic Conditions

The present position, therefore, is that the nutritive elements in farmyard manures become more quickly available in tropical than in temperate climates; that, in the wet tropics, more may be lost by leaching; that, in the sub-humid tropics a marked accumulation of available nitrogen is built up in the dry season; and that, especially in sub-humid conditions, there is much more rapid oxidation of organic matter and a much longer equilibrium humus content than in temperate soils.

Whatever the precise part to be played by organic matter in such improved systems, there can be no doubt that artificial fertilisers will also be used. They have been employed in ever-increasing amounts since the first artificial fertiliser—superphosphate—was put on the market by Lawes a century ago, as the result of his field and laboratory work on phosphates more highly available to plants.

There is likely to be some intensification of the objections urged against the use of artificial fertilisers. The prejudice that still exists in certain quarters against them arises partly from the obvious ill-effects of their misuse and partly from the school that believes they lack certain essential properties that only organic manures can possess. This latter belief is an elaboration, sometimes in pseudo-scientific terms, of the simple and customary difference in nomenclature between the two forms; organic manures are therefore claimed to be 'living', 'natural', 'vital', whereas fertilisers are 'artificial', 'denatured',

'soil poisoners'. These postulated differences are projected into the food value of the crops and animals; those on organic manure are health giving, those that come from artificial fertilisers are the source of most human ills.

Plant Improvement

Plant breeding aims are, in general, the improvement of yield and of quality, and the production of varieties having immunity or enhanced resistance to pests and the diseases. There is also considerable scope in the production of varieties specially suitable for a given environment of farming system, e.g., a stiff, short straw for combine-harvesting of cereals and a shorter growth period for use in higher latitudes.

Marked advances have been made in producing better varieties of temperate zone crops, and animal fodders are obvious examples. In the tropics, spectacular improvements have been secured in certain crops grown in the plantation type of agriculture and, in some instances, of peasant agriculture where large areas can be farmed on a uniform system. An example of the latter is paddy-rice in countries such as Malaya and Burma, where the introduction of better varieties has much improved the yields. In plantation agriculture where the main object is to produce a cash crop, which may be for human or industrial use, coffee, cocoa, tea, cotton, sugar, rubber are well-known examples. Progress has been made by using breeding or selection methods, by vegetative propagation, by the introduction of varieties from abroad for direct use or for cross-breeding.

There is no doubt that the biggest gap at present is the lack of plant breeding work on the staple food-crops of tropical peasant farming.

Tillering

One important aspect of plant breeding for sub-humid tropical conditions must not be overlooked. The tillering habit of grain crops is advantageous when the soil moisture is adequate to sustain the larger plant to maturity. The Chinese, in their successive transplantings, obtain wheat plants with a large number of tillers that produce mature heads. But, as noted at the end of the next section on Soils, tillering is a disadvantage in sub-humid areas. Recent work on dry-land farming problems in India suggests that the environmental conditions have led to the predominance of non-tillering varieties, and that the peasant, by rudimentary selection of seed, and possibly by his custom of sowing seed thickly, has encouraged this process.

In breeding against pests and diseases, the standard procedure is to bring in, if possible, the factor of immunity of high resistance by normal genetical means into otherwise desirable varieties.

Breeding and selection have been, and will continue to be, valuable tools in the fight against plant and disease pests. Important additional help comes also from changes in cultural practices that are suggested by a knowledge of the life history of the disease agent.

Insecticides

But possibly the main method, especially with cash crops, is the use of insecticides or fungicides in a variety of ways; as dressings for seeds before sowing, on the plants, as winter and summer sprays for fruit trees and so on, and the general principle is to attack the pest or disease

Rural Welfare Activities

A brief note on the salient features of the activities of Rural Welfare Department in the areas selected for Rural Welfare work during November 1951 is given below:

Tirunelveli.—During the month of November 1951, 63 compost pits were dug, 14 charkas were sold and 1,333 hanks of yarn were spun; tools to the value of Rs. 2,299 were issued to the artisans.

Bellary.—During the month a sum of Rs. 3,725-8-0 was spent on village communications and another sum of Rs. 1,846 on Rural Welfare schemes. An expenditure of Rs. 885 was also incurred towards the construction of a reading room and a compound wall to the reading room at Ramadurgam village. Three charkas were introduced; 85 hanks of yarn were produced. Twenty-two sanitary drives were conducted. Eighty-two compost pits were dug and 21 charka demonstrations were conducted.

Tiruchirappalli.—In Musiri firka a firka tournament was conducted in which all the villagers participated. Prizes to the value of Rs. 100 were given. A Cottage Industries Co-operative Federation was started. One adult school was opened. In Vellakoil Centre 64 hamlets and 24 cherries were visited. Thirteen soak pits and 20 latrines were put up. Sixteen cherries were cleaned and five mass sanitation drives were conducted.

Tanjore.—Thirty-five new charkas were introduced. 24 hanks of yarn were produced, 63 manure pits and 50 compost pits were dug, 32 cherries and 23 insanitary pits were cleaned; 18 mass meetings were conducted. Congregational spinning was conducted 32 times.

Chittoor.—During the month seven sanitary drives, ten magic lantern shows, and ten spinning demonstrations were conducted. In ten villages leprosy survey work was done.

North Arcot.—During the month 13 charkas were introduced under the Extensive Khadi Scheme and four hundred and one hanks of khadi yarn were spun by self-hundred and one hanks of khadi yarn were spun by self-spinners. Demonstrations in soap-making, chalk-making, candle-making, etc., were held by the Rural Welfare staff. Ten gross of candles were produced by the weavers who were thrown out of employment for want of yarn.

Ten ryots agreed to part with their lands to an extent of 2.04 acres free of cost for the formation of a road from Chittoor to Cuddalore road to join Maruthuvambady village under the Post-war Road Development Scheme. Seven-teen public meetings were conducted by the Rural Welfare staff and propaganda was carried on the potentialities of the Rural Welfare Scheme. One battery radio set was installed at Mangalam village. Arrangements were made for starting poultry units in ten villages.

South Kanara.—In Kumbha firka one acre of waste land was terraced. A co-operative society was organised for Maire village. In Manjeshwar firka, an adult school was opened. In Mulki firka one adult school was opened and a culvert was constructed. In Nileshwar area, 19 compost pits were dug by the ryots in the area. Five acres of land were brought under cultivation of sweet potatoes, tapioca, blackgram and horsegram.

A sanitation drive was conducted in the Harijan colony at Nileshwar. A quantity of 130 lb. of Kolinji seeds (green manure) was distributed to the ryots for raising

green manure crops in their fields now lying vacant after the first.

Salem.—During the month five new charkas were introduced and 1,670 hanks of yarn were produced. An amount of Rs. 3,260 was distributed as loan to the ryots of Anayampatti village for raising cotton crops in the 100 acres block. Ninety-eight manure and rubbish heaps were removed, 3 soak pits were dug, 14 cherries were cleaned, 28 compost pits were dug and 41 manure pits were opened. Harijan Day was celebrated.

Malabar.—In Tellicherry firka, 33 compost pits were constructed and two ryots were supplied with green manure seeds. A new adult education class at Kolari and re-ding rooms at Mangattidam and Koodali were started during the month. Nine charkas were introduced under the Extensive Khadi Scheme.

In Payyanur area, 16 compost pits were constructed; 380 lb. of green manure seeds and 1,440 lb. of chemical manure were issued to ryots. Fifteen services were performed by the breeding bulls, buffalo-bull and the bucks stationed in the area.

Anantapur.—Eight medical chests were distributed to the various Grama Seva Sanghams; six charkas were distributed under the Extensive Khadi Scheme and 22 compost pits have been got dug and partly filled up. A mass sanitation drive was conducted at Seegipalli on November 20, 1951, and the entire village was cleaned and swept; 1,000 trees were planted in the Model farm at Melavoy. A group tournament was conducted at Bullasamudram and prizes were awarded on November 9, 1951, for adults as well as children.

Nilgiris.—A sum of Rs. 852 was disbursed as agricultural loan to two ryots for the purchase of seeds and manure; 201½ lb. of insecticides were supplied to the ryots from the Ootacamund Agricultural Depot. During the month 32 compost pits were dug and filled up in all over the firka. Proper preservation of cattle manure was demonstrated. Four manure pits were newly dug and old pits were renovated during the month. An amount of Rs. 488 was paid to 59 ryots as the subsidy for compost making.

A night school was opened at Kariamalai hamlet. Arrangements for the supply of electricity to Bikkatti village were made. Supply of electricity to Naduvattam Panchayat was under investigation. The maternity centres in the firka treated 28 maternity cases and 1,000 out-patients. The Khadi Co-operative Society at Balacola and the Kathi Mandal at Nanjanad spun 176 hanks of yarn.

A Toda Cattle Show was held during the month at the seventh mile on the Ootacamund-Mysore Road. Prizes were distributed to the best exhibitors. The show was filmed by the Ministry of Information and Broadcasting, Government of India. A spinning demonstration was conducted by the members of the Nanjanad Kathi Mandal on the occasion.

Krishna.—One earthen road (1 mile 6 furlongs) was formed from East Madhavaram village of Vissanna-peta firka to the Masulipatnam-Tiruvur Road. The cost incurred for the road was Rs. 9,700 of which the villagers contributed one-third in the shape of labour.

FISHERIES

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cost to the buyers' establishments. Loans, education and supply facilities are associated with the market organization. The ultimate assumption of control by the fishermen, co-operatively, is envisaged.

Batavia.—Government operates the Batavia fish market, through which all fish for Batavia must pass. The fish is brought to the market by a range of methods, over which Government exercises no control. Fish is auctioned. Loans, education, medical supply and other facilities are associated with the market.

Queensland.—Areas on the coast from Cooktown to Coolangatta have been declared Fish Supply Districts, and all fish taken in those areas must be sold through the Fish Board wherever depots are available. The Board maintains the metropolitan market in Brisbane, eight district markets and 11 depots in country centres. Of these, the metropolitan market, four district markets and four depots are the property of the Board, the remaining markets and depots being operated in rented premises with cold storage facilities. The Fish Board has a fixed price schedule for most species for fish and crustacea. Most of the professional fishermen have a contract with the Fish Board to take all their catches at the fixed price. A fisherman may, however, elect to send his fish to be auctioned if he is not satisfied with the schedule prices. During the glut season, if the cold storage capacity of the markets and depots is strained, Fish Board Officials will not guarantee schedule prices, and the fish, if sent to the market, are auctioned. Species of fish and oysters which are not listed in the schedule are auctioned. These arrangements mean that auctions are very infrequent, the fish bought by the Fish Board at fixed prices being allotted to the registered fish buyers of the market, as demand is always greater than the supply of fish available.

Wholesalers' Organization

The Hong Kong Wholesale Fisheries Organization has been started with the idea of converting it into a co-operative organization when the organization had been built up and the fishermen considered educated enough in the principles of Co-operation and the ideals of the scheme to handle it themselves.

All fish has to be sent to one or two fish markets for sale by auction. A deduction of eight per cent on all sales is made before payment is made to fishermen. This commission, as it is called, represents funds by which the organization and its subsidiary activities are financed. There is a skeleton staff of Government officers at this market but the majority are paid from the fish commission fund. When the fish is sold the fisherman can get his money on the day of sale. The organization undertakes to deliver fish to the buyer in the organization's own baskets, with the organization's own transport free of charge.

Work at the Syndicates

Fish is collected at "Syndicates" which are situated at the various fishing villages in the Colony. The staff of the Syndicate is paid from the eight per cent commission deducted from the sale of fish. It consists of a "Chairman" and a "Fish Caretaker" and office staff. The Chairman of the Syndicate is an employee of the Fish Marketing Organization appointed by the Director of Fisheries. His duties are mainly the general supervision and running of

the various activities of the Syndicate. The fish caretaker checks the fish as it is delivered to the Syndicate, makes out a list showing the name of each fisherman and the amount and kind of fish which he is sending to the market. He escorts the fish to the market, supervises the weighing and checking at the market, follows it through the auction noting the price and collects money on behalf of all fishermen who are unable to accompany their fish, and returns with it to the Syndicate.

The Marketing Organization has a fleet of 16 lorries and five motor fishing vessels launches to transport fish to the market. The cost of this transport is borne by the Marketing Organization, the fishermen being only liable to deliver their fish to the Syndicate.

To describe the organization from a Co-operative angle, the following may give an idea of how the set-up is planned so as to be able to be converted into a co-operative organization in the future. A syndicate consists of all fishermen who are based in that fishing village and use that village as their collecting point. At present, they are not members of the Syndicate, in the true sense of the word, but look upon it as a collecting centre. They can go from one Syndicate to another as weather and fishing grounds alter. In the future it is hoped that these Syndicates will become properly constituted Co-operative body of fishermen with a definite membership. The Chairman will be elected by them and they will have their own staff doing their duties of Secretary, Treasurer and Committee members.

Chanos Fish Seed Collection at Adyar

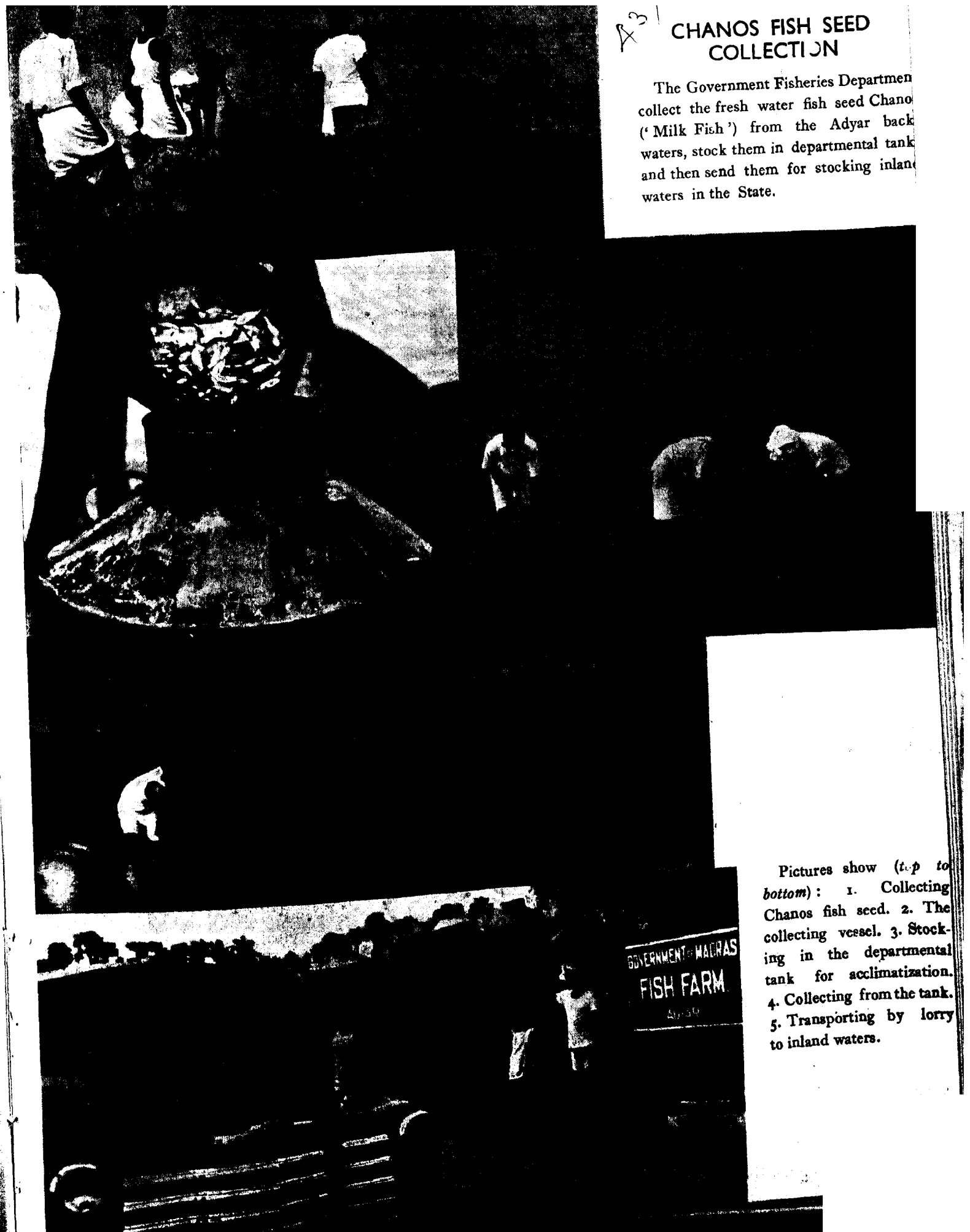
The Government Fisheries Department have made arrangements for collecting and transporting fresh water fish seed from Adyar. Chanos, a kind of marine fish popularly known as 'Milk Fish' appeared in large numbers in the Adyar backwater tracts, soon after the heavy rains. The breeding season for this fish is usually from April to October and during this period, the young ones of this fish (fingerlings or seeds as they are called) swarm in large numbers in the backwater tracts. Several lakhs of them are collected every year by the Government Fisheries Department and arranged to be stocked in all the inland waters of the State.

For the first time in Madras, an attempt in this direction is being made at Adyar. For the period ending June 15, 1952, a total number of 50,000 fingerlings of this fish were collected and stocked in the departmental demonstration tanks in the City. Before being stocked in the inland waters, they are subjected to a process of acclimatization to fresh water and conditioning for long transport.

This particular fish feeds mainly on plankton and filamentous algae and is found to grow well in fresh water. It grows in a year to about 15 inches in salt water, 19 inches in brackish water and 25 inches in fresh water. The rapid growth, non-cannibalistic habit and rich flavour make this species admirably suited for culture in fresh waters. It thrives very well in temple tanks where planktonic growth is abundant. It is expected that two lakhs more of these fingerlings will be collected before the season is over, for stocking the tanks and the reservoirs in the interior districts and for supply to pisciculturists.

CHANOS FISH SEED COLLECTION

The Government Fisheries Department collect the fresh water fish seed Chanos ('Milk Fish') from the Adyar backwaters, stock them in departmental tank and then send them for stocking inland waters in the State.



Pictures show (top to bottom): 1. Collecting Chanos fish seed. 2. The collecting vessel. 3. Stocking in the departmental tank for acclimatization. 4. Collecting from the tank. 5. Transporting by lorry to inland waters.

RURAL RECONSTRUCTION

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MADRAS INFORMATION

Chingleput.—Fifty-one compost pits were dug at Tirur, Melakondayar, Pakkamcheri, Vemmanambudur, Ekkadu, Kesavanallur, Perambakkam, Thenkaranai, Adigathur, Koilampundi, Kaliyanur, Mappedu and Kilanur group. Seventeen manure pits were dug at Patraiperumbudur, Meppedu and Kilacheri group. 280 lb. of improved paddy seeds were sold to the ryots in the selected areas and loans up to Rs. 9 300 were given to the ryots. Thirty trees were planted at Ekkadu village. Five insanitary pits were closed. Twelve drainages were cleaned in Venmandambudur, and Siruvanur, Tirupachur and Patraiperumbudur. First aid was rendered to 51 persons.

Guntur.—In Ongole, during the month 23 individual and 17 mass sanitation drives were conducted. Six old soak pits were repaired. Seventy-three manure heaps were properly covered or rectified. Thirty-five compost pits were formed. Eight public gatherings were addressed on the Grow More Food campaign. One hundred seedlings were planted. Seventy-eight pairs of cart tyres, 19 axles and 13 crowbars were distributed to the ryots.

A survey on soil erosion was conducted in twenty-five acres of land and the ryots were advised to form contour bunds to prevent further erosion. Forty-three charkas were introduced. Sixty spindles were sold to the ryots. One hundred hanks of yarn was produced by self-spinners. Eight spinning demonstrations were conducted. Fifty-one yards of cloth was produced during the month. An amount of Rs. 81-3-4 was disbursed as subsidy to self-spinners.

Kurnool.—The Rural Welfare Officer, Kurnool, and the Grama Sevaks conducted mass and individual sanitation drives in the various villages of the firkas. They conducted 18 spinning demonstrations, dug 25 compost pits, set right 19 manure pits, cleaned 47 streets, dug seven soak pits and levelled up two insanitary pits. Four manure heaps were got removed outside the villages, five heaps of stone and filth were got removed from streets.

In Yerragondapalem circle 56 spinning demonstrations were conducted, 98 manure pits were set right,

29 compost pits were dug, streets were cleaned 69 times and two manure heaps were removed outside the village.

In Kurnool firka, quinine was distributed among the villagers suffering from malaria. Sixteen adult education classes were held. One magic lantern show and five bhajan parties were conducted. A sum of Rs. 900 was collected towards share capital for the Cottage Industries Federation and one sheep-rearers' co-operative society was organised in Konidala village. Three breeding (Murrah) buffalo-bulls were distributed, one in Brahmanakotkur and the other two in Gargeyapuram. Five hundred fish seed was distributed to the ryots owning wells in Nagatur.

Madurai.—Sanitary drives were made on an extensive scale in 30 cheries and 24 villages with the co-operation of the villagers. Masonry drains were constructed to a length of 486 feet and about 200 unhealthy pits were covered up. Village games were conducted in 28 places and a tournament in village games was conducted. Under the Khadi Scheme 45 new charkas were distributed and 8,511 hanks of yarn were spun by the spinners.

Ramanathapuram.—The manufacture of compost manure was encouraged among the villages and 175 compost and manure pits were dug during the month, and 146 trees were planted. A poultry farm was opened at Managaseri. As regards rural water-supply, new wells were sunk and old wells repaired, wherever necessary.

Visakhapatnam.—In Pendurthi firka, 50 sanitation drives, three magic lantern shows and 74 spinning demonstrations were conducted, 58 compost pits were dug and 52 ordinary pits set right.

Cuddapah.—Twenty-two charkas were introduced during the month, and 48 spinning demonstrations were held. Fifty-seven compost pits were dug in the villages and about 62 tons of compost manure was prepared. Fifty-seven sanitation drives and eight sanitation drives were conducted in the villages. Twenty-seven adult education classes were conducted by the Grama Sevaks in the villages.

CO-OPERATION

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MADRAS INFORMATION

Rural Credit Societies

The Cherlopalli Multipurpose Co-operative Society

One of the earliest societies that was organised after the introduction of the scheme of reorganisation of rural credit societies is the Cherlopalli Co-operative Society in Rajampet Taluk (Cuddapah District). It was registered on 21st April 1940 and started on its work on 21st May 1940. On 30th June 1951 there were 165 members with a paid-up share capital of Rs. 1,462. During 1950-51 it borrowed a sum of Rs. 5,980 under short-term loans and a sum of Rs. 6,500 under medium-term loans from the Cuddapah District Co-operative Central Bank and disbursed them to the members. It changed its name to multipurpose rural credit society. In consonance with the name, the Society undertook a variety of multipurpose activities. It dealt in foodgrains, cloth, fertilisers, agricultural implements, kerosene, bengal gram, etc. During 1950-51 the purchases amounted to Rs. 12,211 and the sales amounted to Rs. 13,516.

A community centre was also completed by the Society. The estimated cost of the building was Rs. 5,800. The Government were pleased to sanction a subsidy of Rs. 2,900 to the Society for the purpose. The construction is over. This subsidy of Rs. 2,900 sanctioned by the Government, has already been drawn and disbursed. There is a library in the building. During nights, an adult education school is conducted on the first floor of the building. About 15 to 20 students attend the class daily. The Society's office, is, of course, located in the building.

One of the methods suggested by the Registrar to help the Grow More Food campaign is to issue loans to the ryot members of the societies for the purchase of pumpsets repayable in five years. The Cuddapah District Co-operative Central Bank has taken up the suggestion and has been issuing loans to the multipurpose rural credit societies under the scheme. The Cherlopalli Multipurpose Co-operative Society took advantage of the scheme and has disbursed loans under the scheme to two members to the extent of Rs. 6,500. Both the members have purchased pumpsets.

The Society has been inculcating the thrift habit among members. It has distributed hundi boxes to the members and during 1950-51 a sum of Rs. 128 was collected through hundi boxes. It earned a net profit of Rs. 227 during 1950-51.

The Pilicode Multipurpose Rural Credit Society

The Pilicode Multipurpose Rural Credit Society, Post Pilicode, in the Kasaragod Taluk, is one of the good working societies in the Kasaragod taluk. This Society was registered in a coastal village, and was started on 20th May 1949 with 46 members and a share capital of Rs. 440. Now the membership and the paid-up share capital have increased to 107 and Rs. 1,781 respectively. The Society serves a third of the population.

The Society meets all the credit requirements of the members. During the year 1950-51 the Society issued

111 loans amounting to Rs. 11,620 and recovered Rs. 5,624. An amount of Rs. 10,694 is now outstanding as loans. A good feature of this Society is that there are no overdues from members.

The Society has admitted 12 Harijans as members, and it is issuing small loans to them for various useful purposes. The society borrowed Rs. 11,590 from the Central Co-operative Bank in the year 1950-51 and repaid Rs. 4,598. A sum of Rs. 11,992 is outstanding to the bank at present.

On 17th February the Society was converted into a multipurpose society, catering to the needs of its members including the social and recreational needs of the villagers. An ameliorative committee was set up with five members to look to these activities. Under its auspices a reading room has been started and this has become a centre where the villagers flock in the evenings to read the daily newspapers and discuss the problems of the day. Leading newspapers are subscribed for and these newspapers are widely read in the reading room. The Committee members collected a donation of Rs. 216-9-0 for this purpose and an amount of Rs. 208-8-0 has been spent.

A noteworthy feature of this Society is that it is encouraging the local agriculturists to grow more food and to use more of chemical fertilisers. It purchased Rs. 395-1-2 worth of ammonium sulphate and distributed it to the ryots during the cultivation season. Besides, the members have dug 12 compost pits for preparing compost manure.

The Panchayatdars of the Society are considering the joint purchase of improved agricultural implements for supply to their agriculturists members. The Panchayatdars are working hard for the benefit of their members and others and are doing a real service in the village.

The Hadagalli Society

The Hadagalli Basava Rajendra Multipurpose Co-operative Rural Credit Society, Hadagalli Post, Hadagalli Taluk, Bellary District, was registered on 24th May 1945 and this is the sixth year of its working. There are now 390 members with a paid-up share capital of Rs. 8,115. The Society has built up a Reserve Fund of Rs. 1,095-3-0. It has invested Rs. 2,950 in the shares of the Central Bank and Rs. 250 in the Hirehadagalli Marketing Co-operative Society. It has deposited a sum of Rs. 110 in National Savings Certificates.

The maximum credit limit is Rs. 1,00,000. The Society borrowed Rs. 13,743 from the Hospet Co-operative Central Bank, Limited, Hospet, during the year and now owes Rs. 13,743. The amount of loans outstanding against the members is Rs. 51,888. In addition to credit transactions, the Society has undertaken various multipurpose activities. It is dealing in iron and steel, etc. The volume of business transacted is given below:

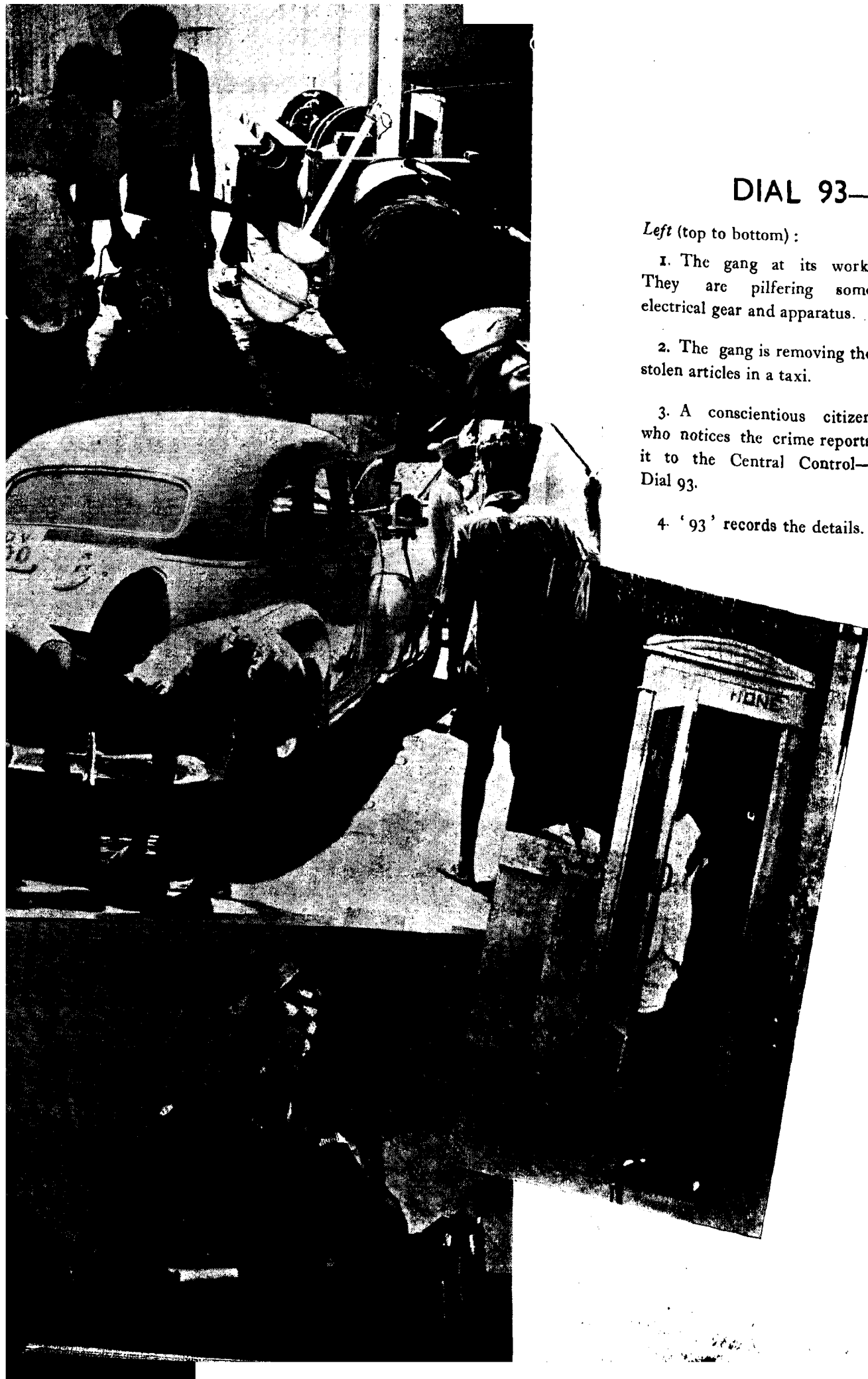
Agricultural implements including cart tyres Rs. 3,615-4-0.

The Society has also inculcated the habit of thrift among the members and has also distributed hundi boxes to the members. The total savings effected by the members amount to Rs. 88.



LAND ARMY IN ACTION

Land Army units removing weeds in the Qamurudin Nagar area. Members of the Land Army seen here are students of the Indian Agricultural Research Institute, Delhi.



DIAL 93—

Left (top to bottom):

1. The gang at its work. They are pilfering some electrical gear and apparatus.

2. The gang is removing the stolen articles in a taxi.

3. A conscientious citizen who notices the crime reports it to the Central Control—Dial 93.

4. '93' records the details.

RECONSTRUCTION OF A CRIME

Right (top to bottom):

5. The mobile squad is alerted and sets out on the chase after the gang.

6. The gang cornered and caught redhanded.

7. The gang is brought to the police station for questioning and enquiry.



Sri Venugopala Multipurpose Co-operative Credit Society

Sri Venugopala Multipurpose Co-operative Credit Society, Bhatlapenumarru, Divi Taluk, Machilipatam Circle, was registered on 13th November 1919 and started on its work on 17th December 1919 with 35 members and a share capital of Rs. 955. The area operations of the Society extends to Vurtur and Iyyannapudi villages besides Bhatlapenumarru. The population of these villages included in the area of operation of the Society is 7,600.

The Society got its bylaws amended converting it into a multipurpose credit society on 26th January 1951. There are at present 398 members with a paid-up share capital of Rs. 14,168. The maximum credit limit of the Society is Rs. 1,25,000 and the individual credit limit is Rs. 2,000. The Society has invested a Reserve Fund of Rs. 8,750. It has yet to invest a sum of Rs. 680-4-0. It has taken shares of Rs. 3,500 in the Krishna Co-operative Central Bank, Limited, and of Rs. 100 in the Krishna District Co-operative Central Stores. A sum of Rs. 63,698-6-0 was outstanding under loans to the Krishna Co-operative Central Bank on 31st October 1951 of which Rs. 14,584 was overdue. A sum of Rs. 88,877 was outstanding against members up to the end of 31st October 1951, of which Rs. 16,483 was overdue.

The Society opened home safe deposits since 1949 and a sum of Rs. 114 was collected by the end of June 1951. This amount was converted as fixed deposits; Rs. 65 was collected as home safe deposits from 1st July 1951 to 31st October 1951. The Society received Rs. 1,805 from members and Rs. 11,295 from non-members as fixed deposits. The profit earned by the Society during the year 1949-50 was Rs. 1,511.

The Society obtained a licence for dealing in chemical manures on 20th July 1951, but did not conduct business in this season. The Society did business in mill cloth and earned a profit of Rs. 630 for the year 1948. Subsequently there were no profits in this regard. The Society was recently permitted to deal in sugar.

The Society is a regular subscriber for the journal *Bahakaram* which is published in Telugu by the Andhra Provincial Co-operative Union, Rajahmundry.

Sri Ranganatha Vilas Co-operative Multipurpose Rural Credit Society

Thirubhuvanani is one of the villages in the Saliaman-firka (Papanasam Taluk, Tanjore District), which is selected for intensive rural work by the Government. The village has got a population of 1,285 and lies half a mile north of Sahiyamangalam.

A credit society was registered in this village on 10th November 1926 and was started on its work on 1st January 1927. Till the inauguration of the Firka Development Scheme in 1946 the Society had only 38 members on roll. After the scheme of reorganisation the Society began to

admit members and a campaign was started which resulted in considerable increase in membership. Today there are 114 members in the Society with a paid-up share capital of Rs. 2,039 by which 44.7 per cent of the population of the village have been brought under the fold of Co-operation.

The maximum borrowing power of the Society has been fixed as Rs. 8,000, while the maximum limit of borrowing of a member is Rs. 500. The Society has advanced loans to 57 members to an extent of Rs. 6,769 on 30th June 1951 for purchase of plough bulls, reclamation of land; discharge of prior debts and for capitalising the business of petty shopkeepers. The Society has to pay to the Central Bank a sum of Rs. 6,248 and no amount is overdue from the Society as on 30th June 1951. The Society has invested Rs. 120 in the shares of the Central Bank and Rs. 86-15-0 has been invested under Reserve Fund.

The Society has jointly purchased manure for Rs. 1,030-10-0 and distributed this among members to increase food production. To encourage the habit of thrift among members hundi boxes have been distributed to some of the members. First aid is made available to the rural folk of the village by providing a medicine chest. Thus the Society plays an important part in non-credit activities also and caters to the need of the village.

Jaggery Co-operative in Palghat

In the Palghat Taluk in the Malabar District a scheme of marketing of palm jaggery produced by the members of palm jaggery manufacturing co-operative societies through the Palghat Sale Society was introduced in 1950. Under this scheme, 25 palm jaggery manufacturing co-operative societies in the area have joined the Sale Society as members. The Sale Society rented three godowns at important market centres and rail heads viz., Palghat, Parli and Vadavannur.

The palm jaggery manufacturing co-operative societies in the area transported their produce to the depots to which they were attached. In the depots auction sales were conducted on all the days in the week except Sundays and public holidays in the presence of the representatives of the respective jaggery manufacturing Co-operative societies. The Sale Society charges a commission of 3 pice per rupee on the sale proceeds and pays the balance to the palm jaggery societies concerned.

During the palmyra season for 1950-51, the Sale Society marketed palm jaggery to the extent of 1,15,120 maunds of palm jaggery to the value of Rs. 7,46,947. By this system of sale, the ordinary variety of palm jaggery was sold at an average price of Rs. 6-8-0 per maund, whereas it fetched only Rs. 4-14-0 per maund prior to the introduction of this system. The superior varieties of palm jaggery were sold at an average price of Rs. 8-1-0 per maund. The Society earned a commission of Rs. 11,218.

The system of sale has assured a steady market for the jaggery produced by the members of the palm jaggery manufacturing co-operative societies who are now in a position to devote their attention to the production side of the industry and increase their output. Above all, certain middlemen who were exploiting the ex-toddie tappers and who were knocking away the cream of the trade have been eliminated.

Science Helps to Turn Wheels of Industry

By Dr. S. S. BHATNAGAR, F.R.S. and Dr. S. D. MAHANT

The chain of National Laboratories stretching so far, from Mysore to New Delhi and Calcutta to Poona, is progressively gearing science to the solution of problems arising on various facets of Indian economy. Seven of these institutes have been formally opened, while four more are to be opened, and though no great inventions can claim to be the steady and silent work done by hundreds of young men and women, as the Prime Minister recently put it, 'solved many problems and laid the basis for real research.'

Disinfectant from Tobacco Waste

Tobacco and oil-seeds constitute two of the economic crops of India; and work carried out at the National Chemical Laboratory, Poona, has resulted in the evolution of processes which should have an important bearing on the utilisation of these industrial raw materials. The manufacture and preparation for export of 684.4 million lb. of the Indian tobacco crop produces over 100 million lb. of mid-ribs, stalks, dust and scrap. In the entire District alone, this waste is estimated at five million tons. Some of this scrap is used in the manufacture of snuff, but considerable quantities, which are more or less considered waste, await economic utilisation. Nicotine, which is an effective insecticide, could be extracted from this waste, but the industry is non-existent in India, and foreign countries have felt that due to the low nicotine content of Indian tobacco scrap (two per cent or less) it is uneconomic to process it.

The National Chemical Laboratory has now worked out a simple method of extraction of nicotine, by which it will be possible to process Indian scrap and produce nicotine for use as an insecticide within the country and also for export on an economic basis.

Tobacco Seed Oil in Varnish

Tobacco seed is another by-product which has been more or less neglected so far, so much so that a couple of years ago tobacco seed oil, which is used industrially in foreign countries and considered edible in some, could not be obtained in India. A process for treating this oil for use in paint and varnish manufacture has now been patented and is available for commercial adoption by industry. Incidentally, this work has stimulated interest in the exploitation of tobacco seed oil, and the oil crushed is now finding an export market.

Vegetable Oils in Soap Manufacture

Other oil-seeds which have received attention are neem, kamla, safflower, pisa, khakan and phulwari. It has been shown that pisa, khakan and phulwari can replace coconut oil in soap manufacture, thereby releasing more oil for edible purposes. Methods of eliminating the objectionable odour and taste of neem oil have been worked out, and the refined oil can be hydrogenated to provide a source of high quality stearic acid for use in soap manufacture.

Kamla oil is of particular interest because of the possibilities that it presents of replacing tung (china wood) oil, which is in short supply. Varnishes and paints based

on kamla oil yield air-drying wrinkle finishes, which hitherto could be obtained only by baking films of alkyd varnishes. This discovery permits production of beautiful finishes on doors, walls, heavy pieces of furniture, fabrics, paper and other materials which cannot ordinarily be subjected to baking.

A new method for extraction of oils from oil-seeds through an aqueous medium has also been worked out. The yield of oil extracted is higher than that obtained by expellers or hydraulic presses.

Fertilisers

Conditions for the production of dicalcium phosphate and kotka type of phosphatic fertilisers, which are not at present produced in India, have been investigated and pilot plant experiments are being conducted at the National Chemical Laboratory. These aim at determining conditions for commercial manufacture. Preparation of ammonium sulphate from magnesium sulphate is also being studied. Large-scale production of these fertilisers and their use in agricultural operations will assist in the campaign for self-sufficiency in foodgrains and commercial crops.

New Foods

A search for new foods is in progress at the Central Food Technological Research Institute, Mysore. Milks and curds from groundnuts, identical in appearance and taste with cow's milk, have been prepared on a large scale. Their production cost is half that of cow's milk, and school feeding experiments on an extensive scale have demonstrated that these are nutritively as good as the natural product.

Considerable progress has also been made in the production of fortified grains and flours from tapioca and groundnut. These materials are meant to supplement, not supplant, the grain diet and are expected to assist partially in making good the food deficit of the country. Processing of coarse grains to make them acceptable to rice eaters, processing of *amaranthus paniculatus* (Rajgira), salt preservation of mangoes for export, passion fruit products and curried vegetables are some of the other lines of investigation engaging attention at the Institute.

Salt Cake in Glass Manufacture

One of the by-products of salt manufacture in the Rajasthan area, and particularly at Didwana, is salt cake. This material, which is available in abundance, has so far only found limited uses. Recent work at the Central Glass and Ceramics Research Institute, Calcutta, has established that it is possible to use salt cake to replace a part of the imported soda ash in the manufacture of amber glass. The possibility of extending the practice to ordinary glass manufacture is under investigation. Adoption of this practice will result in an appreciable reduction in the import of soda ash and also of sulphur, which is in short supply, required for the manufacture of amber glass.

Practical investigations conducted at the Model Salt Farm at Wadala, near Bombay, have demonstrated the

Pipelines for Moyar

Left (top to bottom): 1. Portion of the factory where pipes are manufactured. 2. Rolling machine, where straight plates are rolled into circular shape. 3. Transporting a pipe on a lorry. 4. Transporting a bend pipe on metre gauge trolley.

Right (top to bottom): 1. The Surge Tank. 2. Pipelines on the hill slopes. 3. Penstock pipes near powerhouse.

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The Moyar generating station, the fourth hydro-electric station in the State, is situated in the Moyar Valley in Nilgiris District about ten miles north of the Pykara Power Station. The water after power generation at Pykara is utilised again for power generation at Moyar through necessary diversion and storage works and pipelines.

The water so diverted from the Pykara Station is impounded in a small lake called the Forebay from where it is taken in steel pipes laid down on the hill slopes to the Powerhouse 1,250 feet below for running the generating units. The ultimate installed capacity at Moyar station will be about 36,000 K.W. comprising three units each of 12,000 K.W.

Pipelines.—The pipeline consists of a Low Pressure Pipeline from the Forebay, a surge tank and three penstock lines, each pipe to feed one machine (vide sketch).

The portion AB in the sketch is called the Low Pressure Pipeline. It is made of $\frac{1}{4}$ " thick steel shells of 7' 0" internal diameter and about 688 feet long, and leads into the surge tank shown at location B. The purpose of the surge tank is to absorb the sudden depression or high pressure that may occur in the pressure pipes due to the sudden opening or closing of the valves near machines when load is thrown in or thrown out.

After the surge tank the seven feet diameter pipe divides into three branches running along the hill slope, each branch leading to one of the three turbines at the Powerhouse. These pipes are called penstock lines. The length of each penstock line is about 2,880 feet. The upper reach of the

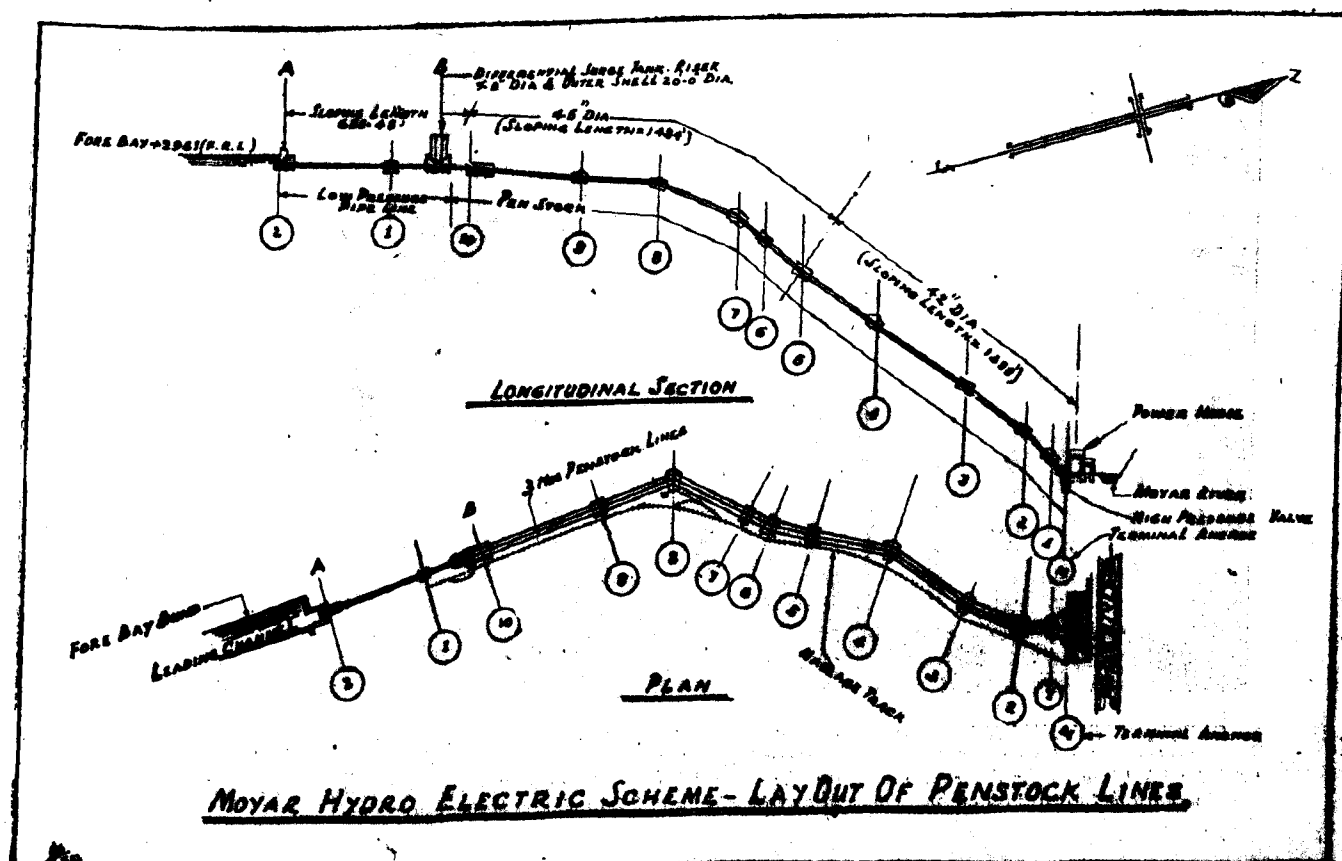
penstock line, for about half the length, is of 45" internal diameter and the lower reach of 42" internal diameter. Water flow in the penstock lines is controlled by necessary valves located at both ends, viz., near the Powerhouse as also the beginning of the penstocks. Several bends are introduced in the pipelines to suit the profile of ground on the hill slopes and such bends are firmly held down to the foundation by huge concrete blocks reinforced by steel rods. These concrete blocks are called "anchors" and are indicated with serial numbers 1 to 10 in the sketch.

The fabrication and supply of steel pipes and special bends and pieces were done by Messrs. India Hume Pipe Company, Bombay. They had set up a factory at Moyar Camp for manufacturing the pipes. The pipe making was mostly done by machines operated by electric power supplied from Pykara.

The transport of the pipes from the factory to the site and their erection at site have been and are being done departmentally. The construction of the Low Pressure Pipeline, surge tank and the first penstock line with necessary valves and controls are completed and this is now feeding the first generating unit which was commissioned into service on 10th April 1952.

The erection of II and III penstock lines is in progress and is expected to be completed shortly.

The cost of the entire supply of pipes is about Rs. 30 lakhs and the estimated cost of erection of these pipes is about Rs. 2 lakhs, thus making a total of Rs. 32 lakhs for supply and erection.



possibilities of producing common salt of a purity of 98 per cent and over by simple technical control and a change in the layout of the salt farm. It is simultaneously possible to obtain greater yields of salt with a consequent reduction in cost.

Search for Sulphur

The search for sulphur and sulphur-bearing ores has been intensified and the Geological Survey of India and the Indian Bureau of Mines are engaged in investigating known pyritic deposits at Taradevi (Simla), Amjor (Bihar), Ingledahl (Mysore) and Wynad (Nilgiris). New deposits of pyrites have been located at Karwar. Native sulphur has also been found in the mountainous areas of Northern India, access to which is difficult. The most economic means of bringing this sulphur to industrial areas are being considered, and if necessary an air lift may be arranged.

Meanwhile, the Fuel Research Institute, Jealgora (Bihar), has shown that pyrites can be separated from some coals. A study of the washing of Nowrazabad (Rewa) coals has revealed that the "rejects" contain a high percentage of pyrites, and attempts are being made to determine an economic method for separating pyrites from "rejects." A rough estimate places the recovery at two tons of pyrites (about one ton of sulphur) per 100 tons of coal, and by establishing a coal washery with capacity of 150 tons per hour it should be possible to obtain nearly 9,000 tons of sulphur per annum. Considering that India's normal requirements of sulphur are of the order of 50,000 to 70,000 tons per annum, this source would meet one-eighth to one-sixth of the need. The practical application of this work in the near future should contribute substantially towards providing a dependable indigenous source to meet the country's sulphur requirements.

Coal

Based on the studies of coal washing at the Fuel Research Institute, two coal washing plants, with capacities of 150 and 300 tons, have now been established and come into operation at West Bokaro and Jamadoba (Jharia). These will assist in conserving India's metallurgical coals and enable low-grade coals to be used in the manufacture of iron and steel.

Low-grade high ash coals of the Bermo seam are to be utilised as pulverised fuel in the Bokaro 200,000 K.W. thermal power station of the Damodar Valley Corporation. At the same time, a proportion of the coal will be recovered for coking. This is another application of coal washing, and will provide a practical demonstration of the economic way of utilising research development.

By adopting suggestions made by the Fuel Research Institute on the controlled supply of secondary air into loco-boilers, the Nizams' Railway (now part of the Central Railway) has shown that not only can coking coals be replaced by high-moisture locomotive non-coking coal but that the coal consumption can at the same time be reduced by about 20 per cent.

Preliminary tests with Jammu coals have shown that though these coals are friable and difficult to handle, it is possible to make "briquettes" from them without any binder. The importance of the method can be easily realised when the distance of the State from the Bihar coal-fields is taken into consideration.

Coloured Glasses for Railways

For the indigenous manufacture of red, blue and yellow signal glasses required by Indian Railways, the Central Glass and Ceramics Research Institute, Calcutta, has worked out various compositions. Samples prepared from these compositions have been examined by the Railways and pronounced satisfactory. Large-scale production is expected to be arranged soon.

Utilisation of Solar Energy

Sunshine is a commodity which, thanks to Nature's benevolence, is in plentiful supply in this country; and that too at no cost. The harnessing of this rich source of energy for practical purposes is receiving attention at the National Physical Laboratory, New Delhi. The subject is of world-wide interest, and the two important aspects involved are concentration and storage of the energy received from the sun at a particular spot.

Solar energy can be used for generating power by the use of a heat engine, or through a thermo-electric generator. It can be used as heat for air conditioning, refrigeration and similar purposes. In the National Physical Laboratory, an air engine is now working on sunshine and air alone. Appliances to use solar energy for cooking food and heating water are also being devised.

Anti-Smuggling Devices

Another subject of practical interest is the evolution of portable anti-smuggling devices, consisting of a concealed cell connected to an electronic circuit which flashes a warning light as soon as a metallic object in the bag or on the person of a passenger comes within range. They thereby assist in the quick screening of potential smugglers from other passengers. Location of the metallic object then becomes a matter of routine. Another instrument, which looks like a hand mirror, is used for detailed scanning of passengers or their luggage. These devices are expected to be of particular assistance to customs officials in laying hands on smuggled gold or other precious metals.

Opium Detection

International smugglers are interested in opium. One of the problems facing excise authorities in various parts of the world is identification of the source from which the illicit opium has been obtained. In collaboration with international organisations and the Revenue authorities who supply various samples, the National Physical Laboratory is taking up a study of the structure of different varieties of opium with the aid of the electron microscope. Should this study reveal any structural differences in opium obtained from various countries, it will provide a ready method of identifying the source from which the contraband has come. Preventive steps can then be considered by the authorities.

These are just some of the instances in which Physics is being put to practical use. Without touching on the abstruse studies in electronics, ultrasonics, nuclear energy levels, vibration of crystals and flame temperature which are engaging attention at the National Physical Laboratory, mention may be made of the series of investigations on Cosmic rays under the aegis of the Tata Institute of Fundamental Research and the Atomic Energy Commission (India) and ionospheric investigations.

(Continued on page 36.)

Employees' State Insurance Scheme

By Dr. C. L. KATIAL, Director-General, Employees' State Insurance Corporation

Implementing the Act

The first of its kind in South-East Asia, the Indian Employees' State Insurance Scheme, one of India's major social security legislations, was introduced on January 27, 1952, to synchronise with the beginning of the third year of the Republic of India. The Scheme is designed to cover 2,500,000 workers in all perennial factories, though it is being introduced, in the first instance, in Delhi and Kanpur to cover 150,000 employees.

Employees will get sickness, maternity, disablement and dependent's benefits and free medical care under the Scheme. The sickness benefit is payable for seven days a week at the rate of half the average daily wage, and the weekly benefit thus comes nearly to 7/12ths of the earnings of the workers. The benefit is payable up to 56 days in any continuous period of 365 days. The maternity benefit is payable at the rate of 12 annas per day or the sickness benefit rate, whichever is higher. It is paid for every day of the week for a period of twelve weeks of which not more than six can precede the confinement.

Persons disabled on account of employment injury will be paid benefit in the form of pensions and the dependants of a deceased employee will also similarly be paid benefits in the form of pensions. The pension to a permanently disabled worker is to be at the rate of about 7/12ths of the weekly earnings of a worker. Under the Workmen's Compensation Act, 1923, the benefits payable to permanently disabled workmen and to dependants of a deceased workman were in the form of lump sums. This was not satisfactory, as the lump sum was frittered away and did not prevent workmen from falling in want again.

The Employees' State Insurance Act was placed on the Statute Book in April 1948. Amended in September 1951, the Act was made applicable to all employees in perennial factories employing 20 or more persons and using power. Employees whose remuneration exceeds Rs. 400 a month are not covered by the Act. To work the new Act, the Government has set up the Employees' State Insurance Corporation which consists of representatives of the Central Government, State Governments, employers, employees, the medical profession and the Central Legislature. The executive work is done by a Standing Committee. A Medical Benefit Council advises on the medical aspects of the Scheme.

For its finances the Corporation is dependant upon contributions by the employees and employers. Workers who receive up to Re. 1 per day are exempt from making any contributions. Workers—in the areas where the Benefit Scheme is operating—who receive between Re. 1 and Rs. 1-8-0 a day contribute 2 annas per week. The higher wage groups contribute 4 annas to Re. 1-4-0 per week—a little over two per cent of their wages. The employees in Kanpur and Delhi, the industrial areas in which the Scheme is being introduced immediately, will contribute one and a quarter per cent of their total wage bill, employers elsewhere in India contributing three-fourths per cent of their total wage bill for financing the Corporation.

In all a sum of Rs. 2 crores is expected to be collected every year as contribution from employers and employees. The health services will be run by State Governments who



Electricity: Review for May

A review of electricity work done in May 1952 is given below :—

Machkund Hydro-Electric Scheme.—Land acquisition proceedings were in progress and lands still remain to be handed over. All bridges and culverts in Lamptaput-Machkund headworks road were completed and in Soguru-Jalaput road 6 miles 7½ furlongs have been metalled and further works on bridges and culverts were progressing. In diversion dam 35 per cent of masonry and 41·4 per cent of excavation have been done. In flume channel 64·7 per cent of work has been done so far. In tunnel pond dam excavation in left flank was progressing and 567 units of masonry has been done besides 59 units of bucket and apron concreting.

In flume tunnel 1,273 feet length has been concreted and further work was proceeding. Trimming of pipe tunnel and laying of concrete for surge shaft and excavation for invert portal open cut for pressure tunnel were progressing. Grading of valve house was nearing completion and work on penstock slopes was in progress. Extension of haulage track up to anchor No. 2 has been done and further extension work was continued.

Levelling of powerhouse area has been completed and foundation excavation for the powerhouse building was in progress. Excavation for main dam and Jalaput was continued. Construction of permanent buildings at

Onukedelli and temporary buildings at Jalaput was in various stages of progress. Total labour force during the month was 5,406.

Moyar Hydro-Electric Scheme.—All civil works from headworks to powerhouse have been completed. The first unit was in commercial service during the month, giving much needed relief to the hydro systems. The second and third penstock lines remain to be completed in the lower reaches near the powerhouse end. Erection work on 2nd and 3rd unit was continued. Erection of switchgear under Moyar bay at Pykara Powerhouse was progressing.

Pykara III Stage Extensions.—At the Pykara dam, construction of masonry for the main dam and wing walls was continued. Work on R.C.C. core wall for the earthen dam was also in progress. The erection of the 4th penstock line at Pykara was already completed. Erection of the differential surge tank was nearing completion. Foundations for the powerhouse extension at Singara were completed and the erection of steel structures remain to be taken up.

Madurai Thermal Scheme.—Component parts of boiler materials for the 10,000 K.W. set were being received and stacked. Collection of materials, earthwork excavation and flooring were under progress for the cooling pond work. Concreting for the 10,000 K.W. set of R.C.C. raft for turbine foundation has been completed.



ELECTRICITY ENGINEERS MEET: Shri Sri Prakasa, Governor of Madras, addressed the Sixth Annual Meeting of the Government Electricity Engineers' Association. At the meeting Sri G. Sundaram, Chief Engineer for Electricity, outlined the details of the Five-Year Plan for the generation and distribution of electricity, and declared that Madras led all States in rural electrification, with 2,230 villages having power supply.

South Kanara Scheme.—Realignment in certain reaches in 33 KV. lines was in progress.

Tungabhadra Hydro-Electric Scheme.—Drilling operations for the investigation of soil at canal powerhouse site were in progress. Reconnaissance was made for getting suitable soil for the hearting of the forebay bund. Trial pits were being excavated in the foreshore of Kamalapuram tank.

Staking of tower locations was completed and the position of tower footings were being marked out in the field for lines surveyed. Preparation of tree and land schedules has been completed for a length of 149 miles out of 342 miles.

Madras Plant Extensions.—The fabrication of the steel work for building has been completed except for chequer-plated walkeys which are held up because of non-receipt of chequer-plates from the mills. The rolling shutters have been received and are being erected. Boiler No. 4 was commissioned on 12th May 1952. Work on boilers 2 and 3 was progressing. Work on turbo alternator, mechanical coal handling plant, switchgear and central evaporatory plant were in various stages of progress.

Vijayavada and Visakhapatnam Powerhouse Extensions—Vijayavada.—Civil works were progressing.

Visakhapatnam.—Erection of the 7th stanchion was completed. Roofing with A.C.C. sheets and necessary trusses and bracings were over. These complete the south side extensions. Work on west side extensions and 6th boiler foundation were being taken up.

Nellore Thermal Scheme.—Staff quarters at Gudur Sub-station was progressing. Sewage and drainage arrangements were completed at Nellore Sub-station except for minor works. Sub-station structure work was progressing.

Operation Branch

Hydro areas.—The water conditions in hydro areas continued to deteriorate. A further cut of 25 per cent was imposed during the month, bringing the total cut to 50 per cent on all but essential consumers.

The hydro systems continued to run in parallel with the Madras Electricity System. The number of units generated, peak load and services connected during the month in the three hydro systems were as follows :—

Services connected.

Name of System.	System peak load in KW.	Generation in millions of units.	Agricultural.	Industrial.	Domestic.
Pykara	35,500	17·37 7·16 *	77	..	202
Mettur	36,800	7·65	43	..	127
Papanasam	17,500	5·17 2·26 †	36	..	339

* 7·16 million units were generated at Moyar Powerhouse.

† 2·26 million units were generated at Madurai Thermal Station during the month. The Moyar Powerhouse with a peak load of 12,800 KW and Madurai Thermal Station with a peak load of 3,500 KW were giving relief to the three hydro systems.

(Electricity Review continued overleaf)

Improvements to Udipi Thermal Station

The Udipi Electrical Undertaking, which was managed by a private company till May 31, 1951, was taken over by Government under the Acquisition of Electricity Undertakings Act, 1949, on June 1, 1951, with a view to improve the supply conditions in the town which were very bad at the time. A scheme for installing two additional diesel generating sets at the existing powerhouse and extending supply to prospective consumers in villages round about Udipi was sanctioned by Government at a cost of Rs. 10·2 lakhs initially rising to Rs. 13·01 lakhs in five years. The first diesel set of 224 KW. operating under this scheme was commissioned on July 21, 1952. Erection work on the second set will be taken up shortly and when completed the power position at Udipi will ease considerably.

It may be mentioned that the present expansion of the Udipi Thermal Station is only to meet the power requirements for the next three to four years, by which time hydro power from the Jog system of Mysore is expected to be made available for the whole of the South Kanara District.

Rural Electric Loads

The Government have approved the relaxation, with effect from July 15, 1952, the re-grouping restrictions on agricultural and other rural loads, in force under the orders dated July 2, 1952.

N.G.Os. and their Families : Free Diet and Drugs in Government Hospitals

The Government have ordered that Non-Gazetted Government Officers of this State and their families, who are admitted in State medical institutions, should be exempted from the payment of diet charges and the entire cost of special and expensive drugs administered to them.

The Government have also ordered that employees of local bodies, drawing salaries not exceeding Rs. 300 per mensem, should be given the same concessions as are admissible to State Non-Gazetted Officers, in the matter of medical treatment, when admitted in the State medical institutions. These orders take effect from April 1, 1952.

The position before the issue of these orders was as follows :

The Non-Gazetted servants and their families were eligible under the Madras Medical Attendance Rules, for free medical aid when admitted to Government medical institutions, including free accommodation, nursing and medical advice, free X-ray examination and treatment and free surgical treatment. They were required to pay diet charges and full or half the cost of special and expensive drugs, which were not ordinarily or normally available at the Madras Medical Stores Depot, Madras, and which were not among the drugs standard as indispensable for general practice.

will bear one-third of the cost of medical care, the remaining two-thirds being borne by the Corporation. The Central Government will share in the Scheme by meeting two-thirds of the cost of administration, excluding cost of benefits, for the first five years.

During the initial phase the Scheme is being put into operation in Delhi where it will benefit 55,000 workers in about 400 factories and Kanpur with about 96,000 workers in 250 factories. Eleven local offices have been set up in Kanpur and five in Delhi for operating the Scheme. Ten dispensaries including one mobile dispensary have been established in Delhi and 13 dispensaries in Kanpur. Subsequently, the Scheme will be extended progressively to cover other regions. Punjab is the next area on the schedule and the Scheme will start working in 11 industrial centres in that State in August 1952.

Greater Bombay and Bangalore will be brought under the Scheme in January 1953 and Madras, Calcutta, Nagpur and Jubbulpore will follow in July 1953. By October 1953, the industrial areas of Ahmedabad, Sholapur, Agra, Coimbatore, Asansol and Burnpur will get the benefit of the Scheme. All other places where the number of industrial workers is 5,000 or above will be covered in January 1954 and in July 1954, workers in smaller centres where the number is below 5,000 will also start getting the benefit of the Scheme.

The Indian Scheme shows interesting differences when compared with the National Insurance Scheme now in operation in Great Britain. While under the British Scheme contributions and benefits are paid at a flat rate, they have been graded in the Indian Scheme. The British Scheme today embraces every citizen, but it took nearly four decades—from 1911 to 1948—to grow to the present dimensions of its service. The Indian Scheme is expected to cover 25 lakhs workers in about four to five years and this social security legislation has invested the Government with authority to extend the Scheme to all categories of employees in due course.

WOMEN'S WELFARE JOURNAL
(ANNUAL NUMBER)

Pages: 108] [Price Annas Eight.

The Annual Number of the *Women's Welfare Journal* is a bumper publication with an impressive array of contributors, eminent in many fields of particular interest to women. The articles in the main stress domestic and social values, co-ordinating points for a general thesis that with women playing their assigned roles, home and world affairs can be tackled in the right spirit.

Subjects like mother care, child training, women and world peace, social service, adult education, rural colleges and the Hindu Code Bill find a prominent place in the Annual Number, dealt ably by specialists. Alongside, the regular features like Children's Corner, Cookery, Needlework, Departmental Corner and the short story, also enrich the issue.

A wealth of pictures, many on art plates, and Malayalam, Kannada, and Hindi supplements, serves to make this issue popular in almost every household. Such periodical publication of special numbers will definitely fulfill the avowed aim of the Women's Welfare Department, of advancing the social conditions of Indian womenfolk.

Science Helps to Turn Wheels of Industry

(Continued from page 34.)

The Cosmic ray experiments are of interest because of the balloon flights by which observations are taken. Thirty to 60 hydrogen-filled balloons carry a gondola which houses a cosmic ray telescope, pressure and temperature measuring instruments and a specially designed wireless transmitter, which continuously relays scientific data. This relay is picked up by ground receivers and a permanent record is obtained. Measurement of various components of Cosmic rays at different altitudes and latitudes is likely to lead to a proper understanding of the nature of matter and elucidation of the mechanism of the origin of these particles in the cosmos. The energy with which these particles approach the earth is of such a high order that it is not possible to reproduce the same with the most powerful cyclotrons or atom smashers known. While the subject is of a fundamental nature at the moment, its practical interest lies in the training it imparts to personnel who are likely to be useful when utilisation of atomic energy becomes a practical proposition.

Ionospheric Investigations

Ionospheric investigations are being conducted at the Wireless Laboratory of Calcutta University and the data are published and exchanged with other international organisations as part of a world programme of ionospheric studies. This involves a routine hourly observation of the height of different layers of the ionosphere, their thickness and ionisation densities. The results are of interest in radio communication, television and aeronautical navigation.

Research Development

For research to play the important role assigned to it in national development, it is necessary that the results of laboratory investigations should be quickly and effectively translated into actual production. This is a subject that is naturally receiving much attention and proposals for the establishment of a National Research Development Corporation of India on the lines of similar specialised organisations in the United Kingdom and Canada are now under the consideration of Government. A primary function of this Corporation would be to demonstrate how processes can be operated on a full production basis. The early establishment of the Corporation should go a long way towards avoiding the risk that valuable researches may be left high and dry in the laboratories.

Radio Sets for Villages

The State Broadcasting Department have installed seven community listening sets in the course of the week ending December 6, 1951, bringing the total number of radio sets so far installed to 1,730. The villages are located in North Arcot, Salem, Tanjore, Malabar, Ramanathapuram, Nellore and Madurai districts.

Correction

The photographic reproduction of a portrait study in oils, published on the first art inset page of *Madras Information* (issue of January 1952), has been erroneously described as "one of the Mughal Paintings in the Art Gallery." The portrait is the work of the well-known painter Raja Ravi Varma, and depicts a Jew.

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Tamil.	Telugu.	Malayalam.	Kannada.
North Arcot	Anantapur	Malabar	Bellary
South Arcot	Bellary		South Kanara
Chingleput	Chittoor		
Coimbatore	Cuddapah		
Madurai	East Godavari		
Nilgiris	West Godavari		
Ramanathapuram	Guntur		
Salem	Krishna		
Tanjore	Kurnool		
Tiruchirappalli	Nellore		
Tirunelveli	Srikakulam		
	Visakhapatnam		

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POWER

20

MADRAS INFORMATION

In the Madras Electricity System, 45 D.C. services with an approximate connected load of 86.9 K.W. were changed over to A.C. supply.

During the month 78 extensions were sanctioned by Chief Operation Engineers and Chief Engineer at an estimated total cost of Rs. 35,22,200.

Name of System.	Peak load in KW.	Units generated in millions.	Services connected.		
			Agricultural.	Industrial.	Domestic.
1 Madras	28,000	14.27	14	23	246
2 Vijayawada—					
Steam	8,007	3.898	20	1	26
Diesel	3,990	1.504			
3 Visakhapatnam—					
Steam	1,100	0.132	2	12	198
Diesel	720	0.008	3		
4 Kakinada	598	0.004			
5 Rajahmundry	80	0.016			144
6 Narasaraopet	100	0.016			12
7 Srikakulam	96	0.019			10
8 Ongole	14	0.003			
9 Narasannapeta					
10 Nellore	800	0.261			
11 Proddatur	102	0.026		1	12
12 Kurnool	330	0.101			
13 Anantapur	150	0.045			
14 Cuddapah	230	0.075	1	2	83
15 Nandyal	125	0.021			
16 Tadpatri	65	0.011			
17 Hindupur					
18 Ceded Districts	239	0.076	8	2	130
	2,928	1.255			

Power purchased from Mysore.

Inter-Departmental Meeting on Statistical Co-ordination

At the first Inter-Departmental meeting on Statistical Co-ordination, held at the Committee Room at the Secretariat on July 24, 1952, Sri K. Ramunni Menon, Chief Secretary to Government, presiding, the Economic Adviser initiated a discussion with the representatives of 24 departments on technical points in the agenda, which included such items as the nature and description of the primary data collected, schedules used in the collection of statistics and the scope for their improvement, type of personnel engaged in the collection of the statistics and their qualification, and the lines on which statistical or economic surveys, if any, are conducted.

The 24 departments which were represented at the meeting included the Engineering, Industries and Commerce, Police, Prisons, Registration, Medical Services, Co-operation, Animal Husbandry, Labour, Port, Controlled Commodities, Public Health, Municipal Council and Local Boards, Revenue, Road Traffic Board, Public Instruction, Agriculture and Fisheries.

In the course of his opening speech, the Chief Secretary stressed the increasing importance in a Welfare State of statistics, the compilation of which requires the skill of competent experts. He added that Governmental organisations and Governmental activities existed for the good of

the people. He pointed out that it was possible to represent statistics, which had been regarded by many people as an exceedingly dry collection of mass figures, in a way in which every schoolboy would be able to understand it. Whatever is collected should be easily understandable to everyone and should also be comprehensive.

The Economic Adviser said that the Karnam is the primary source of information and therefore if the primary data is correct, then only the interpretation can be correct.

Sri C. S. Krishnamoorthi and Sri K. Kondal Rao, Board of Revenue, Sri V. K. Parthasarathy, Public Health Department, Sri V. Dattatreyan, Office of the Industries and Commerce Department, and Sri K. Chidambaram, Department of Fisheries, took part in the discussions.

Extension of Electricity

Supply of electricity was given on August 7, 1952 to Kalugumalai in the Palayamkottai firka, Tirunelveli District.

Loan Instalments

The Government have directed that the collection of loan instalments in the areas which are affected by drought and remission of kist granted in Fasli 1361 in South Arcot District be postponed to Fasli 1362.

LABOUR

21

MADRAS INFORMATION

Indian Trade Unions Act

The following are the important features in the working of the Indian Trade Unions Act, 1926, in this State during the year 1951-52 :—

1. The Commissioner of Labour continued to be the Registrar of Trade Unions.

2. At the beginning of the year, there were 579 unions on the register. During the year, 194 unions including 13 whose registration had been cancelled were registered and 140 unions were deprived of registration. The total number of unions registered since their commencement of the Trade Unions Act up to 31st March 1952 was 1,429, of which 633 were on the register at the end of the year.

3. The membership of registered trade unions slightly increased from 174,608 at the beginning of the year to 189,491 at the end of the year. The balance in the General Fund Account of the Unions has increased from Rs. 4,33,225 to Rs. 6,24,934.

4. As in previous years, many of the unions failed to submit their annual returns even though notices explaining their obligations under the Act were issued to them. The concession of free official audit has been withdrawn from the accounting year 1951-52.

5. Agricultural labour continued to be slow in organising itself into trade unions. At the end of the year there were eight registered trade unions against six at the beginning of the year. Only six unions submitted their returns for 1951-52 and the total number of membership of the unions at the end of the year was 1,458 against 1,354 at the beginning of the year.

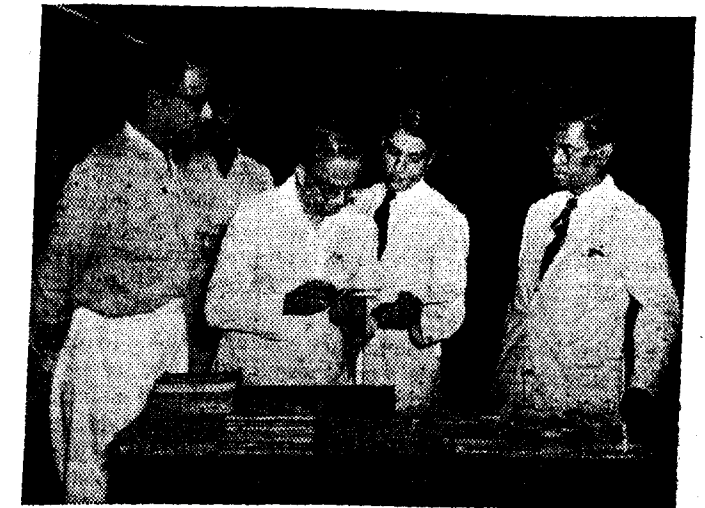
Post-War Services Reconstruction Fund

The Government of Madras have nominated the following to be the members of the Committee of Administration of the Madras share of the Post-War Services Reconstruction Fund for a term of three years from August 14, 1952 :—

Shri Sri Prakasa, Governor of Madras—Chairman; Dr. U. Krishna Rao, Minister for Industries and Labour; Dr. A. Lakshmanaswami Mudaliar; Dr. Rm. Alagappa Chettiar; Sri A. Appadurai Pillai; and the General Officer Commanding, Madras Area.

Dearness Allowance in Textile Mills : Committee's Suggestion Accepted

The Government have accepted the recommendation of the Tripartite Textile Enquiry Committee that the dearness allowance to the workers in textile mills, which is now being paid at less than three annas per point be raised to three annas per point over and above 100 points of the Madras City cost of living index number with effect from 1st April 1952. The Government have commended this recommendation to the managements of 20 specified textile mills in the State for adoption.

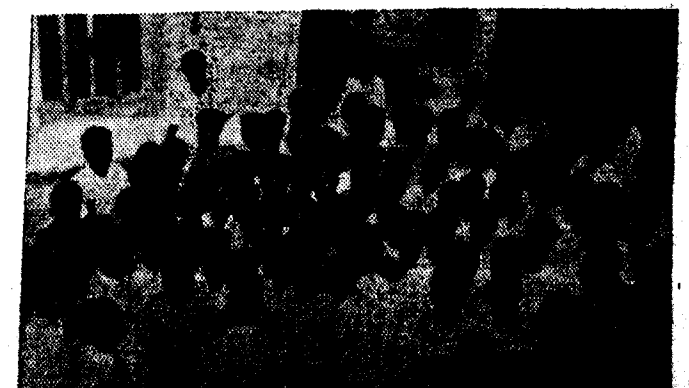


PRECISION INSTRUMENTS : Dr. U. Krishna Rao, Minister for Industries and Labour, examines some of the precision instruments manufactured by the trainees at the Industrial Training Institute, T'Nagar, Madras.



INDEX CARDS : The Minister for Industries and Labour examines the Index Cards in the Live Register maintained at the Regional Employment Exchange, Madras.

EMPLOYMENT SEEKERS : A large number of employment-seekers gathered in the Employment Exchange premises, and represented their problems and grievances to Dr. U. Krishna Rao.



Towards Better National Health

India's emergence as a Welfare State after two centuries of foreign rule threw the very heavy responsibility of building a healthy nation on the National Government. Primarily this responsibility rested with the Health Administration of the country, the Ministry of Health, Government of India, and the Ministries in charge of this field of activities in the States. But the health of the nation is a problem with very wide ramifications as it is tied up with the levels of food consumption, the standards of sanitation obtaining in urban and rural areas, the housing situation, etc., etc. For example, tuberculosis, it will be clear to everybody, is tied up with the social factors of poverty, bad housing, etc. For improving housing conditions in India alone, we need between 5,000 to 10,000 crores of rupees and for improving nutrition we require between 200 to 300 crores of rupees annually.

The problem of national health, difficult from the very outset, was further complicated by the developments in the recent history of the nation. Lakhs of uprooted people from East and West Pakistan have been streaming into India ever since 1947. The country has had to face natural calamities of the severest kind like the Andhra cyclone, the Assam earthquake, etc.

War Against T.B.

Though beset with so many difficulties, the Health Administration has been carrying on an incessant war against the diseases which sap the health of the nation. A review of the measures taken against tuberculosis will give an idea of this particular type of nation-building activity.

Tuberculosis kills five lakhs of people every year in India and leaves another 25 lakhs as active cases. On account of this disease alone, India suffers a loss in terms of man-days of about 900 to 1,000 million days, accepting a very modest estimate of loss of one year per T.B. sufferer.

The total number of Government and private T.B. institutions in India today is:

Sanatoria	49
T.B. hospitals	35
Clinics	110
T.B. wards	114

The total number of beds for the isolation and treatment of T.B. patients is 10,371. During the last three years there has been an increase of 1,000 beds per year. A sum of about Rs. 7 lakhs during 1949-50 and Rs. 5.5 lakhs during 1950-51 were given as grants to various T.B. institutions in India by the Central Government. In addition to this, a sum of Rs. 5 lakhs and Rs. 8.8 lakhs during 1949-50 and 1950-51 respectively were given as grants to various bodies for the treatment of displaced T.B. patients from the Rehabilitation Ministry's allotment for the purpose.

To fight this terrible disease, the Government of India has launched the B.C.G. Vaccination Programme. The vaccine is manufactured at the B.C.G. Vaccine Laboratory at Guindy under the supervision of an expert who received training in Copenhagen, and it conforms to the standards laid down by the World Health Organisation. In the B.C.G. campaign, the Central Government's share of cost consists of expenses on

account of the Guindy Laboratory, the Central B.C.G. Organization including propaganda and subsistence allowances to foreign personnel.

Control and Manufacture of Drugs

Without an adequate supply of medicines of the right quality, the health services cannot function properly. The Government has taken steps in three directions in this respect: ensuring that medicines are actually up to the declared standards; liberalisation of imports and encouraging the indigenous manufacture of drugs.

The Drugs Act of 1940 was brought into operation in April 1947. The necessary machinery for drug control which has been provided in the Act has been brought into being in the Centre and in the States and action is being taken against misbranded and substandard drugs. Samples of drugs which are imported into India are checked in the Central Drugs Laboratory. Under the guidance of the Central Government, all the Part A States have now adopted uniform rules under the Drugs Act and in the very near future Part B States are also expected to adopt these rules.

To make more quantities of drugs available to the public, the import of penicillin, insulin, sulpha drugs, arsenicals, etc., was liberalised by the grant of free licences in May 1950. In August 1950, imports of penicillin, chloromycetin and glucose medicinal were allowed from all countries and streptomycin from soft currency areas. The O.G.L. XXI of November 25, 1950, allowed the imports, besides the items mentioned above, of essential drugs like normal human plasma and vitamins from all countries and sulpha drugs, amino acids, X-ray diagnostic reagents, etc., from soft currency areas. The import duty on D.D.T. has been abolished so as not to hold up anti-malarial work in the various regions of India.

Penicillin and Sulpha

As for the actual production of drugs in the country, the Government of India is implementing a scheme for the production of penicillin and the Government of Bombay for the production of D.D.T. The Government of West Bengal and Madras who own cinchona plantations produce about 100,000 pounds of quinine. The country's annual requirement being 150,000 pounds, the Central Government is in consultation with these Governments on plans for increasing quinine production. The Haffkine Institute, Bombay, is manufacturing sulphathiazole on a commercial scale. It is equal to the best imported sulphathiazole. The Central Drugs Research Institute is carrying on, *inter alia*, research work on certain medicinal plants used in Ayurvedic and Unani systems of medicine.

The Government of India has accepted in principle the main recommendation of the Pandit Committee that the proposed Central Research Institute in Indigenous Systems of medicine should be established in association with the Gulab Kunwarba Ayurvedic Institute at Jamnagar. Details are being worked out in consultation with the Saurashtra Government. The Indian Council of Agricultural Research is working on a co-ordinated scheme for the cultivation of medicinal plants in Coimbatore, Pondicherry and Darjeeling.

and knowledge. Since the cost of equipment often discourages schools of modest means from going in for audio-visual aids, the State has to lend a helping hand. The Central Films Library of the Ministry of Education, Government of India, has at present a stock of over 800 16 m.m. films and a 1,000 thirty-five m.m. film strips and is functioning as a lending library for about 330 institutions all over the country, the average circulation of films being about 400 per month. The Library has now been extended to include other aids like posters, charts, models, graphs, etc.

In October 1951 on the occasion of the visit of Professor T. L. Green—an expert on audio-visual education—sponsored by UNESCO, an All-India Conference of Audio-Visual Education was organised by the Central Ministry of Education. The Conference studied the whole problem of developing and popularising audio-visual aids and ended to all the States the development of audio-education and establishment of educational museums which audio-visual aids could be made available.

Educational Handicaps

Biological research has shown that the low intelligence is due more to the absence of stimulating environment than to original mental inferiority. Geographical remoteness is not the only victims of such handicaps. Even in the midst of modern society, groups isolated by poverty, social prejudices, physical and mental handicaps. The blind people of the world form the most tragic instances of this type of isolation. The history of humanitarian work in this field has shown that they can become useful members of society. "For His servant who is lost and troubled" wrote our own blind Surdas, "He ranges far in loving search." But society has to do this search as a proxy of God.

According to the Census of India, 1931, population of the blind was estimated to be 601,370, a much higher figure in proportion to the total population than is the case with England or the U.S.A. On January 1, 1950, in implementation of the recommendations contained in the Report on 'Business in India' of the Joint Committee of the Central Advisory Board of Education and Ministry of Health, Government of India opened a Training Centre for the Blind Adults at Dehra Dun. The Centre has residential accommodation for 120 trainees. Spinning, net-making, blanket knitting, making blankets, cotton durries and wool carpets are some of the trades taught in the Centre. The training as well as board and lodging is free. The trainees receive clothing free of charge and a pocket sum every week as pocket allowance. After a certain degree of efficiency he is set to work produced. Elementary education is also provided for those who have had no academic education prior to their admission. Organised games are arranged for recreation and all trainees are given a chance to learn and appreciate music.

India has played an important part in the attempt to create a single Braille script for the blind of the world. At the suggestion made by the Government of India, UNESCO undertook a study of the possibility of evolving such a uniform script. UNESCO has since held three international conferences to examine this

problem and a considerable measure of uniformity has been attained. Dr. Suniti Kumar Chatterjee, a member of the Indian Expert Braille Committee, was the Chairman of the UNESCO's Consultative Committee on Braille which met in Paris in December 1951 to advise the Director-General of the UNESCO on the formation of a World Braille Council.

Education for Production

With the far-reaching reconstruction programmes to be implemented in the next few years in order to raise the standard of living in the country, India will be needing an army of highly trained technical personnel. Three schemes recommended by the Scientific Manpower Committee are already under implementation by the Central Ministry of Education: Research Training Scholarships; Practical Training Stipends and Grants to Universities and Research Institutions for development of research and post-graduate training facilities. The total expenditure on these schemes was Rs. 28,59,394 for 1949-50 and the figure for 1950-51 is Rs. 24,58,340. The All-India Council for Technical Education set up by the Central Government to advise on the development of higher technical education has appointed a Technical Manpower Committee to assess the needs of technical personnel during the next five years.

In the meantime, the Council has formed six All-India Boards for technical studies in the main branches of engineering and technology. The All-India Boards have formed courses in civil, mechanical and electrical engineering, metallurgy, commerce and business administration, architecture, regional town-planning, textile technology, applied art, chemical technology and chemical engineering. The Indian Institute of Technology at Kharagpur, established at a cost of nearly 56 lakhs of rupees, has been functioning from August 1951. Grants-in-aid have been given to institutions like the Indian Institute of Science, Bangalore; the Department of Chemical Technology, Bombay University; Dayalbagh Engineering College, Agra; Botany Department, Madras University; Department of Radio Physics and Electronics, Calcutta University; the Victoria Jubilee Technical Institute, Bombay; and the Engineering College, Annamalai University. The Indian School of Mines and Applied Geology, Dhanbad, has been reorganised, resulting in expansion of facilities for the training of mining engineers. A Directorate of Marine Engineering Training and a Residential Marine Engineering College have been established at Calcutta.

A Conference of Vice-Chancellors of Indian Universities and others interested in agricultural education was convened in New Delhi in November 1951 by the Ministry of Agriculture. It considered the problems of making the educated soil-minded and of improving the efficiency of agricultural workers. The Conference emphasised the need to reorient agricultural, veterinary and forest education and welcomed the formation of the land army.

Determined though the efforts have been in the task of re-educating India's millions, by the very nature of things they cannot be expected to yield results overnight. But the slow fruition of this programme will bring abiding benefits for the young generations that are growing into manhood today.

Britain Controls Foot-and-Mouth Disease

By JOHN HARRIS of the *Farmer and Stock-Breeder*, London.

The vast majority of informed opinion in Britain believes that the slaughter policy remains the best means of controlling foot-and-mouth disease in the United Kingdom. Research into other methods is continuously being undertaken, but for the moment there is no practical alternative to slaughter, and moreover, the policy has stood the test of time.

Britain began the slaughter policy, which involves killing infected animals and those that have been in contact with them, in 1892. The amount paid in compensation to owners of slaughtered animals has averaged over the past 25 years no more than £170,000 a year. Compare that with the £83,000,000 which this disease is estimated to have cost Germany in the 1937-38 series of outbreak alone. Britain's worst year was 1923 when compensation amounted to £2,200,000 and there were 1,929 outbreaks which involved the slaughter of 128,000 cattle, sheep and goats.

A relatively bad epidemic has been raging in Britain since last November; there have been about 450 outbreaks and 55,000 beasts have been slaughtered. But this is a tiny fraction of the 34 million cattle, sheep and pigs in the United Kingdom. The loss to an individual owner is tragic, and money cannot replace valuable breeding animals—the work of a lifetime—but viewed nationally the loss has been remarkably small.

Movement Restricted

When the disease does appear in Britain—there is strong circumstantial evidence that migratory birds are an important source of infection—an "infected area" is

immediately declared around the farm in question. Stock movement is restricted, infected animals are slaughtered, all those that have been in contact are traced. This last may be a big task especially if an infected animal has been in market. But day and night it goes on.

The slaughter policy is not, of course, peculiar to Britain. It is followed in the United States, Canada, South Africa, Norway, Sweden, Eire and so on. In countries where it has not been followed, the disease appears so frequently that slaughter cannot be enforced for economic reasons.

Vaccination is the usual alternative to slaughter, but the trouble with vaccination is that there are several types of foot-and-mouth disease and no vaccine fully effective against all of them has yet been developed. And it is expensive.

It is true, of course, that vaccination will reduce losses in countries where the disease is endemic and which have land frontiers, but it is just as true that at present it is no substitute for eradication where that is possible.

Britain has taken a lead in the campaign against this most contagious disease, not only by preventing it from becoming established in her own territory, but also by supporting strongly the team of scientists at the Foot-and-Mouth Research Station at Pirbright in the English country of Surrey. This institution, which supplies serum all over the globe, is the only one in the world, which, in addition to carrying out systematic research in its own laboratories and in various parts of the world, functions as a place of international reference to help other countries which are less favourably placed.

COMBATING FOOT-AND-MOUTH DISEASE: During an outbreak of foot-and-mouth disease in Britain, stringent precautions to avoid the spread of infection are put into operation. Here farm workers are disinfecting their shoes before going into the farm.



Training Classes for Farmers

With a view to popularise improved methods of agriculture, to educate conservative agriculturists on the application of organic and inorganic manures in economic doses and to obtain quick results by direct mass contact with the villages, training classes were conducted at several convenient centres in each taluk of all the districts.

Anantapur.—In Anantapur District, training courses were conducted in 68 centres; 1,390 persons including village officers and Revenue Inspectors attended the training classes. During the training course, instructions were given on (1) kinds of soils and their formation, (2) kinds of manures, their preparation and uses, (3) improved strains of seeds and their preservation and (4) plant protection. Examinations were also conducted at the close of training classes and prizes were awarded to the best trainees.

North Arcot.—In North Arcot District, training courses were held in 128 centres and 6,426 persons attended the classes. The trainees were enthusiastic ryots, school teachers, Revenue Inspectors and village officers. Instructions on improved methods of agriculture, application of organic and inorganic manures, preparation of compost, etc., were given to ryots.

South Arcot.—In South Arcot District, such training classes were conducted in several centres in each taluk. The advantages in adopting improved methods of agriculture were explained to the persons who attended the training classes. Instructions on the formation of soils, use of improved ploughs and seeds, preparation of rural compost, utilization of green manures and plant protection were given to the ryots, village officers, Revenue Inspectors, etc., who attended the classes.

Chingleput.—In Chingleput District, training classes were conducted in 38 centres in all the taluks and there was great response from agriculturists and village officers. With the help of Agricultural Department, instructions were given on climate and seasonal conditions, manuring of crops, use of improved strains, plant protection, cultivation of cotton, green manuring, efficient use of oil engines and pumpsets, etc.

Chittoor.—In Chittoor District, short training courses were conducted in convenient centres of the district. During the training classes, lessons were given on subjects in season and rainfall, soils and their classification, improved implements and their economic uses, improved seeds, manures, plant protection, etc. Enthusiastic local ryots, Revenue Inspectors, elementary school teachers and village officers who attended the classes were very much benefitted by the lessons.

Coimbatore.—In Coimbatore District, similar training classes were conducted in firka headquarters and in public meetings. Besides the Revenue Officials, leading ryots, village officers and teachers, officials of the Co-operative Department also attended the classes. Various subjects such as climate, soils, manures, implements, improved seeds, horticulture, fodder and subsidiary occupation were discussed and instructions were given during the classes.

East Godavari.—In East Godavari, training classes were conducted in six centres and instructions were given on

improved methods of agriculture. Revenue Inspectors and other subordinates attended the classes.

West Godavari.—In West Godavari District, training classes were conducted in two centres of each firka of the district. The courses were attended by the officers of Revenue Department, besides enthusiastic ryots, village officers and school teachers. During the courses, the subjects dealt with were climate and season, soils and manures, implements, seeds, insect pests, horticulture, subsidiary occupation, etc. About 5,000 (in total) persons attended the classes and the response is reported to be fair.

Guntur.—In Guntur District, training classes were held in convenient centres and instructions given on subjects like climate and season, soils, manures, implements, seeds, irrigation, plant protection and subsidiary items, etc.

South Kanara.—In South Kanara District, training classes on improved methods of agriculture, application of organic and inorganic manures, preparation of compost pits, etc., were conducted and the classes were held in 31 centres of the district. About 708 persons (289 village officers, 300 ryots, 19 Revenue Inspectors and about 100 elementary school teachers) attended the classes.

Krishna.—In Krishna District, training classes were conducted in important villages of all taluks. The Revenue Officers of the respective taluks, village officers, and influential ryots attended the training classes. Instructions on subjects like mechanised cultivation, improved seeds, fertilisers, green-manuring, plant protection work and cattle were given to those who attended the classes.

Kurnool.—In Kurnool District, training classes were conducted in 21 centres. During the courses, Taluk Supply Officers, Revenue Inspectors, village officers and ryots were present. The training classes enabled the trainees to understand the scope and working of the intensive cultivation schemes. The need for planting Glyricidia and Sesbania to step up production was also explained to those who were present during the training classes.

Malabar.—In Malabar District, training classes were conducted in 50 convenient centres and there was a large attendance of village officers, elementary school teachers, Revenue Inspectors and enthusiastic ryots during the training courses. The instructions imparted in the classes included all aspects of agriculture and improved methods of farming. Different kinds of manures, pest control, compost preservation and use of green manure were explained to those who were present during the classes.

Madurai.—In Madurai District, the training classes were conducted in all the taluks in 37 centres. About 1,546 persons attended the training classes. Instructions on seasonal operation, control of soil erosion, compost-making, tractor ploughing, Sesbania planting, improved methods of agriculture, application of organic and inorganic manures, use of improved implements, control of pests and diseases, selection of seeds, horticulture and subsidiary industries were given to the ryots. Village officers were also present at the classes.

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prepared an omnibus scholastic attainment test for studying the scholastic achievements of the children in Basic and non-Basic schools in Bihar. It has also started an experimental Basic school to conduct experiments in Basic education in an urban setting, as hitherto Basic education in the various States has been confined almost entirely to the rural areas.

Social Education

A black and white photograph showing a group of people, including men and women, gathered around a table covered with a patterned cloth. Some individuals are seated, while others stand. The scene appears to be an indoor gathering or meeting.

Many schools co-operated to make the Exhibition a success, designed to bring teachers and parents together, and explain to the public visual education programmes, citizenship training, Basic schooling and diversified courses.

EDUCATIONAL
EXHIBITION

A black and white photograph showing a group of men performing handstands in a row on a grassy field. They are wearing dark suits and white shirts. A crowd of spectators is visible in the background.

A high-contrast, black and white photograph showing a group of men, likely athletes, sitting on the ground in a circle. They are wearing light-colored tank tops and dark shorts. The background is dark and indistinct.

Audio-Visual Education

A high-contrast, black and white photograph of a man in a suit and glasses playing a harp. The image is grainy and has a dramatic, almost abstract quality due to the high contrast. The man is positioned on the left, looking towards the right. The harp is on the right, with its strings and frame clearly visible. The background is dark and textured.

Athletic demonstrations and dances by school children formed highlights of the Exhibition.

Nellore.—In Nellore District, the training classes were conducted in 23 centres. Village officers, Revenue Inspectors and elementary school teachers attended the training classes. Revenue Inspectors were given training on rural compost preparation. Demonstrations on rural compost making were also conducted. Instructions on intensive cultivation schemes, methods of assessment of the results, general survey on climate, soil moisture, improved implements, improved seeds, pest control and application of chemical manures, etc.

Nilgiris.—In the Nilgiris District, training classes were conducted in most of the villages. Elementary school teachers, enthusiastic ryots, Revenue Inspectors and village officers attended the training classes. Subjects that were dealt with in the training classes were crop competition, soil formation, preservation of soil fertility, manures and intensive manuring schemes, selection of good seeds. Detailed instructions were given on these subjects and there was a great response from elementary school teachers, ryots, Revenue Inspectors, Firka Supply Officers and village officers.

Ramanathapuram.—In Ramanathapuram District, training classes were conducted in 19 centres of all taluks and about 450 persons (officials, teachers and public persons) attended the training classes. The training classes were conducted by the Agricultural Demonstrators.

Salem.—In Salem District, training classes were conducted in 63 centres. The training classes were conducted by the Agricultural Demonstrators and were attended by Revenue Inspectors, village officers and ryots. Printed pamphlets on various subjects such as vegetable cultivation, fruit cultivation, etc., were distributed to the trainees.

Tanjore.—In Tanjore District, training classes were conducted in 54 centres of all taluks and about 910 persons including Revenue Inspectors and village officers attended the training classes. In a number of places where training classes were conducted, mirasdars and school teachers also were present. In all classes lessons on soil and climatic conditions pertaining to the district, the nature of crops that could be grown, Grow More Food schemes and targets fixed for the district were dealt with. Instructions on preservation of farmyard manure, rural compost, growing of improved paddy strains, importance of using chemical fertilisers, use of green manures, growing cotton in rice fallows, growing Sesbania and Glyricidia in wet lands and economic planting of paddy were imparted. Special emphasis on plant protection was also laid during the classes. The technique of accurate assessment of increased yield was also explained to Revenue Inspectors and village officers. Propaganda films on agriculture were also shown during the training classes. The conduct of the training classes generally had a beneficial effect not only on the Revenue staff but also on others who attended the classes.

Tiruchirappalli.—In Tiruchirappalli District, training classes were conducted in all the taluk headquarters of the district. Revenue Inspectors and village officers attended the classes. The classes were addressed by the District Agricultural Officer and instructions on the application of organic and inorganic manures, preparation of compost, etc., were given to the Revenue Inspectors and village officers. Training classes at firka level were also conducted for the benefit of enthusiastic ryots, elementary school teachers and others interested in the schemes.

Agricultural exhibitions on a small scale were also conducted when the preparation of compost was demonstrated and the activities of the Department explained in detail.

Tirunelveli.—In Tirunelveli District, training classes were conducted in two important centres in each of the firkas of the district. In 94 centres, such training classes were conducted. In all the classes, lessons on soils, manures, seeds, irrigation, pests and diseases, individual crops, horticulture and subsidiary occupation, etc., were given to those who were present. Written as well as oral tests were conducted by the Agricultural Demonstrators and certificates were issued to those who completed the training successfully. Attendance in all centres was satisfactory.

Visakhapatnam.—In Visakhapatnam District, training classes were conducted in 26 centres. In these classes, Revenue Inspectors, Firka Supply Officers, elementary school teachers and many enthusiastic ryots were present. Lessons were given on climatic conditions and their effects on various crops, soils and their suitability for different crops, important Grow More Food schemes, horticulture, subsidiary occupation, improved methods of agriculture, mechanised agriculture, etc. These training classes had given an incentive to the farmers to adopt improved methods of agriculture. Small exhibitions were also arranged during the training classes.

Srikakulam.—In Srikakulam District, training classes were conducted in 39 centres. During the training classes, tahsildars, Taluk Supply Officers, Firka Supply Officers and village officers and ryots were present. The training classes were conducted by the Agricultural Demonstrators and instructions on intensive cultivation schemes were imparted.

Soil Conservation for 6,000 Acres

The Government have sanctioned a scheme of soil conservation and land improvement with contour bunding as its main feature as a famine relief measure in respect of an area of 6,000 acres in Mulanur firka, Dharapuram Taluk, Coimbatore District. The work is expected to be completed within a period of six months. The scheme is a model one for the district and the Government have emphasised the fact that it is the responsibility of the ryots to see that similar contour-bunding work is taken up extensively in the dry and wind-swept parts of the district.

Wells: Time-Limit Extended

On representations made to Government for extension of the time-limit for completion of wells subsidised under the New Well Subsidy Schemes, 1948-49, 1949-50, 1950-51 and 1951-52 beyond 30th June 1952, the Government consider that, in view of the adverse seasonal conditions of last year, an extension of time should be granted in respect of the two latter schemes, viz., the New Well Subsidy Schemes, 1950-51 and 1951-52, and accordingly direct that time-limit for completion of wells be extended till 30th June 1953.

The Government also direct that steps should be taken for the recovery of subsidies granted under the New Well Subsidy Schemes, 1948-49 and 1949-50, in cases where the wells were not completed by 30th June 1952.

Address Your Enquiries for Any Information You Need

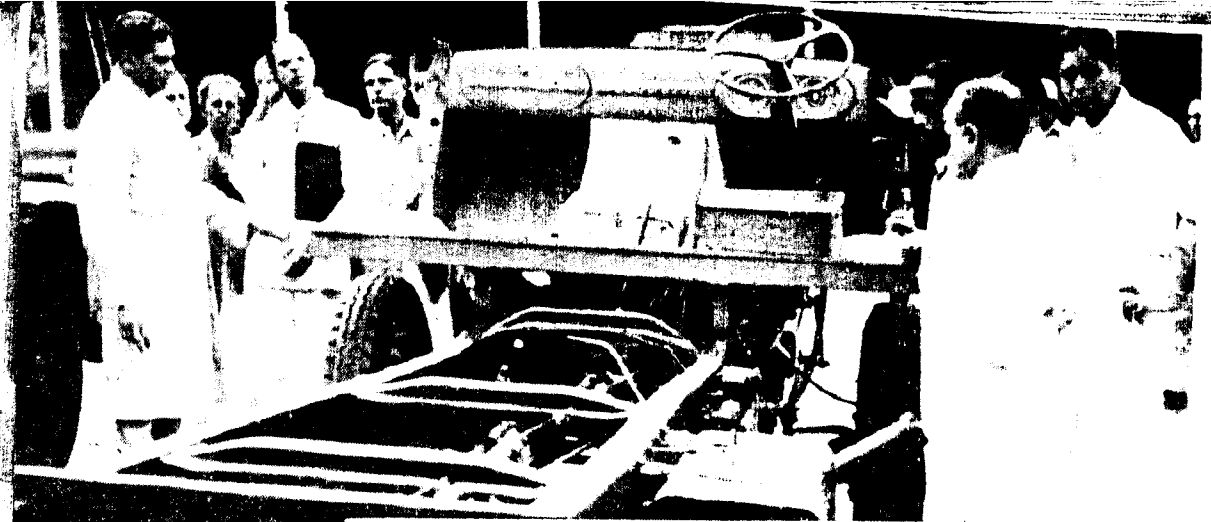
Designation of the Officer.	Jurisdiction.	For matters relating to
Executive Engineer (Food Production), Central, Madras.	Chingleput, North Arcot and South Arcot.	Works taken under Tank Improvement Schemes.
Executive Engineer (Food Production), Madurai.	Madurai, Tiruchirappalli, Tirunelveli and Tanjore.	
Executive Engineer (Food Production), Ramanathapuram.	Ramanathapuram ..	
Supervisor of Industries ..	Each district ..	Supply of H.B. sets of power drills, drilling wells for irrigation.
Compost Development Officer ..	Office of the Inspector of Municipal Councils and Local Boards.	Advice regarding manufacture of rural and urban compost.
Executive Officer of the Panchayat or Commissioners of Municipalities.	Each district ..	Supply of urban compost.
Secretary of the Local Co-operative Society.	Do. ..	Supply of urban compost if distributed through co-operative societies.
Deputy Registrars, Coimbatore, Erode ..	Coimbatore ..	Supply of chemical fertilisers. Iron and steel on agricultural implements and obtaining Government fallow lands on lease for cultivation of food crops. Obtaining of credit facilities for purchase of pump sets, sprayers and offer of improved agricultural implements.
Deputy Registrars, Madurai, Dindigul ..	Madurai ..	
Deputy Registrars, Tirunelveli and Tuticorin.	Tirunelveli ..	
Deputy Registrars, Vellore and Tiruvannamalai.	North Arcot ..	
Deputy Registrars, Cuddalore ..	South Arcot ..	
Deputy Registrars, Chingleput and Tiruvellore.	Chingleput ..	Enquiries relating to the execution of major irrigation schemes.
Deputy Registrar, Cuddapah ..	Cuddapah ..	
Deputy Registrar, Madras ..	Madras ..	
Deputy Registrar, Ootacamund ..	Nilgiris ..	
Deputy Registrar, Ramanathapuram at Madurai.	Ramanathapuram ..	
Deputy Registrars, Salem and Dharmapuri.	Salem ..	Fish seed collection and stocking supply of fish seeds, transport and marketing of fish, supply of processed prawns and supply of yarn to fishermen at subsidised rates.
Deputy Registrars, Tanjore and Kumbakonam.	Tanjore ..	
Deputy Registrars, Tiruchi (South) and Tiruchi (North).	Tiruchirappalli ..	
Executive Engineer ..	Each district ..	
Assistant Director of Fisheries, Vellore.	North Arcot, Chittoor and Chingleput.	
Assistant Director of Fisheries, Madurai.	Madurai and Nilgiris	All matters relating to fishery development and intensive cultivation schemes. Transport and marketing of fish.
Assistant Director of Fisheries, Tanjore.	Tanjore, South Arcot and Tiruchirappalli.	
Assistant Director of Fisheries, Tuticorin.	Tirunelveli ..	
Deputy Director of Fisheries, Madras North, South and Special.	Madras ..	
Fishery Marketing and Information Officer, Madras.	Madras ..	
Special Officer, Craft and Tackle, Madras.	Madras ..	Improved fishing craft and tackle and construction of mechanised boats.
Assistant Director of Fisheries, Mettur Dam.	Salem ..	The supply of fresh and salted fish from Mettur Dam.
Joint Director of Agriculture (through District Agricultural Officers).	Whole of Madras ..	Free fish cultivation advice.
District Agricultural Officers in all districts except Coimbatore.	Each district ..	Supply of oil engines and electric motor pumpsets under hire-purchase system.
		Hiring of tractors, bulldozers, allied implements, oil engines and petrol pumps. Sale of pipes and fittings and used petrol sets. Service for installation of new oil engines or repairs to oil engines or tractors owned by ryots.

MADRAS *Information*

March 1952
Price As. 3



Registered No. M-470
**NEW BUSES
FOR THE CITY**
New buses are being added to the Government Transport System in Madras City, to relieve the peak hour rush.

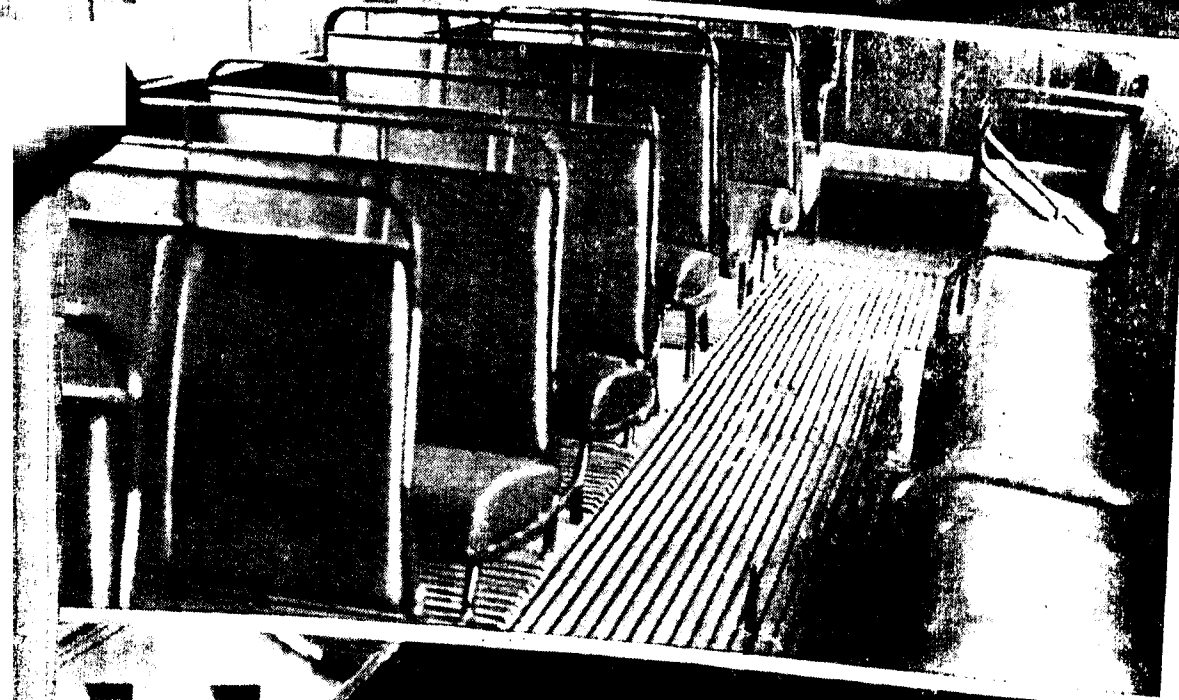


Above: A Bedford Chassis.
Right: Leyland "Tiger" Diesel bus with seating capacity of 45.



Left: The luxurious seating arrangements in the Leyland bus.

Below: A row of new buses marked for relief services.



AGRICULTURE

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MADRAS INFORMATION

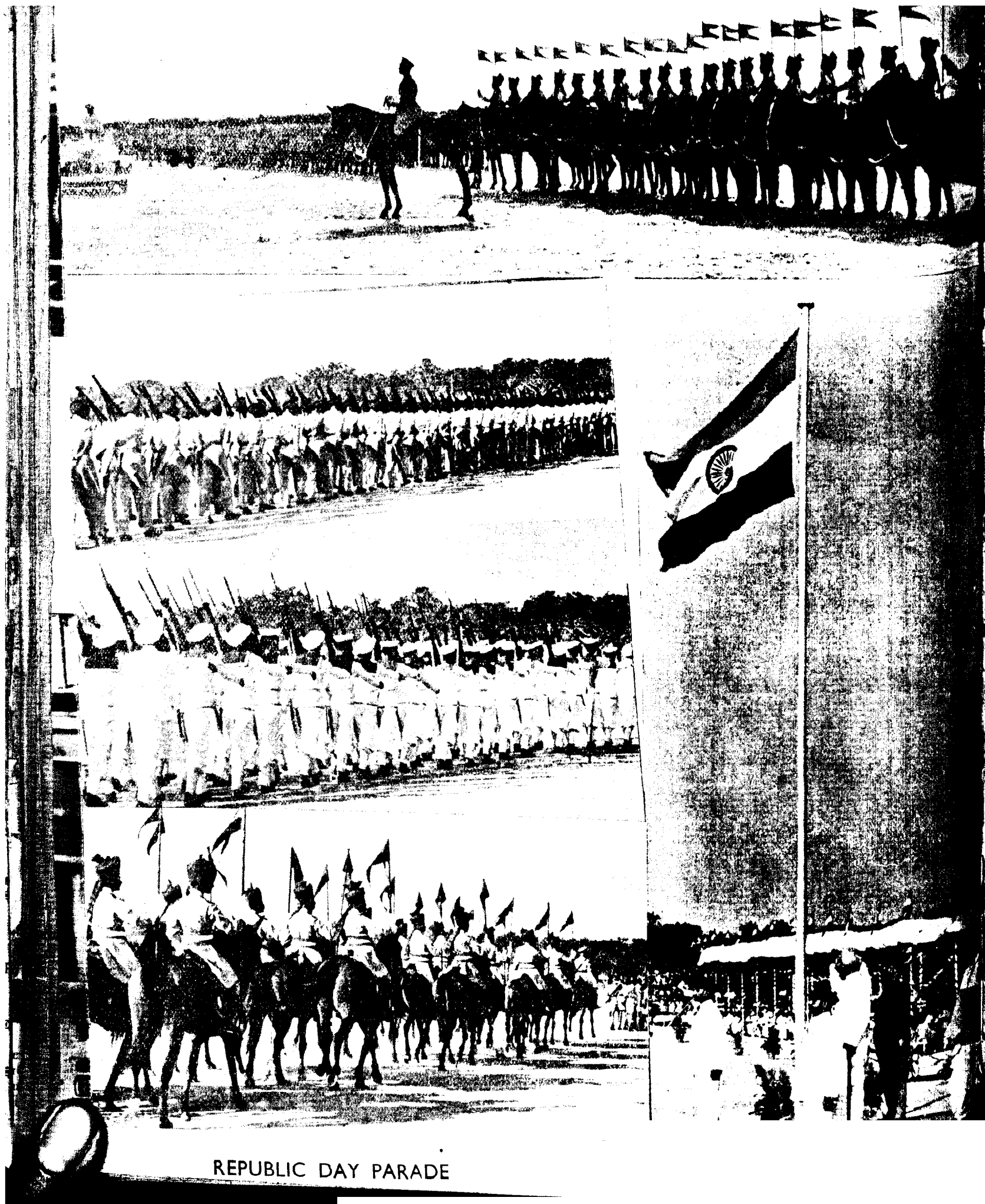
Designation of the Officer.	Jurisdiction.	For matters relating to
Regional Assistant Agricultural Engineer.	..	All technical advice on Agricultural Engineering matters on price information.
Research Engineer, Coimbatore	Coimbatore	All information regarding new and labour saving implements and tools for agricultural operations, their uses, advantages and other matters connected with research in Agricultural Engineering.
Assistant Agricultural Chemist, Government Malt Factory, Lawley Road P.O.	Coimbatore	Sale of malt extract with shark liver oil.
Executive Engineer, Chepauk, Madras ..	Chingleput Division.	Matters pertaining to the execution of Intensive Cultivation (Irrigation) Schemes.
Executive Engineer, Tanjore	Cauvery Division ..	
Executive Engineer, Tanjore	Grand Anicut Canal Division.	
Executive Engineer, Tanjore	Vennar Division ..	
Executive Engineer, Tiruchirappalli ..	River Conservancy Division.	
Executive Engineer, Cuddalore	South Arcot Division.	
Executive Engineer, Tiruchirappalli ..	Tiruchirappalli Division.	
Executive Engineer, Madurai	Periyar Division ..	
Executive Engineer, Ramanathapuram.	Ramanathapuram Division.	
Executive Engineer, Palayamkottai ..	Tirunelveli Division ..	
Executive Engineer, Vellore	North Arcot Division.	Granting agricultural loans, supply of seeds, fertilisers, agricultural implements, pesticides, literature on agricultural implements, etc.
Executive Engineer, Mettur Dam	Salem Division ..	
Executive Engineer, Coimbatore	Coimbatore	
Agricultural Demonstrator	Each taluk of all districts.	
Collector	Each district	
Revenue Divisional Officer .. ..	.. ..	
Tahsildar	Each taluk of the district.	
Secretary of the co-operative society of of your village.	.. ..	
Deputy Registrars of Rajahmundry and Kakinada.	East Godavari	
Deputy Registrars of Guntur and Bapatla.	Guntur	
Deputy Registrars, Nellore (North) and Nellore (South).	Nellore	Supply of chemical fertilisers. Iron and steel on agricultural implements and obtaining Government fallow lands on lease for cultivation of food crops. Obtaining of credit facilities for purchase of pump-sets, sprayers and offer of improved agricultural implements.
Deputy Registrar of Anantapur	Anantapur	
Deputy Registrar of Bellary	Bellary	
Deputy Registrar of Chittoor	Chittoor	
Deputy Registrar of Eluru	West Godavari	
Deputy Registrar of Vijayavada and Machilipatam.	Krishna	
Deputy Registrar of Kurnool	Kurnool	
Deputy Registrar of Rajahmundry and Kakinada.	East Godavari	
Deputy Registrars of Guntur and Bapatla.	Guntur	
Deputy Registrars, Nellore (North) and Nellore (South).	Nellore	

AGRICULTURE

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MADRAS INFORMATION

Designation of the Officer.	Jurisdiction.	For matters relating to
Executive Engineer (Food Production), Visakhapatnam	Srikakulam and Visakhapatnam.	Works taken under Tank Improvement Schemes.
Executive Engineer (Food Production), Eluru.	West Godavari, East Godavari and Krishna.	
Executive Engineer (Food Production), Nellore.	Nellore and Guntur.	
Executive Engineer (Food Production), Chittoor.	Chittoor, Cuddapah and Salem.	
Assistant Director of Fisheries, Visakhapatnam.	Srikakulam, Visakhapatnam and East Godavari.	
Assistant Director of Fisheries	Krishna, Guntur and West Godavari.	
Assistant Director of Fisheries, Anantapur.	Anantapur, Cuddapah, Bellary and Kurnool	
Fishery Marketing and Information Officer, Madras.	All districts	
Assistant Agricultural Engineer, Soil Conservation Scheme, Bellary.	Bellary	
Principal, Agricultural College, Bapatla.	Bapatla	
Executive Engineer, Vizianagaram ..	Visakhapatnam North Division.	Fish seed collection, stocking and supply of fish seeds, transport and marketing of fish, supply of processed prawns and supply of yarn to fishermen at subsidised rates.
Executive Engineer, Vizianagaram ..	Visakhapatnam South Division.	
Executive Engineer, Nidadavole	Godavari Western Division.	
Executive Engineer, Dowlaishwaram ..	Godavari Eastern Division.	
Executive Engineer, Dowlaishwaram ..	Godavari Central Division.	
Executive Engineer, Vizianagaram ..	Grow More Food Division.	
Executive Engineer, Vijayavada	Krishna Eastern Division.	
Executive Engineer, Vijayavada	Krishna Central Division.	
Executive Engineer, Guntur	Krishna Western Division.	
Executive Engineer, Vijayavada	Guntur Division	
Executive Engineer, Vijayavada	Vijayavada Division	Matters pertaining to the execution of Intensive Cultivation (Irrigation) Schemes.
Executive Engineer, Bellary	Bellary Division ..	
Executive Engineer, Madanapalle ..	Madanapalle Division.	
Executive Engineer, Kurnool	Kurnool Division ..	
Executive Engineer, Nellore	Nellore Division ..	
Executive Engineer, Kandukur	Rallapad Project Division.	
Deputy Registrar, Malabar (North) and Kozhikode.	Malabar (South) ..	
Assistant Director of Fisheries, Kozhikode.	Malabar	
Special Officer, Craft and Tackle, Madras.	Madras	
.. ..		



REPUBLIC DAY PARADE

Madras Information

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"WE SEEK TO SERVE AND NOT TO COMPETE"

March 1

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COVER PAGE—

Little Gandhi, the youngest inmate of the Government School for Blind, Poonamallee, learns to use Montessori appliances to develop sense of touch.

SECOND COVER PAGE—

H.E. the Maharaja of Bhavnagar, Governor of Madras, reviews the troops and takes the salute at the March Past by Army, Naval and Police Units at the Republic Day Parade on January 26, 1952, at the Island Grounds, Madras City.

Designation of the Officer.	Jurisdiction.
Superintendent, Fisheries Technological Station, Kozhikode.	Malabar
Executive Engineer, Kozhikode	West Coast Division.
Deputy Registrars, Mangalore and Kasaragod.	South Kanara

For matters relating to
Semi-dried prawns—manufacture and supply.
Matters pertaining to the execution of Intensive Cultivation (Irrigation) Schemes.
Supply of chemical fertilisers. Iron and steel on agricultural implements and obtaining Government fallow lands on lease for cultivation of food crops. Obtaining of credit facilities for purchase of pumpsets, sprayers and offer of improved agricultural implements.

Drawbacks in the Kale Spinning Machine

Several enquiries are being received about spinning machines manufactured in India. Perhaps the following information regarding the Spinning Machine manufactured by Sri Kale may be useful. The Committee appointed to consider the problem relating to production and supply of yarn to the Handloom industry has given the following opinion regarding this machine:—

"Sri Kale's spinning unit with 10 spindles which is a finished model and which is capable of being run by one operator after short initial training in any home of the cotton-growing area, where electric power is available, producing more than 2 lb. of 20 yarn per 8 hours' shift, is a unit that should be popularised."

The Textile Commissioner, however, reports that the Auto-Spinner suffers from the following defects:—

(i) High cost approximating to Rs. 1,500 per machine which would be beyond the reach of even a well-to-do weaver, particularly when it is considered that yarn spun on it during eight hours would be sufficient to feed only one loom;

(ii) the wages earned by a spinner would comparatively be low and would not constitute a living wage in the urban, semi-urban areas where it could be worked;

(iii) judging from the results of tests incorporated in the penultimate paragraph of the Committee's Report the yarn spun on Kale's units will be rather uneven and nappy besides containing kitties. The preparatory processes, namely, carding, roving and drawing in the Auto-Spinner are not the same as these obtaining in the mills, while the blowroom processing is completely eliminated. Consequently the yarn spun by it will be inferior to mill-spun yarn in quality and strength variations in count and tensile strength will also vary very widely.

In view of the above, the yarn may not be as much useful for weaving on handlooms as mill-spun yarn unless superior type of cotton is used. This would mean increased cost of production. Some other experiments are being carried on at different centres. The results are not finalised.

Gift of Mattresses for Hospital

The Government have accepted with thanks the gift made by Sri Keshreddy Balarami Reddy, Sawayapalayam, Kavali, of four cotton mattresses and four cotton pillows for use in the maternity ward of four beds, for the Government Hospital, Kavali.

Price of Milo Reduced

Under the revised food policy, the Government of Madras have *inter alia* decontrolled and derationed the distribution of milo but price control is retained. There is no limit on the quantity of milo that a consumer can purchase.

In order to make available milo at cheaper rates to consumers the Government of Madras have decided to reduce the prices of milo and issued orders that milo should be sold to wholesalers at Rs. 8-8-0 per imperial maund with immediate effect. This reduction in price will be given effect to on the stocks now with the wholesalers. Consequent on this reduction in the price, the retail price to consumers will be about six annas six pies per Madras measure. The actual retail price may vary from place to place depending on transport charges, etc. and these retail prices will be fixed and notified by District Collectors. The retail sale price should not exceed the rate fixed by the Collector.

As the distribution of milo is completely decontrolled and derationed except for price control, it is open to fair price shop-keepers or to any trader intending to deal in milo in retail, to obtain milo stocks from wholesalers at the revised rates and distribute to the consumers at the revised rates fixed by Collectors.

The public are informed that ample stocks of milo are available with the Government and they desire that the consumers should take advantage of the reduction in price and purchase as much quantity as they require. In view of the substantial reduction in price it is hoped that the merchants will take up the trade in milo more effectively than hitherto, so that it may conveniently be made available to consumers everywhere in the State even outside the fair price shops. In fair price shops milo will continue to be made available as usual.

Order Cancelled

The Government have rescinded the order relating to the ban on the movement of foodgrains into the Kasaragod Taluk from other taluks in South Kanara District.

South Arcot Lignite

By DR. C. V. S. RATNAM, PH.D., Member, Expert Committee, Lignite Investigation.

Part II—Utilization

Until the discovery of large deposits of it in South Arcot District in Madras State, lignite was practically unknown in our country. The term "Lignite" itself was not comprehensible to a large number of us until recently. The South Arcot lignite deposits have been under active investigation by the Government of Madras and India since 1947.

The lignite, a member of coal family, is different from the most commonly used variety of coal in India, bituminous coal, in three ways. The moisture content in lignite is relatively high, sometimes over 50 per cent. Lignite when mined and exposed to atmosphere, disintegrates into small pieces, as the moisture in it evaporates into the air. It is not possible to produce large blocks of coherent coke by heating lignite out of contact with air, as is done in the case of bituminous coal. The lignite of South Arcot contains 35 to 45 per cent moisture. The abovementioned special nature of lignite gives rise to various doubts and speculations in the minds of lot of people as to the utility of lignite in domestic and industrial fields. These doubts are due to the lack of experience with lignite in this country.

If we consider for a moment the amount of industry built up in Germany with brown coal (lignite) as basis all these doubts do not arise. One of the most important fuels available in Germany is brown coal and this coal is put to a great number of uses and was greatly responsible for the German leadership in various fields of industry. Large amounts of lignite are also being used in Australia, U.S.A. and Canada.

Fuel or Chemical Raw Material

Lignite can be looked upon both as a fuel and as a chemical raw material. As fuel and as chemical raw material lignite finds many and varied uses.

Many forms of lignite are used as fuel. Combustion Engineering developed means for burning natural lignite in furnaces producing steam. Natural run of the mine lignite containing moisture up to 37 per cent is being burned in furnaces now in operation in the U.S.A. This lignite is also used for domestic stokers. The most common types of equipment used for burning this natural lignite are spreader stokers, travelling grates and pulverised fuel burning equipment. Recently the Consolidated Edison Company of Chicago developed what is called a "Cyclone Burner" in which coal of sizes up to an inch are fed to the burner and the molten ash is slagged off. The burner is very compact and the present units are built so that a single unit can produce enough steam for 100,000 K.W. generator. Experiments were conducted in this Cyclone Burner with lignite, especially from North Dakota, U.S.A. These tests are successful and Cyclone Burners can be usefully employed for burning lignite, where large power stations are required. The South Arcot lignite, very similar to U.S. lignites, can be used in this burner.

Because of the high moisture content of lignite and the consequent low heat content per unit of fuel, the distance

over which a natural lignite can compete successfully with bituminous coal with lesser moisture content is limited due to freight rates. In North Dakota, U.S.A., the approximate distance over which natural lignite can successfully compete with bituminous coal is around 250 miles from the mine site. Conditions in South India are different. The bituminous coal mines of the North are nearly 1,000 miles away from most coal consuming centres in the South and this aspect of freight rates is not likely to play an important role in the development of South Arcot lignite mines. The existing industry in the South is being starved of coal supplies and practically no new industry can be started here for want of power. The hydro-electric power in use in South India is also in short supply due to the growth of consumer demand and the failure of monsoon over a long period of time. Lignite from South Arcot mines, if put on the market at a reasonable price, will prove a boon for the industrialization of South India.

In a Processed Form

To distant markets lignite can be supplied in a processed form. Much of the moisture in natural lignite can be taken out at the mine site itself, and the upgraded product can be sent to larger distances than is possible with natural lignite. This is being done in Australia, where a steam drying process called "Fleissner's Process" is being used to dry lignite without at the same time obtaining any disintegration of lignite during the process of drying. Extensive work on this process has been carried out by the United States Bureau of Mines and the process was found successful as far as American lignites are concerned. This can very well apply to South Arcot lignites. Dried South Arcot lignite can be sent all over South India to meet growing fuel demands in this region.

Lignite briquettes have extensive markets in Germany, Australia, Japan, Europe and to some extent in the U.S.A. Here powdered and dried lignite is compressed by pressure into small briquettes. To help this compression a binder, usually asphalt pitch, is added in a large number of cases.

Briquettes are Ideal Fuel

The special nature of German brown coal makes it possible to briquette it without the addition of any extraneous binder. Thus the briquetting cost is very much reduced, because in briquetting lignite with binder, the binder is a very expensive item. Experiments conducted on South Arcot lignite in Germany and Switzerland showed that it can be briquetted without a binder, a very welcome property considering the fact that we have to import asphalt binders from abroad and that the present cost of such materials is about Rs. 450 per ton.

Lignite briquettes can become ideal fuel for domestic purposes and for existing industries using high grade coal and for buses running on charcoal, if these briquettes are partially carbonized at about 800°F. The carbonization yields low temperature tar from which can be obtained a large number of chemicals, wood preservatives and petroleum products and carbonized charbriquettes. The raw lignite has a heating value of 8,500 to 7,000 B.T.U.



REPUBLIC DAY CELEBRATIONS IN DELHI: The Indian Republic Day was celebrated in the Capital with great enthusiasm on January 26, 1952. People in their lakhs witnessed the impressive Republic Day Parade in which men drawn from all the Services participated. The President, Dr. Rajendra Prasad, took the Salute at the March Past. The pageantry procession which followed immediately after the units of the Armed Forces, represented the culture of different States and Regions in India. There was a March Past of Delhi school students followed by a float item tableau showing the educational and youth activities in the country. Photo shows the Naval Contingent passing through Connaught Circus, New Delhi.

EDUCATION

3

MADRAS INFORMATION

Education of the Visually Handicapped

By SRI K. BAPAYYA, M.A., M.SC. (HONS.), B.ED., Special Officer, Government School for Blind, Poonamallee

The earliest organised effort for the Education of the Visually Handicapped can be traced to France which holds the unique honour of being the first to establish a School for Blind "The Institute National Des Jeunes Aveugles" at Paris in 1784. It was only a century later that some attempt can be said to have been made in that direction in our country. Due to the pioneering efforts of the S.P.G. Mission, the twin institutions at Amritsar and Palamcottah, one in the extreme north and the other in the southernmost corner of our country, were started in the years 1887 and 1890 respectively. Since then, there appears to be a steady growth both in the number of schools started and the number of pupils benefited by them. While most of these institutions have their origin in the early educational efforts of the Christian Missionaries, our School at Poonamallee has the distinction of being one of the very few schools founded by the philanthropically-minded public and conducted purely on secular lines.

In the year 1926, the Corporation of Madras undertook to start a combined school for Blind and Deaf at Royapuram. The Provincial Government extended their kind help by way of sanctioning a grant-in-aid, but due to paucity of funds available with them, the authorities of the Corporation were constrained to proceed cautiously with their new enterprise. But when the Madras Association for the Blind was started in the year 1929 with His Excellency the Governor of Madras as the First President and Mr. E. Conran Smith, the then Commissioner, Corporation of Madras, as the First Secretary, a new chapter in the history of this institution can be said to have commenced.

Good Response from the Public

The appeal made by the Board of Governors of that Association received a good response from the generous public and they could succeed in acquiring the imposing buildings then under Military occupation, at Poonamallee, with an extensive site of thirty acres, from the Government of India at a concessional rate. Thus in 1930, the Blind Section of the Corporation School was finally installed in its present premises under the name of "Victory Memorial Blind School," its management being transferred to the Association. The strength of the pupils admitted then was only seventeen as compared with its present strength of one hundred and forty.

Mr. William Bell from Scotland was invited to be its first Principal and his valuable services extending over a period of eleven years contributed in no small measure for its successful organisation and all-round development. It was really unfortunate that his endeavours in this direction so well begun and so sincerely pursued should have come to an abrupt end due to his sad and sudden demise while on active service, in the last Great War in the year 1941. Mrs. D. M. Bell by offering her services as the Correspondent of this institution tried to continue this work of very great humanitarian value to which her late lamented husband dedicated his life. Though she could serve in that capacity only for a short period, her heroic efforts in this direction, especially at a time when she was still in the throes of her great sorrow, are in no way less commendable.

Government Assumes Responsibility

With the advent of our Independence and formation of the National Government, the interests of these unfortunate blind justly received the immediate attention of the authorities. The Government for the State of Madras at first assumed the responsibility of the administration of this institution as Agents of the Association from 3rd July 1948 to 30th June 1950, and on 1st July 1950 it came under the complete control and management of the Government. From that time, it has come to be known as "The Government School for Blind, Poonamallee."

This is a residential institution where most of the pupils coming from very poor families seek admission. All of them are provided with free boarding, lodging, clothing, medical aid and educational facilities. Admission is extended to all bona fide blind persons irrespective of race, colour, creed or sex. Provision is made for catering to the needs of the inmates of different age-groups, capacities and inclinations. The Educational Section, the Industrial Section and the Boarding Section, form the main features of this institution at present. A sheltered workshop under the protection and management of the Government for providing facilities for the trained and accomplished workers to become self-supporting, self-reliant and self-respecting citizens of the State will shortly be opened soon after the completion of repairs to one of the barracks in our premises.

General Education

Our senses being the gateways of knowledge, all education necessarily begins with sense-training. This becomes all the more important in the case of the Blind who are deprived of the most important sense of sight and have to depend more upon the use of the remaining senses. Hence it is that children of the pre-school age who are admitted in their infancy are given adequate training in this direction with the Montessori appliances, that it may facilitate their progress in their later stages of development.

It will not be out of place if a passing reference is made regarding the current code universally adopted for teaching the Blind, that the "Modus Operandi" of the various tangible appliances utilised for the purpose may be easily understood. The ingenious invention of Louis Braille, a Frenchman, destined to usher a new era in the education of the Blind, owes its origin to the calamity which befell him at the very tender age of three. Total blindness descended on him as a result of his trying to imitate his father who was a saddler by profession, by meddling with some sharp instruments in their workshops. He evolved a system of embossed characters comprising six dots arranged in two vertical lines forming a cell. Different groups of these raised dots represent different letters, syllables, words, marks of punctuation and numbers. By the acceptance of the principle of "same sign, same sound" this system has found universal application for the education of the Blind throughout the world. It has come to stay as an international code named after its inventor 'Braille.'

per pound whereas the carbonized briquettes will have a heating value of about 11,000 to 12,000 B.T.U. per pound and will in no way be different from high grade coals. The carbonized briquettes will have good burning qualities and can be used for bus and lorry transportation and as a smokeless fuel for household purposes. Handling problems will become very simple with carbonized briquettes.

Carbonization Process

Last year, a process for drying and carbonizing lignites was developed by the United States Bureau of Mines. This process, incorporating the latest knowledge in engineering practice, promises to be a very successful way of processing lignite. The Aluminium Corporation of America is now constructing a plant in Texas designed by the engineers of the United States Bureau of Mines. This plant will carbonize about 7,000 tons of lignite every day producing char for power plant use and low temperature tar from which petrol and other by-products will be obtained. This process has great potentialities in our country.

South Arcot lignite can be used as a chemical raw material from which a great many chemical substances may be obtained.

One of the important uses to which South Arcot lignite can be utilised is for the reduction of large proved iron ore resources of this State to iron and steel. The lack of coke and coal has been the main obstacle for a large scale iron and steel industry in South India. Although lignite does not produce coke, when carbonized it can be used for the reduction of iron ores to metallic iron. These processes which make use of non-coking coals for the reduction of iron ores are called direct reduction processes and they have been successfully operating in Sweden. Similar plants were in commission in the U.S.A., Japan and Germany during the last war. This process is of very significant interest to our State.

Good Source of Hydrogen

One of the chief raw materials for making ammonia and ammonia fertilisers like ammonium sulphate, is the hydrogen which is produced by electrolysis in a large number of South Indian factories, making hydrogenated oils, fertilisers, etc. Lignite is a good source for the production of hydrogen. Gasification of lignite has been successfully done in Germany, U.S.A. and other countries for producing water gas, domestic heating gas, hydrogen and synthetic gases, the last of which contains mixture of carbon monoxide and hydrogen. With the proper processing of synthetic gas products like petrol, various alcohols, etc., can be obtained.

Experiments so far conducted indicate that South Arcot lignite contains good quantities of wax useful in a number of industries. Wax obtained from lignite has been a German monopoly hitherto. These waxes are used in making polishes, insulating materials and the like. South Arcot lignite promises to be a good source of this wax, called "Montan Wax" in the trade.

Role in Southern Economy

It can be seen from the information given above that South Arcot lignite has various applications in the industry and economy of South India. The lignite deposits can supply adequately the growing fuel demand for the existing industries, assure fuel for the future industries, furnish

fuel for domestic service and buses, thus preserving forest wealth and acting as chemical raw material for production of iron and steel from iron ores and for the manufacture of fertilisers, petrol and liquid fuels, and various other products.

The deposits of coal in South Arcot amounting to nearly 2,000 million tons are the only significant coal deposits yet discovered in South India. No other deposit seems to be in sight. The present supply position with regard to coal is not satisfactory. The Coal Commissioner of India estimated that the present requirement of coal for South India is around three million tons. Only about three-fourths of these requirements are met at present. The development of the South Arcot lignite mines seems to hold out great promise for the South.

(To be continued)

Benefit Performance

In aid of its Building Fund, the N.G.O. Association, Madras City Centre, arranged as part of the 'Independence Day' celebrations, a benefit performance *Kalvanin Kathali*, a social drama, written by "Kalki" and staged by Messrs. T.K.S. Bros. at the Kalamandapam open air theatre, National Girls' School, Triplicane, at 6-30 p.m. on 17th August 1952 under the immediate presence and patronage of Sri C. Subramaniam, Finance Minister, Government of Madras. Over 5,000 people, mainly Government servants and their families, witnessed the drama.

Just before the close of the performance Sri M. J. Aruliah, President of the City Centre, welcomed the President of the function, and announced the names of donors.

Sri C. Subramaniam then spoke congratulating the organisers and Messrs. T.K.S. Bros. for their splendid performance. He observed that the Government do realise the sufferings of the N.G.O.s. and added that it was not the Government servants alone that suffered and that when the country became a land of plenty and prosperity all including them will be happy. He wished that every one should do his or her duty wholeheartedly and Government servants should help to enforce law and order, they themselves being law-abiding.

Sri T. K. Shanmugham compared the N.G.O.s. to the roots of a tree and observed that the tree can flourish only if the roots are well nourished and properly protected. In proposing a vote of thanks Sri P. R. Subramaniam pointed out that the drama was significant in that it characterised the unflinching loyalty of a Sub-Inspector of Police who was also an N.G.O.

Bed Strength in Hospitals Increased

The Government have sanctioned the increase of bed strength in the following hospitals in the State:—

Headquarters Hospital, Vellore, from 133 to 158; Mental Hospital, Waltair, from 164 to 210; Government Hospital, Kancheepuram, from 75 to 131; Government Hospital, Srivilliputtur, from 16 to 30; Kasturba Hospital for Women and Children, Madras, from 407 to 515; and Headquarters Hospital, Salem, from 235 to 295.

MY INDIA

By JIM CORBETT

Published by the Oxford University Press

Price: Rs. 6-12-0.

Pages 190.

Jim Corbett's *Man-eaters of Kumaon* was a literary tour de force, a best seller that was chosen as Book-of-the-Month by many societies. It is gratifying, therefore, to note that his latest offering not merely sustains the earlier reputation, but also enhances his worth as a writer of note. The title, though it sounds commonplace, is apt, for the book clearly establishes his moral right to the use of the possessive pronoun.

My India is a collection of stories and sketches about men and animals, heart-warming studies of people and beasts among whom the author had lived for over two decades. His is not the dispassionate curiosity of the field anthropologist, or the patronising interest of the social worker; he had adopted their way of life, shared their joys, suffered more their sorrows. Conventional attitudes thus find no place in such complete identification; the author is sincere in his sentiments because he has got under the Indian skin.

Corbett's forte is the jungle theme, and many of the sketches of village life in this collection have the fascinating backdrop of the U. P. forests. But if there is any predominant motif in the book, it is the subject of

loyalties. *My India* is a passionate testimony to this quality of loyalty that he evidently admires most among his "fellow-Indians", and each vignette describes one facet or attribute of this quality in the simple code of the rural folk.

The simple straightforward style of the artless narration is the art that conceals art; without the spurious aid of strained effects and purple patches Corbett heightens the emotional impact of the sketches. It would be needless to pick out the characters for special consideration; all of them will certainly persist long enough in the memories of the thoughtful reader... in the Naini Tal memories of the thoughtful reader... in the Naini Tal group we have the resolute Punwa who toiled like a beaver to bring up her children, Sher Singh and his bull, the sacrifice of the miserly husband Chadi, the mystery of Punwa and Putali (the babes in the wood), the incredible heroism of Haria who saved his brother Narwa from the tiger. The long short story *Sutana*, *India's Robin Hood* appeared in *Lilliput*. The other stories in the book deal with equally worthy characters at Mokameh Ghat, beyond Patna.

This is a book of particular appeal to those who cherish human values; a book all should be made to read, more so our schoolboys and undergraduates, even to the drastic extent of having it prescribed as a text-book for non-detailed study!

—P.V.S.

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EDUCATION

Learning Braille

After the Kindergarten stage, the child gets initiated into the mysteries of language study. A letter-plate consisting of a wooden block with six slots represents a cell. Making use of marbles as inserts, different Braille characters are formed. By exercising his sense of touch, the pupil is made to recognise them. The idea is to form bigger dots with the marbles following the same principle of using big print in books for small children in the schools for the sighted for purposes of reading. Also, manipulations with these marbles for the formation of these Braille characters implies the principle of play-way of Education.

By introducing another device—Braillet board—a wooden-block with smaller slots and iron-pegs with smaller heads than the marbles, the child is made to learn the formation of small words making use of the knowledge previously gained in the earlier stage.

After a successful mastery in the technique involved in reading embossed characters by feeling with his fingers, the child is given a specially prepared book in Braille to read his first lessons.

Braille Writing Frame

Next comes the stage of writing when a special appliance called the 'Braille Writing Frame' consisting of a paper clamp, a guide with two rows of cells, and style for punching the letters in dots, and a slate on which the extra thick paper is placed. The peculiarity in the use of this lies in the fact that the writer has to proceed from the right to left reversing the signs at the same time, so that the dots can be read from left to right.

Employing the same principle involved in the construction of those for the sighted, typewriters for the Blind are invented with the extra facilities of having to deal with the limited number of seven keys, one of which is used for spacing. Thus in the final stage, the pupil is made to feel self-confident and his blindness ceases to be so severe a handicap as it initially appears to be. He can read and write with as much facility and freedom as a sighted person, after passing through the different stages enumerated above. It may be interesting to note that highly contracted forms for the indication of words and syllables has been evolved in English and books are printed in the same. Means of taking notes in Shorthand are also rendered available for the Blind.

Study of Mathematics

Rev. W. Taylor, one of the Canon Choral of Yorkminster, developed a very convenient device for making

TYPING: A blind student uses the Braille typewriter.



the study of Mathematics easily accessible to the visually handicapped. It comprises a metallic board with star-shaped octagonal slots in which square pegs of two kinds—Type I for arithmetic and Type II for algebra—can be inserted. On one side of the peg of Type I, there is a raised ridge forming a bar while on the corresponding side there are two raised dots. Either the bar or the pair of dots can be made to occupy eight different positions in the octagonal slot. Corresponding to these 16 positions in all, we have the arithmetic signs represented by numbers 1-8 with reference to the eight different positions of the bar and 9, 0, +, -, ×, ÷, decimal point and √, corresponding to the eight different positions of the pair of dots. Similarly by making use of the pegs of Type II, having a raised formation of a right angle on one side and a right-angled triangle on the other, different signs in Algebra and Trigonometry can be expressed. Use of spur-wheels and embossed protractors make it possible for a blind child to receive ideas of Geometry.

The syllabus remains the same for the blind pupils as that intended for the sighted. From what is said above, it is obvious that while the content of curriculum is unaltered, only the methods of teaching are modified to suit the requirements of the handicapped. As for instance, use of specially prepared embossed maps, sand-tray models and such other tangible appliances are used for imparting knowledge in social studies. Apart from the use of modified forms of apparatus, direct contact with the objects of study as in the case of teaching of Natural Science is found to be more instructive.

Handicrafts

Clay modelling, paper folding, bead-work and knitting are some of the forms of handiwork taught, as a preparatory stage for future training in the Industrial Section.

Though the facilities available at present in this institution for imparting General Education are rather limited and extend up to the Eighth Standard only, opportunities for execution of higher studies by such of the promising students cannot be said to be altogether lacking. One of our ex-students has successfully completed his Intermediate Course in the Government Brennen College, Tellicherry, with State aid. He is expected to pursue his degree course from the next academic year.

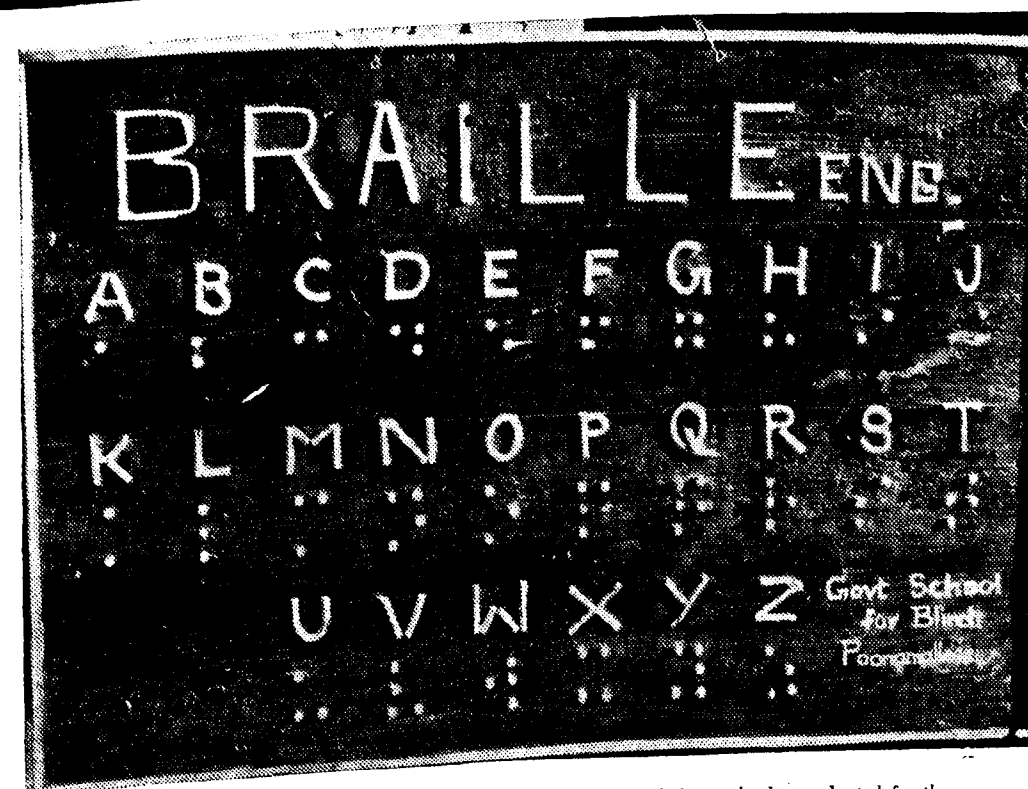
Music and Physical Education

It is found that Music makes a better appeal to the Blind, and the Art Education for the handicapped always centres round the teaching of Music. So extra facilities are provided for imparting knowledge in the science and art of Music and our students who are presented for the Government Technical Examination in Music, have acquitted themselves with credit.

Physical Education is in no way less important than the general and has a special significance in the education of the Blind. It is aimed at not only promoting healthy habits, team-spirit and sportsmanship, but also at exercising the much-needed corrective influence in the eradication of certain mannerisms essentially peculiar to the visually handicapped, known as Blindisms.

The pedagogical methods employed for the teaching of the Blind will necessarily differ from those adopted for the instruction of the sighted. A mere working knowledge in the use of the Braille Code or the Taylor Frame will not qualify a person to be an efficient teacher for the Blind.

EDUCATION



LETTERS: The Braille alphabet in English. The symbols have also been adapted for the regional languages Tamil, Telugu and Malayalam.

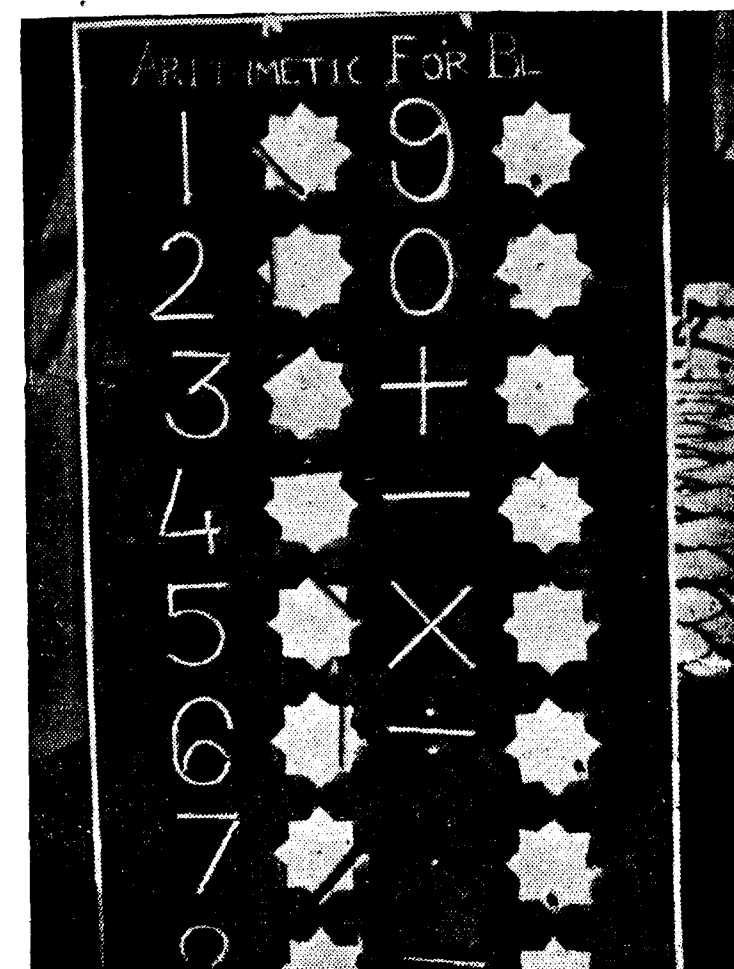
Thus it is found that a special course for training teachers for the Blind is found to be necessary and our Department of Education has recently instituted two Diploma Courses, of Education has recently instituted two Diploma Courses, the Junior for the Secondary Grade trained teachers and the Senior for the Collegiate trained teachers. Training of four Secondary Grade teachers was undertaken in this institution after the completion of which they were pre-institution after the completion of which they were presented for the Junior Diploma Examination in the methods of teaching the Blind, held in June 1951. All of them have come out with credit and have been declared to have passed in First Class. Three of them are serving as assistants in this institution itself, while the fourth is now officiating as the Headmaster, Government School for Blind, Cuddapah.

Vocational Education

When a basic standard in general education is achieved, learning of academic subjects is followed by training in some useful vocation to improve the earning capacity of the individual and to insure against his being forced to lapse back into his original condition of being a mere dependent on public charity.

We have at present facilities for imparting instruction in two main vocations, namely, Rattan Work and Handloom Weaving. For purposes of convenience, male members are sent to the former, while women are admitted into the latter. Our productive capacity both in quantity and quality has been found to be appreciable. Requirements of cloth of the inmates here are met from that produced in our Weaving Section—surplus only being placed for sale. The demand from the public is far greater than our output which is unfortunately limited by the meagre quantity of yarn allotted to us.

ARITHMETIC: The symbols used for figures and mathematical signs. Blind students use the Taylor Frame for doing sums.



BOOKS

32

MADRAS INFORMATION

Prizes for Best Books in Regional Languages in 1951-52

The Government have sanctioned the award of prizes for the best books in Tamil, Telugu, Kannada and Malayalam, for the year 1951-52, as detailed below. Each prize will be of the value of Rs. 500.

Tamil: 1. Prose—*Medai Tamil* by Sri T. M. Daivasikhamani Achariar; 2. Short Story—*Nondi Kili* by Sri T. J. Ranganathan; 3. Novel—*Pen Manam* by Dr. Tirupurasundari (Laxmi); 4. Research—*Ovach Chaiti* by Dr. M. Varadarajanar; 5. Science—*Sakthi* by Sri R. K. Viswanathan; 6. History, Politics, etc.—*Panchala Kuri-chiveera Charitram* by Sri Kaviraja Pandithar Jagaveera-pandiyanar.

Telugu: 1. Evolution of Karnatic Music—*Karnataka Sangeetha Parinamam* by Sri M. V. Narasimhacharyulu; 2. Production and Exhibition of Films—*Chitra Jagati* by Sri D. V. A. Acharya; 3. Criticism—*Telugu Poetesses* by Ubhaya Bhasha Pravcena Srimati V. Lakshmikantamma; 4. Science—*Vinayukta Rasayana Sastramu* by Sri Hari Adishesuvu.

Kannada: 1. Novel—*Kudiyara Koosu* by Sri K. Shivaram Karanth, South Kanara; 2. Drama—*Kundamala* by Sri Moleyar Shankaranarayana Bhat, Mangalore; 3. Satire—*Thimmanna Thale* by Sri Bellary Beechi. Bellary.

Malayalam: 1. Short Story—*Yavanikakku Pinnil* by Sri S. K. Pottekkat, Kozhikode; *Thoppiyum Thattavum* by Sri N. P. Muhammed, Kozhikode (both the works stand bracketed); 2. Prose—*Innathe India Bharamakootam* by Vidayaratnam P. N. Menon, Palghat; *Kappirikalude Natil* by Sri S. K. Pottekkat, Kozhikode (both the work stand bracketed); 3. Poetry—*Kaladippadukal* by Sri V. Unnikrishna Nair, Kozhikode.

A SURVEY OF IMPORTANT BREEDS AND TYPES OF CATTLE IN INDIA

The Indian Council of Agricultural Research has brought out a bulletin entitled *A Survey of Important Breeds and Types of Cattle in India*.

An attempt has been made in the publication to deal rather exhaustively with the different breeds and types of cattle found in the country. The characteristics which underlie the differentiation of the various breeds and types have been specified. The areas in which they are indigenous have been indicated and the distinctive quality of each breed—whether milch, draught or dual-purpose type—emphasised. The bulletin is profusely illustrated with photographs of the different types of cattle, both male and female, described.

The bulletin is actually a reprint of two earlier publications on cattle breeds in this country which have been long out of print. The material contained in the previous publications has now been consolidated and printed in the form of a single bulletin to facilitate reading and refer-

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Copies can be had from :

The Editor, *New Education*,
Teachers' College,
Saidapet, Madras-15.

INDEPENDENCE DAY CELEBRATIONS

In celebration of Independence Day, Shri Sri Prakasa, Governor of Madras, gave a garden party at Raj Bhavan on the evening of August 15, 1952. Pictures show the Governor receiving the guests and the party in progress.

At the Parade on the Island Grounds, the Governor unfurled the National Flag and took the salute at a March Past of the detachments of the Defence Services and the Madras Police.



Some of our articles prepared in the Rattan Section have been approved and presented in the International Exhibition in the United Kingdom recently through the kind agency of our customers, the Norfolk Syndicate of New Delhi. Demonstrations given both in General and Vocational Education by our pupils and our exhibits presented at the Fourth Madras Educational Exhibition recently held at Saidapet have received particular attention from the interested public. It is proposed that our institution should be represented at the All India Exhibition of the Handicrafts of the Handicapped to be held in March this year at Nagpur.

When a pupil has successfully completed his course both in the Educational and Industrial Sections, it is to be normally expected that he has attained sufficient efficiency for becoming self-supporting and self-reliant, but in as much as the attitude of our society in general has not sufficiently advanced as to absorb these handicapped and take them into its fold, the question of discharging these trained personnel from the institution cannot be thought of unless it be to leave them entirely at the mercy of the public without any useful occupation provided for them. Thus our institution has inevitably come to be their 'home' for life and the State Government has generously undertaken to institute a Sheltered Workshop for them; this will be started soon after the completion of the repairs to one of our vacant barracks in our premises.

IV. Statistics for 1950-51.

Staff—

(a) Principal—Common to all sections.

	Teachers.	Instructors.	Total.
(b) Educational Section ..	7	2	9
(c) Industrial Section ..	..	3	3
	7	5	12

(d) Office—

Clerks	2
Peons	2
Night Watchman ..	1
	5

(e) Boarding Section—

Boarding Master ..	1
Matron	1
Medical Officer ..	1
Deputy Warden ..	1
Cooks	4
Maid Servant ..	1
Sweepers	3
Barber	1
Dhoby	1
	14

Strength of pupils.

	Males.	Females.	Total.
1 Educational Section ..	42	17	59
2 Industrial Section ..	43	25	68
	—	42	127

Receipts and Expenditure for 1950-51.

1. Receipts—

	RS.	A.	P.
(a) Sale-proceeds (Rattan and Woven articles).	8,732	10	3
(b) Subscriptions and donations ..	933	6	0
(c) Miscellaneous receipts	493	2	6
(d) Met by Government	60,283	4	3
	70,442	7	0

2. Expenditure

	70,442	7	0
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Encouraging Progress

The gradual progress in the different branches of work which our institution is able to achieve from year to year is entirely due to the keen interest evinced and active sympathy shown in our efforts by Sri D. S. Reddi, B.A. (HONS., MADRAS AND OXFORD), our Director of Public Instruction, Madras, and Srimathi O. C. Srinivasan, B.A., L.T., formerly Inspector, Central Office, Madras, and Deputy Director of Public Instruction, Madras, at present.

Also, our State Government has been pleased to give additional encouragement and incentive for talented teachers to take up this line of work by offering not only an additional allowance for acquiring the special Diploma but also by giving a higher initial pay in their usual scale. Provision of rent-free quarters to the employees is another special feature of this institution.

Two Officers from the Education Department have been deputed for specialising in the methods of teaching the handicapped, one for the Blind and the other for the Deaf, in the United Kingdom this year and two more are expected to be sent abroad for the same purpose in the near future. After the return of these specialists and with the active co-operation of the Government, this branch of education can safely be expected to show further improvement and achieve better results.

Higher Pay for Teachers in Government Schools for Defective Children

The Government have ordered that the secondary grade teachers, employed in Government Schools for Defective Children, be allowed, with effect from March 1, 1952, a higher starting pay of Rs. 60 in the scale of Rs. 45-3-00-2-90, besides the special pay of Rs. 10 admissible under the existing orders.

Science Block for Kumbakonam College

A science block for the Government Arts College, Kumbakonam, constructed at an estimated cost of Rs. 2.8 lakhs, has been completed and the building handed over to the College for use.

Cut Ordered in Telugu Drama

The Government have ordered that the Telugu drama entitled *Evaru Dongu* written by Sri Acharya Atraya should not be allowed to be staged in any public place in the State of Madras without cutting out certain specified objectionable passages.

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Coimbatore	Cuddapah		
Madurai	East Godavari		
Nilgiris	West Godavari		
Ramanathapuram	Guntur		
Salem	Krishna		
Tanjore	Kurnool		
Tiruchirappalli	Nellore		
Tirunelveli	Srikakulam		
	Visakhapatnam		

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The Chief Minister
observed on the occasion:
"All the efforts of social
workers should be to remove
the differences in treatment
among the people."

Pictures on this page show
the opening ceremony, a
class in progress, the library
and the Chief Minister with
the trainees.



Educational Exhibition

The Fourth Madras State Educational Exhibition was held at the Teachers' College, Saidapet, from 9th to 12th January 1952. This is the fourth annual educational exhibition promoted by the Government of Madras and held by the Department of Public Instruction and the second to be held in the Teachers' College, Saidapet. The Exhibition was opened by Sri B. Gopala Reddi, at 4 p.m. on the 9th January 1952 in the presence of a distinguished gathering. After the welcome by Sri D. S. Reddi, Director of Public Instruction, and the statement by Sri T. P. Santhanakrishna Naidu, Principal, Teachers' College, Saidapet, and organiser of the Exhibition, Sri Gopal Reddi addressed the gathering on the significance of the Educational Exhibition.

There was a demonstration of physical activities at the exhibition, over which His Excellency the Governor of Madras presided.

The Exhibition was open to the public from 9 a.m. to 1 p.m. and 2 to 7 p.m. every day from 10th to 12th January 1952. Over 15,000 persons visited the Exhibition during these three days, the largest number of visitors being children from Elementary and High Schools and students of Training Institutions and Colleges. Several distinguished visitors including Sri P. S. Kumaraswamy Raja, Sri K. Ramunni Menon, Chief Secretary to Government, and Lt.-Col. G. S. Gill, Inspector-General of Prisons, visited the Exhibition. Immediately after the preview Mr. E. G. Malherbe, Vice-Chancellor, University of Natal, South Africa, visited the Exhibition.

Presenting New Advances

The Exhibition aimed to give a picture of what is new in Education, more especially of the changes which have come about in the past five years in the system of education in the Madras State. Each section of the Exhibition was intended to illustrate a stage or a phase of education. The various aspects of the educational system exhibited included Pre-primary Education, Basic Education, Social Studies and Citizenship Training, Diversified Courses, Science Clubs and Hobbies, School Gardens, Health and Physical Education, Audio-visual aids in Education, Social Education, Libraries, Education of the Handicapped, Teacher Education and Psychology Section and Education in other countries. The new sections in this year's Exhibition were exhibits of school science clubs and exhibits and demonstrations in Psychology. Some of the older sections like Diversified Courses Section, Drawing and Painting, Engineering and Home Science Sections were comprehensively expanded. In addition, the United States Information Services, the British Council, Hindi Prachar Sabha, etc., had their stalls.

A larger number of schools from the mofussil than in the previous years sent exhibits and participating pupil groups for the physical education activities.

On all the Exhibition days according to programme there were demonstrations in Music and Dancing, Home Science, Agriculture, etc., besides film shows.

Every evening there was a demonstration of physical activities organised by the Chief Inspector of Physical Education in co-operation with the Y.M.C.A. College of Physical Education, National Cadet Corps, Junior

Division, Madras, and the boys and girls of the City Secondary Schools. In addition there was an entertainment every evening by talented pupils from City schools, viz., Children's Garden School, Sri Sarada Vidyalyaya Girls' and Training Schools, the Madras Seva Sadhana High School, Vidyodaya Girls' High School, Lady Willingdon High School, Chintadripet Girls' and Boys' Schools.

The Various Sections

1. *Pre-primary Education* related to the education of the child from 2½ to 6 years. This section illustrated the Kindergarten, Montessori, Nursery School and Pre-basic methods and activities and emphasised the importance of organised education for the child even at this age, in a setting half way between home and school.

2. *Basic Education* is the activated successor to Elementary Education, taking its root from what is known as the Wardha Scheme, associated with the Father of the Nation. The use of productive crafts and social activities in educating the child for life is illustrated in this section of the Exhibition.

3. *Social Studies and Citizenship Training* in secondary schools serve to integrate and lend purpose to what was formerly an academic study of History and Geography. The exhibits in this section showed how new and spontaneous interest is aroused in the study of these subjects.

4. *Diversified Courses* in the high school may probably become the centre of interest in the Exhibition. They are the result of the demand for practically useful and adequately varied alternatives to the single academic course of the past, and are meant to give full scope for the widely different talents of boys and girls at the high school stage. A cross-section of all the different courses in over 165 schools in the State which have introduced them was presented at the Exhibition.

The arrangements under the various courses are such as to show the Arts and Crafts work in the first, second and third forms, the Academic and Diversified Courses work in the fourth, fifth and sixth forms and lastly to the possibilities of advanced work in higher educational institutions.

Display Features

Music and Dancing: Various concert instruments, and the costumes, jewellery and masks used in Kathakali, Manipuri and Baratha Natyam were displayed here.

Secretarial: Typewriters in different languages and the varieties of office appliances available were the exhibits of chief interest here.

Engineering: This section was arranged as a typical school workshop showing the various activities of the Engineering students. The many working models such as the 60 feet track electric train, the magic boat, the diving duck, the dancing elephant, etc., made by the future engineers were all here.

Drawing and Painting: Here one may compare and contrast the work of the embryo artist of the Nursery stage with the finished artist of the High School and College stage.

Home Science: This section showed what pains the schools take to make a clever housewife of our daughters in cookery, laundry work, stain removal, first aid, nursing, mother craft.

Textiles: The first to the last processes were all demonstrated here. What beautiful kerchieves, tapes, towels and sheets our children are taught to make in schools.

Agriculture: The young farmer rises to the call of the Nation 'Produce or Perish.'

5. *Science Clubs and Hobbies*: These were represented in two parts at the Exhibition—science club activities in a section of their own, showing both the actual performance and the wider possibilities in the early pursuit of scientific hobbies and arts and crafts under the respective subjects of the Diversified Courses.

6. *School Garden*: A demonstration school garden at the entrance of the Exhibition exemplified the results which enthusiasm and effort can produce in making schools attractive and providing boys and girls of all ages with an all-absorbing and ever-pleasing pastime.

7. *Health and Physical Education*: The growing interest in this aspect of education was represented at the Exhibition both by objective exhibits and daily programmes of activities and demonstrations.

8. *Audio-visual aids in Education*: Apart from the older and well-known visual aids like pictures, charts and models, the newest and most effective medium of the movie and the talkie has now come to the aids of the teacher in the classroom. A display of these aids and demonstrations of their use was arranged at the Exhibition.

9. *Social Education* known in the past as Adult Education, is a subject of paramount interest at the present moment when about 17 crores of voters in the country exercised their franchise in the recent Elections. The need for a rapid liquidation of illiteracy in the country and the methods of achieving this end were illustrated by the charts and pictures in this part of the Exhibition.

Library Education which is an integral part of Social Education, also found a place in this section, including the Children's Library at the Exhibition.

10. *Education of the Handicapped*: In this section could be seen the methods and the results of educating the blind and the deaf and dumb in scholastic work as well as cottage industries which help them to support themselves without being a burden on society.

11. *Teacher Education and Psychology Section*: In this section visitors got an idea of the many-sided activities of the institutions entrusted with the task of training teachers. Charts, pictures and material relating to training and output of teachers and to Psychology, were on display. The use of aids to teaching, as Broadcasting which vitalise instruction, books and test material of use to teachers also formed part of the exhibits in the section.

12. *Education in other countries*: India profits by the educational experiments and practices of the countries in the West like Britain, and the United States of America.

EDUCATIONAL EXHIBITION: The Fourth Madras State Educational Exhibition held recently in Saidapet attracted a large number of visitors. Here an interested group of visitors view the dance costumes displayed in the Music and Dancing Section (top);

ENGINEERING: The Mechanical Man (centre); **SCIENCE:** The giant electromagnet lifts the girl in the swing (bottom).





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SCHOOL OF SOCIAL WORK

Sri C. Rajagopalachari, Chief Minister, recently opened the Madras School of Social Work in Madras City. The School has 25 students, including 18 graduates, undergoing training; the Government have lent some lecturers and teachers.

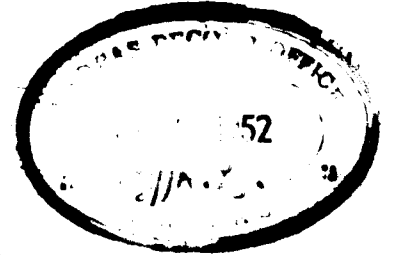
The Chief Minister observed on the occasion: "All the efforts of social workers should be to remove the differences in resources among the people."

Pictures on this page show the opening ceremony, a class in progress, the library and the Chief Minister with the trainees.



OCTOBER 1952
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M A D R A S *Information*



Railway Staff College at Baroda

When the Staff College for the Indian Railways, the biggest nationalised undertaking, was revived at Baroda in February after a lapse of 20 years, the long-felt need for a central professional institution, organised in much the same way as the Defence Services Staff College at Wellington in the Nilgiris Hills, was fulfilled.

The opening of the Staff College by the Hon'ble Sri N. Gopalaswami Ayyangar, Minister for Railways and Transport, on January 31, 1952, marked the culmination of an idea that took its birth as far back as 30 years ago. It actually owes its origin to a proposal made by the Ackworth Committee appointed by the then Secretary of State to inquire into the conditions obtaining in the railways.

It had by then been recognised that the vast majority of officers and staff for working the railways would necessarily have to be recruited in India itself, and in order to fit them for the responsible task they would be called upon to perform, the Committee, which was presided over by Sir William Ackworth, suggested to the Railway Board to make sufficient training facilities available to them. It pointed out that two classes of railwaymen, i.e., men in training for the superior posts and those who did not usually go beyond the subordinate grade, particularly needed being catered for.

Doon Institution

It was in pursuance of this recommendation that a Railway Staff College was started in 1930 at Dehra Dun amidst the picturesque mountainous surroundings of the Doon Valley. The training scheme envisaged refresher courses for junior and senior officers in railway service as also education in railway operation for selected subordinates so as to qualify them for promotion to superior grades, the object being to enable railway personnel to supplement their knowledge and experience through the media of theoretical lectures and practical working. Formally inaugurated by His Excellency Sir Malcolm Hailey, the then Governor of U.P., the Staff College had a total of 22 courses varying from a fortnight's to three months' duration in the first year of its working and 20 in the second year.

As the increasing complexity of railway operating problems demanded improved methods of training the staff, a number of Area Schools were also started between 1925 and 1930 on the different railways for the lower staff, the most remarkable of them undoubtedly being the Walton Training School near Lahore. The Principal of the Staff College was, in addition, entrusted with the general supervision of these schools.

Soon after the Staff College and the various Area Schools had got going, the post-1930 economic depression hit the railways. While it was found extremely difficult to meet the prohibitive expenditure which the running of the training establishments entailed, the large-scale decrease in the number of officers and staff required for handling the depleted volume of traffic drastically reduced the scope for training new personnel. The staff strength was cut to the bone and few or none of them could be spared from their normal duties for undergoing the periodical training visualised when the College was established.



RAILWAY STAFF COLLEGE: The entrance to the hostel which will be attached to the Railway Staff College at Baroda.

College Closed Down

Due to these reasons, it was decided early in 1932 to close down the Staff College at Dehra Dun. The buildings, which had been constructed at a cost of about Rs. 23 lakhs, were handed over to the Armed Forces and they now house the National Defence Academy. The scope of the Area Schools was also correspondingly diminished and some of them had even to cease functioning.

The need for expanded training facilities for finding a larger number of persons to handle the heavy movement of men and material was again realised when the depression gradually receded and the war progressed. But, concentrated as all the energies at the time were towards promoting the war effort, it was not considered desirable to launch on anything new that was not intimately connected with war production.

When however hostilities neared termination, the railways once more thought of providing adequate training for their staff towards the middle of the 40's. With the

ever-increasing numbers of men recruited to man the railways, both for meeting the heavier traffic and for replacing the non-Indian personnel who left the country after Independence as also the Muslims who opted for Pakistan after Partition, the need became all the more imperative. The Railway Inquiry Committee, which went into the question of reorganisation of the railways with a view to improving the earnings and reducing the expenses, also stressed the urgency of proper training facilities. It recommended the setting up of a Staff College which would help promote *esprit de corps* amongst the officers so that they might feel that they were an important part of the great national railway system.

Government Decision

Accordingly, the Government of India decided to restart the Staff College. A former palace of His Highness the Maharaja Gaekwar of Baroda was earmarked for the purpose and all arrangements were completed by the end of 1949. The difficult ways and means position of Government, however, stood in the way, and the opening of the College had therefore to be deferred until now.

The College will be under the administrative control of a Principal, who will be assisted by selected officers of the various departments of the Railway Board working as instructors. The Principal and the instructional staff are already in position and the classes commenced by the February 1952. Eighteen probationary officers of the Transportation (Traffic) and Commercial Departments will constitute the first batch of trainees at the College for a two-month course of instruction in railway working.

With the taking over of all the company-managed railways and integration of the former princely State railways, the number of officers requiring training has become much larger than those at the time when the Staff College was set up as Transportation schools at Chandausi (E.I.Ry.) and Bina (G.I.P. Railway) and the Staff Training School at Saldah (E.B. Railway). Besides the Staff College, there are now a number of Area Schools scattered all over, giving training to Class III Staff in all aspects of railway working.

Palatial Building

The magnificent Lalbagh Palace, in which the Staff College will be housed, was built by the late Maharaja Sir Sayaji Rao Gaekwar in 1909 and covers an area of 58 acres. It was made over to the Bombay Government as part of the transaction pertaining to the merger of Baroda with the Bombay State in 1949. The palace has been renovated and altered and additional structures put up to suit the requirements of the College.

A hostel, with modern equipment for 18 officer trainees, and playgrounds have been provided in its precincts. Meanwhile, a scheme is being worked out to cater for an additional 42 officer trainees so as eventually to train 60 of them at one and the same time.

Gift for Children's Ward

The Government have accepted with thanks the offer of Mr. E. W. Simcock, Waterford Estate, Yercaud, Salem, to donate a Children's Ward of thirty beds in the Government Headquarters Hospital, Salem, at a cost not exceeding Rs. 50,000 and hand it over to the Government for maintenance.

Extension of Electricity to Villages

The Government have sanctioned a proposal for extending supply of electricity from the Papanasam Electricity System to 24 agricultural pumpsets and 46 house service connexions at Vellikulam village in Ambasamudram Taluk, Tirunelveli District, at an estimated cost of Rs. 56,900.

The Government have sanctioned a proposal for extending supply of electricity from the Papanasam Electricity System to 18 agricultural pumpsets and 65 house service connexions at Alankulam village in Pazhamcottai firka, Sankarankoil Taluk, Tirunelveli District, at an estimated cost of Rs. 49,800.

The Government have sanctioned a proposal for extending supply of electricity from the Papanasam Electricity System to 21 agricultural pumpsets, one industrial service and 20 house service connexions at Vadakkupatti and Pitchai-thalaivanpatti villages in Sankarankoil Taluk, Tirunelveli District, at an estimated cost of Rs. 46,460.

The Government have sanctioned a proposal for extending supply of electricity from the Papanasam Electricity System to 37 agricultural pumpsets and 38 house service connexions at Vagailakulam and Kallikulam villages in Pazhamcottai firka, Sankarankoil Taluk, Tirunelveli District, at an estimated cost of Rs. 85,800.

The Government have sanctioned a proposal for extending supply of electricity from the Mettur Electricity System to 83 house service connexions at Ekambarakuppam village in Nagari firka, Chittoor District, at an estimated cost of Rs. 31,700.

The Government have sanctioned a proposal for the extension of supply of electricity from the Rayalaseema Power System to 41 agricultural pumpsets and five industrial loads at Alamkhanpalli, Tadegodla, Ramachandrapuram and Ramarajupalli villages, Cuddapah District, at an estimated cost of Rs. 1,36,900.

The Government have sanctioned a proposal for the extension of electricity from the Pykara Electricity System to 14 agricultural services and one oil mill load at Vellore and Chettipalayam villages in Coimbatore Taluk, Coimbatore District, at an estimated cost of Rs. 44,600.

The Government have sanctioned a proposal for the extension of supply of electricity from the Pykara Electricity System to 20 agricultural services at Vellamadai village, Coimbatore Taluk, Coimbatore District, at an estimated cost of Rs. 44,600.

UNION LABOUR MINISTER INAUGURATES EMPLOYMENT EXCHANGE



Shri Sri Prakasa, Governor of Madras, who presided on the occasion of the inauguration of the Employment Exchange, Ootacamund, is seen addressing the gathering. Sri V. V. Giri, Minister for Labour, Government of India, inaugurated the Exchange.



Sri V. V. Giri examines index cards of a few employment seekers at the Employment Exchange, Ootacamund, which he inaugurated on 1st September.



A view of the gathering on the occasion of the opening of the Employment Exchange at Ooty.

Supplement
To

Madras Information, October 1952

Economics of Handloom Cloth

By SRI J. M. LOBO PRABHU, I.C.S., Secretary to Government, Development Department.

The economics of handloom cloth may be examined with reference to the factors of production and demand. The test in respect of production is the most economic employment of labour, capital and resources. There are 29 lakh handlooms in India and two lakh powerlooms. Each handloom has been calculated by Dr. Narayanaswami Naidu, now Member of the Tariff Board, to employ gainfully a minimum of 1.98 manpower. In effect, one male member of each family and other members capable of working are engaged in working one handloom. On this computation, the total number of handloom workers is about 5.9 millions, that is, more than twice the total number of workers in all other organised industries. The number of workers in the 425 cotton and spinning mills in India is about 0.5 millions of which those employed on the spinning side are less than half.

There is therefore really no comparison between the labour employed on handlooms and that employed on powerlooms, the proportion at best being 25 to 1. If the labour employed on production of bordered dhoties and coloured saris in mills, about one-fourth of the total mill production is considered the proportion of the two classes of labour will be 100 : 1. In considering therefore the relative interest of labour in handlooms and powerlooms this proportion deserves to be kept in view.

The significance of this proportion is enhanced by the fact that at the best of times, according to the calculations of Dr. Narayanaswami Naidu, the labour employed on handlooms is idle for all but 10 to 12 days in the month. In terms of economics, this colossal unemployment of a trained class of artisan involves waste of manpower and loss of potential production.

Capital and Resources

In respect of capital, it is computed that the handloom costing Rs. 60 can produce about 12 yards of cloth per day as against a powerloom involving an outlay of Rs. 1,200 which can weave about 40 to 80 yards per day according as there are one or two shifts. It may be mentioned that the handlooms are mostly assembled by village artisans in the normal course of their employment. Powerlooms are largely imported involving use of the slender foreign exchange of the country.

In respect of resources, powerlooms consume electricity, fuel, steel and other materials and services in short supply. Handlooms, on the other hand, are located in the houses of the workers employing only labour which would be otherwise wasted. The handloom industry of India is

also a decentralisation which we should conserve in order to maintain the quality of rural life. The textile industry, on the other hand, involves concentration in towns with problems of housing and sanitation which cannot be solved easily within the present financial resources of the Government.

To summarise, the handloom industry is a means of capitalising labour and skill of a large section of the population without involving the demands on finance and essential commodities which are in short supply. Judged on the basis that the best economic policy for a country is maximum employment at minimum cost, the handloom industry is entitled to the highest priority for development.

Adequacy and Quality

On the supply side, the claims of handloom products may be considered with reference to their adequacy, quality and price. In respect of adequacy, it may be noted that the present production of handlooms is computed at 1,400 million yards on the basis of the yarn issued. This figure agrees with the figure mentioned at page 128 of the Centenary Volume of the Indian Cotton Textile Industry. Of this production, 60 per cent, i.e., 840 million yards is estimated to be made up of dhoties and saris. Powerlooms are at present producing 1,752 million yards of dhoties and saris. The question is whether handlooms are capable of taking over the powerloom production of 1,100 million yards of dhoties with borders and about 14 million yards of saris (two per cent of the total sari production) which are coloured after weaving. The answer should be in the affirmative because handlooms, as already stated, are employed only for 10 to 12 days in the month, i.e., at less than two-fifths of their capacity. If they are employed regularly, production of bordered dhoties and coloured saris in the yardage of 1,114 millions now produced by mills will be within their capacity.

The total capacity has not been utilised for the reasons : firstly, that the yarn in the required quantity has not been available, and secondly, that the market for handlooms has been curtailed by competition of cloth made by mills with their own yarn which is not subject to the many charges the handloom weaver has to pay. It is a mistake to doubt the capacity of handlooms forgetting that this depends on factors within the control of mills, like the price of yarn and cloth. Given equality of conditions, handlooms regularly employed should be able to meet the entire demand for bordered dhoties and coloured saris.

Sanctions for Social Service

By SRI O. MOHANASUNDARAM, Labour Welfare Officer, Government Transport, Madras

Social service is no more sentimental charity, indulged in as a pleasurable pastime by the leisured social-butterflies or rendered in a patronising or paternal style by the benevolent class. It should be recognised as a highly specialised service, having matured into a professional status. It should go to the root of the problems. It should endeavour to meet out social justice through scientific means. The social worker is a doctor entrusted with the social health of the society.

The personality of the social worker is a great factor in deciding the quality of service. He alone can put the soul and spirit into the framework of any social organisation. Institutions and individuals that employ personnel for social services, have a great responsibility in choosing, training, building and maintaining their personality, as well as giving freedom for thought, advice and action. If a social worker is to serve *selflessly* for the common cause, it is a primary responsibility of his employer to care for him adequately. He should be kept beyond normal wants, needs and necessities of life. He should not be like a hunted being, insecure about his job, promotion, prospects, future, or be submitted to acts of injustices or petty irritations; or, be prevented from discharging his duties in an unbiased way which sometimes may run counter to the wishes of his employer. Without this fundamental freedom from want, of thought, word and deed, social service will be a mere make-believe. It will fail to create the necessary confidence in its clientele.

Characteristic Qualities

Social work should be characterised by sympathy, sincerity, simplicity, sterling character, sacrifice and service. Without genuine sympathy for the cause and the people concerned, it is impossible to render any effective service. People who cannot get over their petty prejudices of caste, colour, creed, religion, race or nationality have no business to pollute the noble mission of disinterested service. They should look on their work not as a job but as a calling. They should believe in the brotherhood of man and the fatherhood of God and serve and enrich humanity without any other ulterior motive. They should be socialised personalities with scientific outlook and sympathetic understanding of human nature. Without sincerity, one reduces himself to the status of an hypocrite. Sincerity alone can develop in us a faith in the cause and a will to fight for it against all obstacles, doubts and temptations.

Social workers should learn to live in simplicity. It does not mean that to be a slum-worker, we should become a slum-dweller. It does mean that we should not be aristocratic in our ways, habits and outlook. Our life should be well ordered, disciplined and purposeful. A social worker should be a well-integrated personality. He should possess sterling character beyond all reproach which alone can generate confidence. In the words of A. Chaddock, "He that would lift me physically must be below me but he that would lift me morally must be

above me". It is needless to say that workers in public who do not possess character, will become a public menace.

Spirit of Service and Sacrifice

Social workers should be prepared for sacrifices. But sacrifices need not always mean self-effacement. Social workers will have to exist, may be with homes and families; they will have to be happy and then alone is it possible to serve abundantly. But if one is ambitious to become a prince of men and amass wealth, he should seek some other career. Social workers will have to realise that as doctors of social health, they will be called on at any time, even at considerable personal sacrifice and inconveniences. "Our time is not our own, it belongs to those who need us" should be the urge to serve humanity ungrudgingly and enhance the human personality.

In an ideal society, there is no need for any social service, because all functions of the State will be harnessed for the service of the citizens. The spirit of service will become the very life-breath of its administration. But we will have to take the society as it is today, with all its handicaps and shortcomings. No doubt, "man is trying to eat man, individually, socially and internationally" as Dr. Lin Yutang has so beautifully put it. We are living in an age of masked cannibalism, wearing the cloak of hypocrisy and masquerading under the pseudonym of civilization. Social service movements are born as a challenge to the dehumanising influences that are reducing humanity to the level of beasts and brutes.

Boarding Grants for Basic School Hostels

The Government have laid down the policy to be followed in sanctioning boarding grants to pupils of Scheduled Castes and other eligible communities, studying in Basic schools.

In future, only pupils staying in hostels serving Model Schools, attached to Basic Training Schools, will be eligible for the boarding grant. For pupils, between six and eleven years, a grant of Rs. 10 per mensem will be granted. For pupils between twelve and sixteen years a grant of Rs. 15 per mensem will be granted. Pupils below the age of six years will not be eligible for the boarding grants.

The hostels attached to Basic schools recognised for boarding grants during 1949-50 and 1950-51 will however continue to enjoy such recognition.

Asoka Chakra Awards

Warrant-Officer O. Sundaresayya (34) of the Indian Air Force has been awarded the Asoka Chakra Class II for averting a railway disaster in May 1950.

"But for his timely action there might have been many casualties among passengers and heavy damage to the railway property," says the citation awarding the Asoka Chakra.

This act of gallantry was performed by Sundaresayya, formerly Flight Sergeant, when travelling by the Jhansi-Lucknow passenger train. Between Chiragaon and Moth stations he noticed that one of the compartments was on fire. Finding that the emergency communication cord failed to work, he travelled on the footboards of carriages at great personal risk, and got as near to the engine as possible, thus attracting the attention of the engine crew and succeeding in bringing the train to a stop, and averting a disaster.

Warrant-Officer Sundaresayya, whose home is in Madras, joined the I.A.F. in December 1939 after qualifying as an electrical engineer from the Madras Polytechnic. After serving with Nos. 1, 3 and 8 I.A.F. Squadrons as ground technician, he went on release in July 1946, but rejoined the Service two years later.

Warrant Officer Sundaresayya.



Flight-Lieut. U. A. D'Cruz.

For "fortitude and devotion to duty while a prisoner-of-war", Flt.-Lieut. U. A. D'Cruz of the Indian Air Force, has been awarded the Asoka Chakra Class II. He is one of the four I.A.F. recipients of this newly instituted award.

Ulrich Antony D'Cruz, who hails from Madhavaram, Madras, joined the Indian Air Force as an airman in 1943. He volunteered to be trained as pilot and was commissioned in the General Duties (Pilot) Branch of the Service in January 1946.

During Jammu and Kashmir air operations, D'Cruz saw action as a fighter pilot. While carrying out a reconnaissance sortie over the Akhnur-Bhimber area on December 1, 1947, he was shot down and captured by Pathan tribesmen. He remained a prisoner-of-war with the tribesmen until December 1948, when he was returned to India under a scheme for the exchange of prisoners-of-war.

The citation awarding him the Asoka Chakra Class II says, "while a prisoner-of-war Flt.-Lieut. D'Cruz was often beaten and threatened with death by his captors but neither ill-treatment nor the offer of monetary reward could undermine his loyalty to his country, or his Service. The fortitude and devotion to duty displayed by him while a prisoner-of-war is in accordance with the highest traditions of his Service, and serves as an example to his fellow officers and men."



No one has seriously questioned the quality of handloom dhoties and saris. There are many who maintain that handloom products have longer life and may have individual features.

Price of Handloom Cloth

The general objection to handloom cloth is in respect of price. No one can deny that mass production by power represents certain economies in the cost of production. The question, however, is how many of these economies are passed on to the consumer. The mill and handloom products were not subjected to any marked disparity in the price till recently when the fall in price of cotton conferred a benefit on mills which used the yarn spun by them. This has happened because while the price of yarn sold outside the mill is revised every three months, the price of yarn consumed inside the mill is related only to the price of cotton which has been falling. Otherwise, the disparity can be explained in terms of the higher price paid for yarn by handloom weavers, which arises from several factors: (1) 12½ per cent is added to the mill price on account of transport and trade charges; (2) charges for reeling, bundling and baling which are not incurred by composite mills; (3) the minimum price which the handloom weavers must demand if only to live in conditions of under-employment. Given the yarn required for full employment and at the prices paid for it by mills, handloom weavers would be in a position to compete with prices of mill products.

In this connexion, it is urged that if mills are barred from producing bordered dhoties and coloured saris, the resulting monopoly would be utilised by weavers to put up their prices. It seems to be forgotten first that such a monopoly cannot come into existence so

long as the mills are allowed to produce cloth of widths capable of being used as saris and dhoties. There is no doubt that mills will turn to the production of such substitutes which are already in vogue and should become more so if handloom products are scarce or too dear. Secondly, it seems to be forgotten that if handlooms get all the yarn required by them, they will be producing bordered dhoties and coloured saris in a quantity which would be competitive within itself. Thirdly, if the worst comes to the worst, there will be cloth from mills for trousers, the vogue for which will no doubt increase. The idea therefore that the weavers will exploit their position is not real since it is related only to the existing conditions in which weavers have not enough yarn to produce the full requirements of the country.

Human and Economic Problem

The simple question then is whether handlooms which are capable of producing all bordered dhoties and coloured saris required, should have the yarn required at the appropriate price. To deny this yarn is to keep a population of nearly six millions with their dependents under-employed for nearly three-fifths of their working capacity. This is not only a human problem, but an economic problem for the country which must be solved by all means possible. The yarn required should be diverted from the mills to be made up to the extent necessary by import of cotton or even of yarn itself. As a compensation, mills could be allowed greater facilities for export, even reduction of the export duty.

Whatever the cost for securing to handlooms the yarn required, the mills and the Government are in a position to bear it better than the millions of weavers who so far appear to be alone exposed to the vicissitudes of the textile industry and trade.

Madras Information

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Food Production Exhibition

The Food Production Exhibition at the Park Fair Exhibition, Madras, was organised by the Commissioner of Food Production assisted by a Committee consisting of the Heads of Departments and a few non-officials. Nearly all Departments that have a bearing on Food Production and Food Consumption were included, viz., Agriculture, Agricultural Engineering, Fisheries, Animal Husbandry, Industries, Co-operation, Electricity, Public Works Department, Public Health, Civil Supplies, State Women's Food Council, etc. This co-ordinated Exhibition was arranged in one composite block to make it more effective and interesting. A total of 67 stalls were taken for locating the different Departments and the stalls allotted to the various Departments according to the nature and magnitude of the exhibits.

At the entrance of the Food Production enclosure an attractive frontage with a cut-out model of a tractor in the centre, a farmer sowing seeds on one side and a woman carrying the sheaves of a bumper crop on the other was put up.

Agriculture.—The Exhibition started with the Agricultural Department. The Agricultural Section displayed different aspects of paddy cultivation with a special reference to the various strains evolved by the Agricultural Department and found suitable to different tracts of the State. Special prominence was given to Sri Vellayya Gounder who achieved the phenomenal yield of 12,000 lb. of paddy per acre in Salem District. Similarly exhibits of millets, pulses, cotton, oil-seeds, sugarcane, vegetables, etc., were arranged in an attractive manner and Assistants from the different scientific sections were on duty to explain to the visitors the advantages of the different strains exhibited. Varieties of fruits grown on the plains and on the hills of the State were also exhibited.

Every evening an Assistant from the Fruit Section demonstrated to the visitors the preparation of jams, jellies, squashes, etc. This attracted a good crowd every evening and the visitors had a chance to taste the preparations of the evening and also obtain their recipes. Selected seeds of important vegetables and greens were sold at reasonable rates to the public. An attractive book called *Guide to Vegetable Cultivation* was a speciality and enjoyed a good sale.

In the centre of the Food Production enclosure, demonstration plots with agricultural crops and fruit trees were attractively laid out, showing the methods for cultivating fruit trees, vegetables, cereals, green manure crops, etc. There was also a model of an ideal home with lawns, gardens, etc., surrounding the building. A model of a compost pit was laid out in a corner of the demonstration plots.

Agricultural Engineering.—This branch of the Agricultural Department put up exhibits in nine stalls. Implements worked with bullock power and machines were exhibited. The Rotavator which is meant for puddling wet lands attracted a good crowd. An oil-engine pump mounted on a trolley was kept working daily and this interested a good many villagers.

A model of contour-bunding, contour trenching, gully channeling, etc., with terrace method of cultivation was put



PARK FAIR EXHIBITION: Front view of the Food Production Section organised by the Government of Madras at the Park Fair Exhibition held recently in the South Indian Athletic Association grounds.

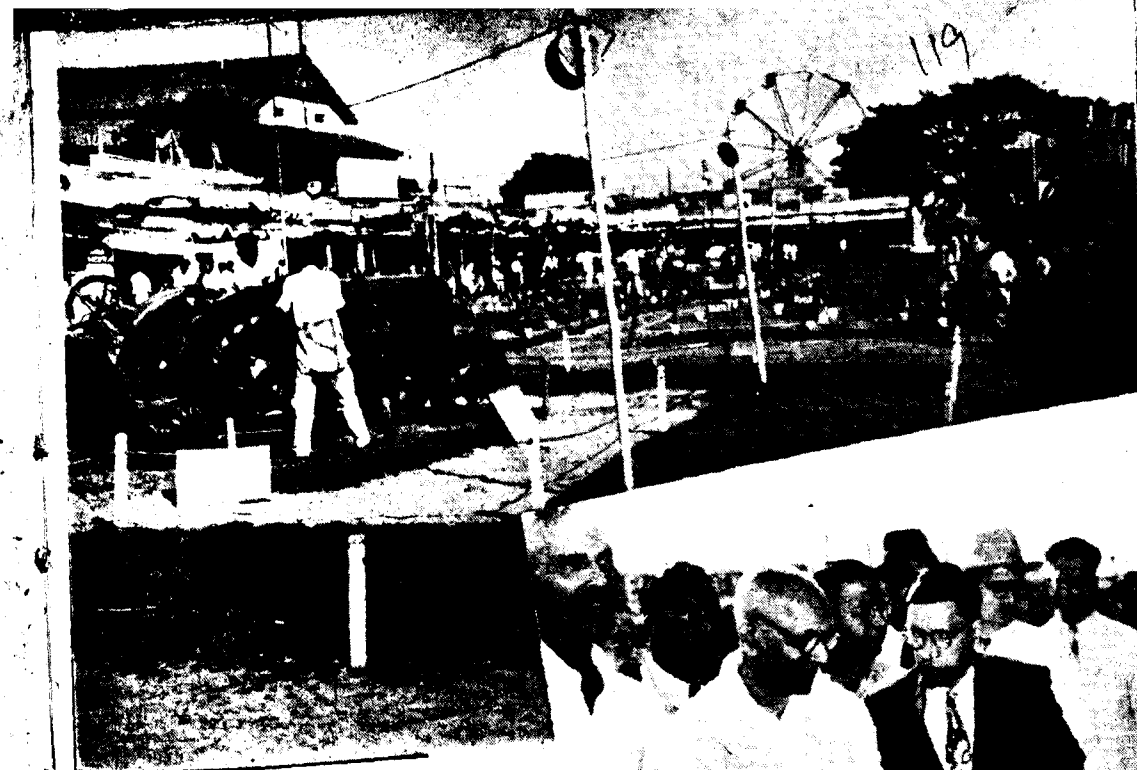
up, showing the different agricultural practices that should be adopted for conserving moisture in dry lands and for preventing soil erosion.

Non-Cereal Cafeteria.—The Madras State Women's Food Council conducted a non-cereal cafeteria at the Exhibition. Dishes prepared out of non-rice cereals and vegetables were served to the public at moderate prices to induce people to take increasingly to non-cereal preparations. Leaflets in English and Tamil giving recipes for the different non-cereal dishes were distributed to the public.

Civil Supplies.—A model of the Government Milk Factory, Teynampet, where reconstituted milk is prepared, was exhibited. This factory was constructed in 1947 at a cost of about four lakhs of rupees to meet the acute shortage of milk in the City. Milk-shakes and buttermilk manufactured from milk-powder with the addition of vitamins and other ingredients and pasteurised was sold by Messrs. Vernon & Co., who are the sole distributors of this reconstituted milk, in a tastefully decorated stall. All those who have taken this milk opine that it tastes like fresh cow's milk.

The City Rationing Officer put up an attractive stall with charts showing the production, requirements and consumption of foodgrains in the State, the necessity for rationing, rules on rationing, austerity measures introduced by Government, etc. Visitors were told how bona fide visitors could get one week's rations into the City and how they could secure ration-cards. Samples of popular foodgrains with their prices were also displayed. Magic lantern slides on rationing regulations and austerity measures were shown every night on an improvised screen on the top of the stall.

Nutrition.—In the Nutrition Section, posters on the nutritive values of the different foodgrains, vegetables, fruits, etc., were exhibited. Articles constituting a balanced diet of South India (vegetarian and non-vegetarian) were put up with their calorific values. An illuminated map of Madras State showing the working of the



Above: General view showing stalls and plots. Note the tractor in the foreground.



Above: A demonstrator explaining the making and bottling of fruit juice and squashes to Sri A. B. Shetty.

Left: The value of fish as supplementary food was extolled at the Fisheries stall.

Right: A model village showing the benefits of electrification. Note the electric motor pump-sets.



FOOD PRODUCTION EXHIBITION

At the annual Park Fair Exhibition held on the S.I.A.A. Ground the Government of Madras organised a Food Production section designed to present a comprehensive view of activities on the Food Front.

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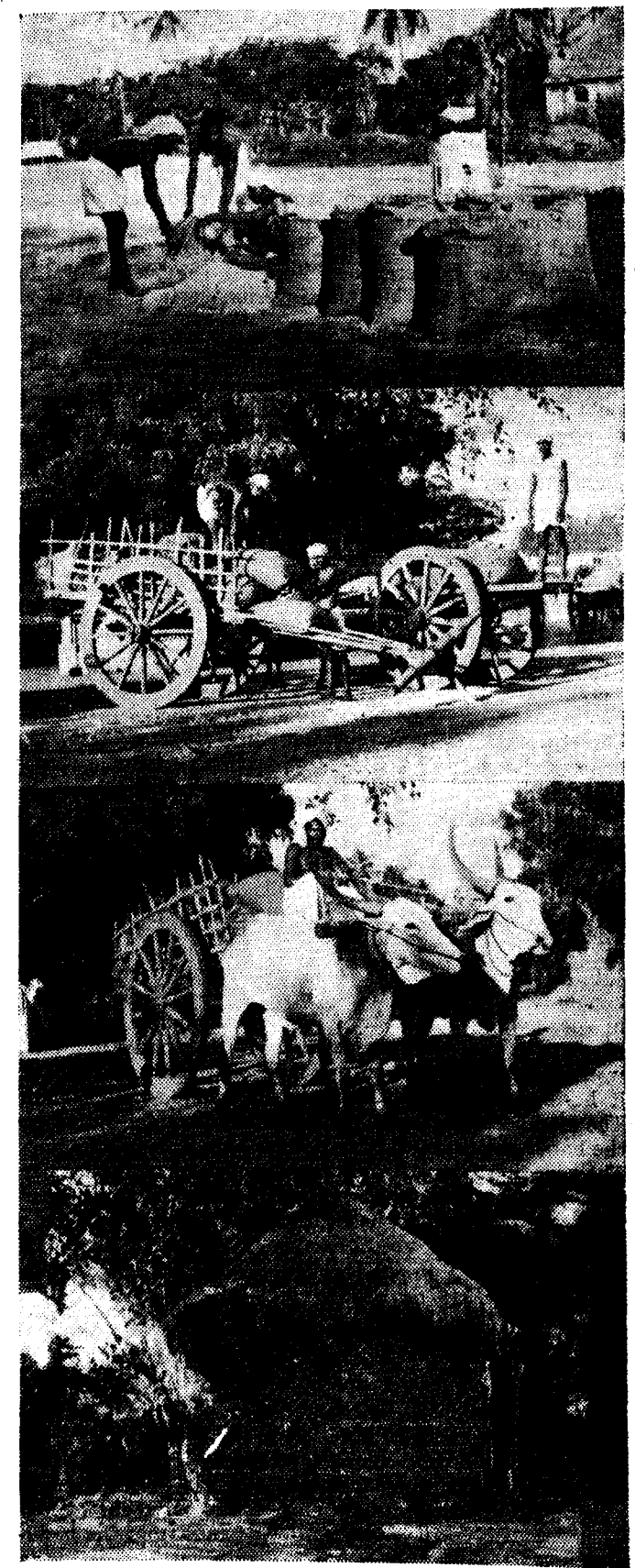
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LAND REVENUE



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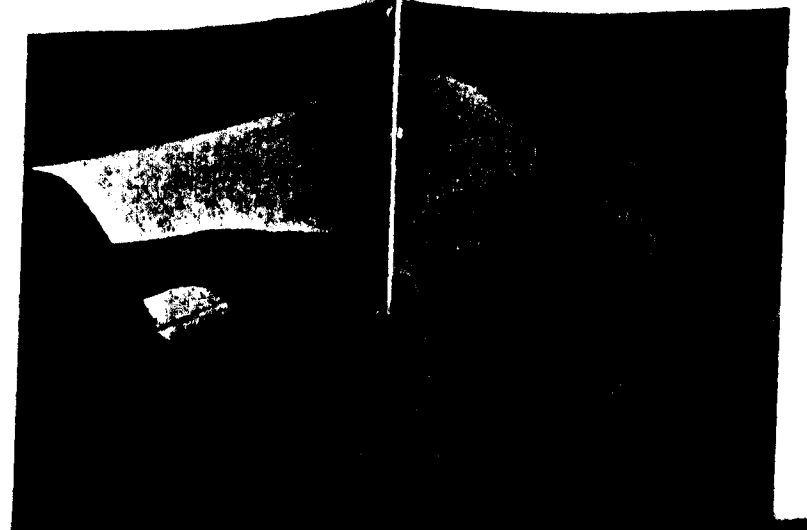
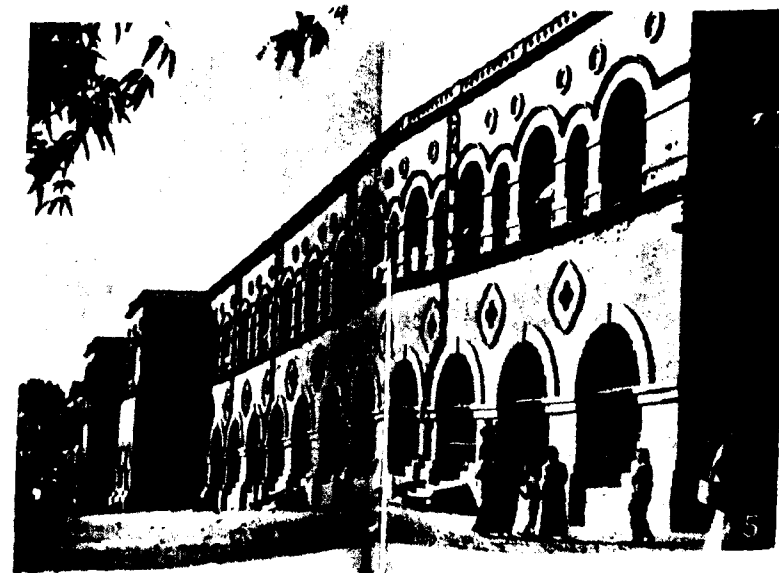
EDUCATION OF THE BLIND

With the advent of Independence, the interests of the unfortunate blind have justly received the immediate attention of the Madras Government. In July 1950, the Victory Memorial Blind School, Poonamallee, came under the complete control and management of the Government, from which time the institution has come to be known as the Government School for Blind, Poonamallee.

This is a residential institution where most of the pupils come from very poor families. All of them are provided with free boarding, lodging, clothing, medical aid and educational facilities. Admission is extended to all blind persons irrespective of race, colour, creed or sex. The aim is to provide adequate training facilities for the blind students to become self-supporting, self-reliant and self-respecting citizens of the State.

The pictures :

1. Murugammal learns to recognise Braille letters with the Letter Plate.
2. Chitravelu forms short words in Braille with the Braillet Board.
3. Kamalamurthy uses a Braille Writing Frame.
4. Vedamani reads a book in Braille.
5. The imposing building of the Government School for Blind, Poonamallee.
6. Close-up of "seeing fingers" reading a page in Braille.
7. Lalitha works out a sum on the Taylor Frame.
8. A class in progress.
9. Sridharan types out a passage on one of the latest model Braille Typewriters.
10. The School Orchestra. Music is a popular pastime.



Dhoties and Saris for Handlooms

Chief Minister Reiterates Suggestion

"The question of reservation of the manufacture of dhoties and saris to the handloom industry is not a question of yardage, but of human families whose care is the obligation of the State Government and therefore of the Central Government," stated Sri C. Ragagopalachari at a recent Press Conference, reiterating the justice of the stand taken by the Madras Government in this matter.

"My demand on behalf of the handloom weavers, that dhoties and saris should be entirely reserved for this cottage industry," the Chief Minister said, has been opposed publicly by the Minister for Commerce and Industry, Government of India, during his short stay in Madras. This opposition is welcomed by the mill-owners of Bombay and Ahmedabad and the piecegoods merchants here. Some persons have been much concerned over the personal aspect of the matter. "It is not necessary for anyone to come to our assistance in maintaining our mutual goodwill and friendship. Mr. Krishnamachari has said enough about it."

"We are entitled each to defend our policies. I am convinced that this reservation, as I have proposed, is the only proper, just and economically sound solution for the conflict that has risen between the unprotected handloom industry and the long-protected mill industry. We are concerned not with private feelings but with the merits of the handloom cottage industry and its present position arising out of its dependence for yarn on the mill industry and the competition of the mills in a field which was entirely the monopoly of the Indian handloom all through the ages till recently. The mills have plenty of scope to produce cloth that could be tailored and could be used otherwise.

"Dhoties and saris are peculiarly Indian and could give adequate employment to the five million people engaged in the handloom industry. The total number of people engaged in the weaving section of all the mills in India would be much less than one lakh of workers. Actually, it has been calculated that they would be only 60,000. The number of men, women and children depending on the handloom in Madras State alone, I think, is five millions. The question is not a question of yardage but of human families whose case is the obligation of the State Government and therefore of the Central Government also.

'A Practicable Compromise'

"I am afraid the Union Minister made some error in his statistics; but nothing much hangs on that argument. You may take it that the mill production is round about 4,000 million yards per annum. The handloom production may be taken to be round about 2,000 million yards per year, most of which are dhoties and saris, whereas mill production of dhoties and saris has not been even up to fifty per cent of total output. Dhoties and saris have been a good field for exploitation for mills only in recent times. I would call it pilfering of pattern from the handloom to which the mills are not entitled. Considering the under-employment prevailing among millions of handloom weaving families, who cannot switch over to any

other employment such as a handful of people in England or Scotland could manage to do, it is really ridiculous to talk of the handloom weavers of India going over to other occupations.

"It really amounts to a policy of allowing one million families in Madras or three times that number all over India to be wiped out of existence. This will not happen. Human beings do not allow themselves to be wiped out. Problems will be created in the meanwhile which Governments will not be able to solve peacefully. I wish to avoid this and have suggested a fair and practicable compromise which could be smoothly worked.

'Industry Cannot be Allowed to Die'

"We cannot allow the handloom industry to languish and die. That is the equivalent of the policy underlying certain statements made on this subject. It is absurd to go abroad for marketing the handloom cloth instead of providing for handloom weavers what is due in their own country within whose social condition and tastes and manners, their avocation has grown. It has been stated that there will be a cloth famine if dhoties and saris are reserved for handloom cottage weavers. This is a groundless apprehension. A few months ago, the Handloom Weavers' Society in Madras had Rs. 4 crores worth of dhoties and saris on hand which they could not dispose of and which they wanted the Government to buy. Does this indicate a cloth famine?

"If anyone says that people took to handlooms on account of a boom, it would be quite wrong. Nobody takes to handloom weaving unless he is to that avocation born. No one can learn to weave crores worth of cloth simply by way of speculation. It is because he is a weaver by birth and is trained to do it from his early infancy that he weaves cloth. The mills with their machinery and paid labour and their extraordinary strong organization can produce four thousand million yards of cloth other than dhoties and saris, which can be used up for all requirements against nudity. And which can also be exported and easily marketed abroad.

'A Deepavali Gift to Weavers'

"The whole of the argument against my proposal arises out of want of imagination. I do hope that the Minister at the Centre will make up his mind and induce mill-owners of India to make a Deepavali gift to the handloom weavers this year. It will be a memorable step towards peace, stability and prosperity, and God will bless it and make it fruitful."

The Chief Minister was asked whether the public could afford the high cost of handloom cloth. He replied: "The public and the weavers have a way of adjusting themselves. The public cannot bear the starvation of the weavers either."

The Chief Minister finally declared: "Whatever the Government may do or may not do, the Government here or at Delhi, let us buy only handloom dhoties and saris for the next Deepavali."

Khadi Development in our villages

Of the population of 56.95 millions in Madras State, nearly thirty-eight millions are dependent on agriculture for their livelihood. Agriculture by itself can never provide employment throughout the year. Even in the delta areas the peasantry have no work to do for four months in the year. In the dry tracts the off-season extends to even eight months in the year and as the crops depend on the monsoon, the fruits of agriculture are uncertain. How can a population forced to spend in idleness four months in the year on an average be ever prosperous? This explains the chronic poverty in our villages.

No other advanced country in the world is burdened with so much unemployment. In the United Kingdom, the percentage of unemployed to the total population in 1949 was 1.6 and in the United States of America it was 5.5.

In terms of money, this national waste can be calculated as follows:—

Excluding the children and the over-aged, the able-bodied under-employed among the agricultural population in the State may be taken as nearly 27 millions.

Taking the period of unemployment as only four months in a year on an average and supposing that the population is provided with work as in a famine season and paid wages at famine rates, their earnings would be:

27 millions × 100 days (at 25 working days in a month, for 4 months) × 6 annas per day = Rs. 101.25 crores.

This then is the lowest estimate of the cost of unemployment among the agricultural population in our State in a normal year. In a drought year the period of unemployment will be longer and the cost proportionately stupendous. The State's revenues from all sources amount to 60 crores of rupees per annum. The cost of unemployment amounts to more than two and a half times the annual revenues of the State. The real cost will be much in excess of this estimate, for we should remember that the value of the output of an individual working for even six hours at a productive occupation will be more than six annas.

As long as this huge waste of man-power continues, there is no hope of revitalising our villages. Gandhiji spoke the literal truth when he said:

"Without a cottage industry the Indian peasant is doomed. He cannot maintain himself from the produce of the land. He needs a supplementary industry."

The Industry for the Millions

Hand-spinning is sometimes spoken of as an unprofitable industry, as it can give only about six to eight annas for a full day's work. Facile suggestions have been made for the introduction of Japanese industries like manufacture of cycle parts, clock and watch-making, mechanical toys, etc., by providing cheap electric power in the cottages of the peasantry. The introduction of such industries is no doubt welcome where facilities exist, but they can absorb but a small fraction of the rural unemployed.

"We make little headway (in developing Cottage Industries) because we have an unclassified catalogue of industries for the people to choose, when we should know that there is only one industry it is possible to put before all. They may not all take it up. Let those who can and wish to, by all means, take up any other. But national resources must be concentrated upon the one industry of hand-spinning which all can take up now and beside which the vast majority can take up no other. It is not enough to say that hand-spinning is one of the industries to be revived. It is necessary to insist that it is the central industry that must engage our attention if we are to re-establish the village home."

—MAHATMA GANDHI.

The workers who take to any such industry will have to devote themselves wholly to it and become skilled craftsmen. They must also have the necessary capital to instal the machinery and procure the raw materials. Such industries cannot be thought of as a spare-time employment for the millions of our agricultural population, men and women, young and old, who cannot give up the plough, the hoe and the sickle.

Hand-spinning, on the other hand, was, till less than two centuries ago, the universal cottage industry. The spinning tradition still lives in many of our villages, particularly in the cotton growing districts like Coimbatore, Ramanathapuram, Tirunelveli, Salem, Cuddapah, Anantapur, Guntur, East Godavari and Visakhapatnam. It can easily be revived. The charkha can be made by the village carpenter at a cost of less than five rupees from materials available in the village. It does not require any special skill. Above all, the product of the industry will supply one of the essential needs of the workers themselves. It is thus the cottage industry *par excellence* and is well suited to our rural economy.

The Madras Government's Khadi Scheme

The Madras Government can justly claim to have been the first State Government to take active measures for developing Khadi. Rajaji as the Premier in the first Congress Ministry that came into power in 1937, was responsible for enacting the Madras Regulation of Sale of Cloth Act, 1937. The system of licensing cloth dealers introduced by this Act provided for a levy of licence fee on dealers in mill cloth and was thus a measure of protection, albeit slight, for Khadi. Government also initiated a system of grants to the All-India Spinners' Association for developing Khadi in the State. The grants were utilised for distributing charkhas and starting spinning centres in many of the famine-affected areas of the State.

The Intensive Khadi Scheme formulated in 1946 was the first comprehensive scheme to develop Khadi directly through Government agency. The Scheme aimed at intensifying production of Khadi in selected areas with a view to make those areas self-sufficient in respect of cloth in terms of Khadi.

THE BLIND LEARN A TRADE

When a basic standard in general education is achieved, training in some useful vocation follows. Such vocational training is designed to improve the earning capacity of the blind individual, and insures against his being forced to lapse into being a dependent on public charity.

At Poonamallee, men learn rattan work and women are trained in weaving.

The pictures :

1. Weaving Section at work. This blind woman is weaving a bedsheet of intricate design. The cloth requirements of the institution are met from the stocks produced at the Weaving Section, only the surplus being put up for sale.

2. At the Rattan Section. All types of furniture and wicker works are produced here. Some of the articles made by the inmates were exhibited at the Festival of Britain.

3. Physical education has a special significance for the blind. It is aimed at not only promoting healthy habits, team spirit and sportsmanship, but also at eradicating certain mannerisms essentially peculiar to the blind. The boys here are doing Wand Drill.

4. The girls at Pinnal Kolattam, a kind of Indian Maypole dance. Music has a powerful appeal to the blind and so extra facilities are provided for imparting training in music.

FOOD



MODERN EQUIPMENT: Agricultural implements displayed included Rotavator and seed-drill.

Unicef Milk Distribution Schemes and the quantity of milk powder distributed to malnourished children and mothers in the different districts was put up. Free skimmed milk donated by the Unicef was distributed to a few children every evening in the stall. Heights and weights of children and women were recorded in the stall for statistical studies.

Electricity.—The Electricity stall was one of the most popular ones in the Food Production enclosure. The model of an electrified village proved very popular and huge crowds queued up to see this model which showed how electricity could be utilised for the prosperity of the rural areas. Charts showing the utilisation of electric power, increasing demand for power and revenue, progress of electric supply for agricultural purposes and the Madras Grid were also popular exhibits in the stall.

Public Works Department (Irrigation).—The stall of the Public Works Department (Irrigation) was tastefully decorated on the outside and provided with dark blue screens to obtain a partial darkness inside so that the electrically lit models could be seen to advantage. Models of the Lower Bhavani Project, Krishna-Pennar Project, Cauvery Valley and Irrigation Projects of Madras State were exhibited attractively. They showed at a glance the details of the projects in a pleasing way and large crowds queued up in the stalls every evening.

Superintending Engineer (Food Production).—A model of an ideal village showing how Minor Irrigation Works could help towards the prosperity of a village was attractively laid out. A map indicating the Tank Improvement Schemes of the State was also exhibited.

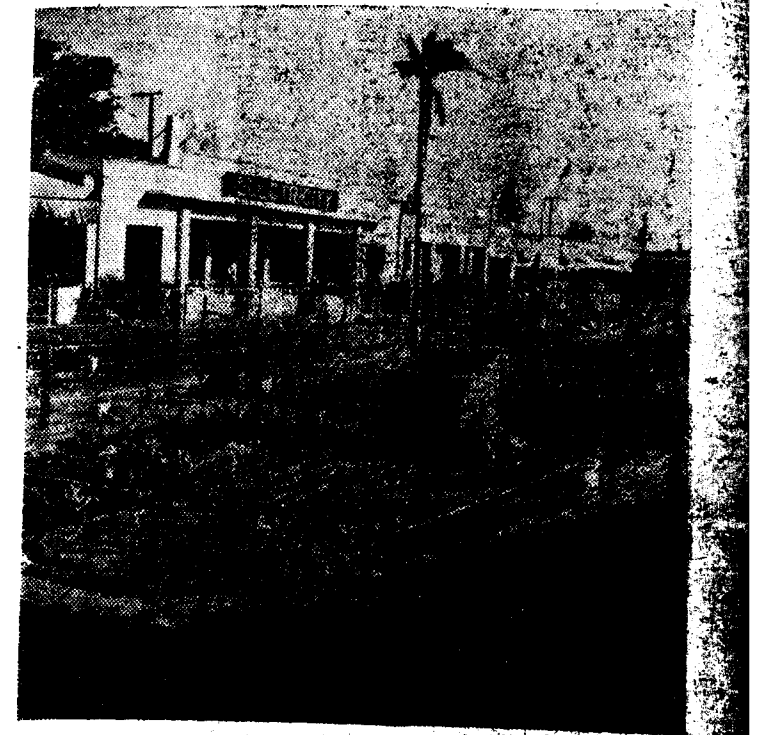
Co-operative Department.—Several exhibits were put up in the stalls on the utility of the palm trees, particularly palm jaggery as an article of food. In one of the stalls neera (sweet juice drawn from date trees) was sold to the public as a beverage. This juice was kept in iced drums to keep it in good condition and was sold at 6 pias per cup.

In another stall, the conversion of sweet juice into jaggery, white sugar, chocolates, toffees, etc. was demonstrated. A hand-driven centrifugal machine for converting rubber into white sugar was put on demonstration. Articles made from palm leaves by the tappers as a subsidiary occupation were exhibited.

Fisheries.—A miniature aquarium with fresh water fish used for food, for pleasure and for disease-control was put up, with suitable natural background and lit during nights to make it not only attractive but educative. Preserved specimens of cultivable fish were also exhibited in huge glass jars. Cured fish and processed prawns were sold at reasonable prices. Certain preparations made of fresh fish were also put on sale daily and there was a very good demand for these. A portion of this stall was taken up for exhibiting a variety of 'Algae' which grows on the seashores of Ramanathapuram District and which is claimed to be a good subsidiary food. Delicious preparations can be made out of this weed, and they had a good sale. Agar-agar is prepared from this seaweed.

Animal Husbandry.—Numerous posters showing the different breeds of cattle, their location and distribution, their utility for drought and milch-purposes, their diseases and methods of their control and prevention were put up.

Specimens of parasites, model cow-sheds, sheep-dip, models of different breeds of cattle in India, balanced diet for different breeds, etc., were exhibited prominently. Dairy appliances, viz., cream separator, butter churners, butter workers, milk strainers, milk thermo-cans, milk bottles, capsuling machines, etc., were displayed and visitors told about the working of each appliance.



RAISE YOUR OWN VEGETABLES: Model vegetable garden designed for the home, laid out at the Park Fair Exhibition.

RURAL RECONSTRUCTION

The Scheme has been working in the following seven centres since the beginning of 1947:—

Name of the centre.	Number of villages included in the centre and the districts in which they are situated.
(1)	(2)
1 Avanashi ..	28 villages of Coimbatore District.
2 Vellakoil ..	12 villages of Coimbatore District.
3 Chinnasalem ..	9 villages of Tiruchirappalli District.
4 Payyanur ..	7 villages of Salem District.
5 Santanutalapadu ..	61 villages of South Arcot District.
6 Erragondapalem ..	4 villages of Tiruchirappalli District.
7 Kotauratla ..	9 villages of Malabar District.
	6 villages of South Kanara District.
	21 villages of Guntur District.
	19 villages of Kurnool District.
	31 villages of East Godavari District.
	18 villages of Visakhapatnam District.

In these centres the Government provide all the facilities necessary for the villagers to produce and use their own Khadi.

The ideal home-spun Khadi is that which is made out of yarn spun in one's own home out of kapas hand-picked from cotton cultivated by oneself. Khadi work therefore begins with the cultivation of cotton. The centres supply seeds of approved varieties of cotton to the ryots in order to encourage them to grow their own cotton. But as the majority of the spinners are not growing cotton at present, cotton has to be supplied by the Government. Cotton is therefore procured in the season, stocked in the centres in bulk and supplied to the spinners whenever they require it at cost price.

The spinners are encouraged to gin and card the cotton themselves at home. Hand gins and carding bows are also supplied to them at cost price; guts for the carding bows are supplied at one-third of the cost price. Charkhas are supplied to all intending spinners without any initial payment. The cost is recovered in easy instalments from out of the yarn spun by them. Trained workers have been employed to teach all the processes—ginning, carding, silvering and spinning—to those who wish to learn. Weavers are secured where there are no weavers at present, with a view to enable every village to have all its yarn woven into Khadi in the village itself.

The spinners can utilise the yarn spun by them to make their own Khadi and sell the surplus yarn to the Centre Khadi Officers. The Centre Khadi Officers utilise the yarn for producing Khadi which is available for sale to the non-spinning families.

The weavers have to be paid higher wages for weaving Khadi than for weaving mill-yarn. This is one of the reasons for the higher price of Khadi. With a view to promote self-sufficiency among spinners, the Government offer them a small subsidy varying from about 2½ to 4 annas per yard to offset the higher weaving wages. The amounts paid as subsidy every year since the inception of the Scheme are given below:—

Year.	Amount.
	RS. A. P.
1946-47	277 4 0
1947-48	44,222 3 3
1948-49	51,993 4 0

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Year.	Amount.
	RS. A. P.
1949-50	44,456 13 6
1950-51	43,770 15 3
1951-52 up to 31st March 1952.	50,255 2 6

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 from every family.

Though the goal of "one charkha in every house, and one loom in every street" is still far off, the progress made so far is encouraging, as can be seen from the following figures:—

Total number of families resident in the seven centres : 84,636.

	At the inception of the Scheme.	On 31st March 1951.	On 31st December 1951.
Total number of spinners in all the centres.	26,459	33,578	43,627
Number of looms		1,225	1,937

The production of Khadi in these centres has averaged 6.5 lakhs of yards per annum during the first four years, i.e., up to the end of 1950-51. For 1951-52 the final figures are not yet available, but the figures up to February 1952 indicate that the production has nearly doubled during the year. Besides the production on Government account mentioned above, about three lakhs of yards are produced by self-spinners under the Scheme.

Gandhiji warned nearly 25 years ago that it was wrong for the handloom industry to rely upon an unfailing supply of mill-yarn. He pointed out that handloom weaving and mill weaving were not complementary propositions but mutually antagonistic. "To make continuous improvements in their machinery and continuous encroachments on handicrafts is the objective of great industrialists. Indeed it is the very condition of their 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 handloom weavers themselves are beginning to realise that their future is linked up with the future of handspinning.

In view of the distress caused among the handloom weavers the Government have been examining the possibility of organising more centres for producing Khadi.

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 charkhas before an Intensive Khadi Centre can be started. Under this Scheme, charkhas are supplied to intending spinners at about half the cost price. Cotton as well as the implements necessary for carding, silvering, etc., are supplied to the spinners at cost price. 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 Scheme has so far been introduced in 93 firkas in 22 districts.

HARIJAN UPLIFT

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MADRAS INFORMATION

Great Strides in Harijan Welfare Work

By DR. M. V. KRISHNA RAO, Minister for Education and Harijan Welfare

Many of you may not be much acquainted with me in public life, but you may be interested to know that I have devoted a good part of the past thirty years to social service, particularly for the Harijan community. I was indeed very happy when the subject 'Harijan Uplift' was entrusted to me and more so because Education, which is so closely connected with Harijan Uplift, has also been put in my charge. It is the far-sighted statesmanship of the Chief Minister that has been responsible for these two subjects 'Harijan Uplift and Education' being entrusted to one and the same Minister. As some social reformer observed, education is the lever by which we can lift the down-trodden and socially backward classes to the level of the other advanced communities.

Since assuming charge of my office, I have visited the districts of Coimbatore, Madurai, West Godavari, Visakhapatnam and Guntur. Wherever I went, I have found a considerable change in the outlook of the so-called Caste Hindus in regard to the problems of untouchability and Harijan uplift. Untouchability is a word which has been removed from the dictionary of right-thinking and civilised people by the Constitution of India. We, of this State, must be particularly proud because the Government of this State forestalled the reforms introduced by the Constitution of India. All will recall that red-letter day in the history of Harijan uplift in this State, when, in 1938, under the able and wise statesmanship of Rajaji who is also happily at the helm of affairs today, the Harijans of Madurai were enabled to enter and worship at the famous Meenakshi temple at Madurai. The Madras Temple Entry Authorization Act and the Madras Removal of Social Disabilities Act soon followed, prohibiting the practice of untouchability in all forms by law. Offences under these Acts have been made cognisable. The district authorities have special instructions to see that the provisions of these Acts are enforced rigidly.

As regards the progress of Harijan uplift work, I do not propose to give a historical retrospect, because Ministers and Government officials have already dealt with this subject before, both through this medium of the Radio and in print. For my purpose, standing as I am on the threshold of my tenure of office as Minister for Harijan Uplift, it would suffice briefly to recapitulate the results so far achieved and to indicate in a broad manner the problems that still lie ahead of us and with which we will have to grapple resolutely to attain the goal set for us by the late-lamented Father of the Nation.

The Harijan welfare work that is done by this State is given in a small pamphlet issued by the Director of Information and Publicity, Government of Madras, under the title "Harijan Welfare in Madras State." Broadly speaking, Harijan uplift in this State consists of the following ameliorative measures.

Education

As I have already pointed out earlier, the Government attach very great importance to the problem of educating

members of the Harijan communities. This is but natural in a Welfare State with Adult Franchise. The solicitude of the Government in this regard can be best seen in the Budget provision for the purpose mentioned below:—

Year.	Total provision in the Budget.	Provision for Education.
	RS.	RS.
1951-52	1,10,47,000	85,00,000
1952-53	1,12,72,040	87,09,040

The educational facilities provided consist of scholarships, both residential and non-residential, provision of free mid-day meals in Elementary schools run by the Harijan Welfare Department, boarding grants tenable in hostels recognised and subsidised by the Government, maintenance of hostels directly run by the Government, stipends for professional courses and non-recurring grants to children studying in Aided Elementary schools. The progress made in the field of education can be seen from the expenditure incurred in the past few years on the following activities of the Department.

Year.	Boarding grant.	Scholarships and stipends.		Mid-day meals.	
		Students.	Amount.	Schools.	Amount.
(1)	(2)	(3)	(4)	(5)	(6)
	RS.		RS.		RS.
	(LAKHS).		(LAKHS).		(LAKHS).
1947-48	5.35	5,980	2.20	1,194	11.15
1948-49	10.08	7,698	3.08	1,153	12.31
1949-50	12.84	13,969	5.47	1,228	12.52
1950-51	17.14	17,732	7.12	1,349	15.72
1951-52	21.09	..	9.96	..	18.18
1952-53	22.09	..	9.62	..	17.00

[Budget Provision (including Part II Provision) proposed.]

Besides, all Harijan pupils in Elementary schools and High schools and students in Arts and Professional colleges are exempted from the payment of tuition fees. The quantum of tuition fees foregone by the institutions is borne by the Government. The result of the expenditure incurred on education can be seen from the increase of teachers employed and the number of schools as shown in the statement below:—

Year.	Number of schools.	Number of teachers.	Number of pupils taught.
1947-48	1,194	2,469	84,432
1949-50	1,290	2,834	98,744
1950-51	1,349	2,970	98,007

IRRIGATION STALL: Front view of the Public Works (Irrigation) Stall at the Park Fair Exhibition. Note the planted Coconut seedlings in front.

Award of Prices in the All-India Crop Competitions

The yield of the plot of 2.26 acres of Sri K. Vellayya Gounder was equivalent to 12,000 pounds of paddy per acre in wet weight. The yield of the plot of three-quarters of an acre of Sri Padam Singh was equivalent to 59 maunds, 25 seers and 11 chattaks of wheat per acre. The yield of the plot of 10,000 square feet of Sri Madho Kripal was equivalent to 726 maunds, 3 seers and 3 chattaks of potatoes per acre.

Subsidy for Milk Co-operatives

The Government have sanctioned a subsidy of Rs. 100 per mensem for a period of six months to the Co-operative Milk Supply Societies at Dachipalli and Thummalsakuram in the Palnad area of Guntur District.

By RICHARD CHINNATHAMBI

Once A Thriving Trade

Broken loose, they are brought to the surface and collected in a basket. With a chopper they are cleft open and the meat is scooped out. The entire contents are eatable and locally in demand only for medicinal purposes. Limited orders especially for the treatment of bile are sometimes placed with him. Each oyster (meat) by itself weighs from 1 to 2 palams but Munia Padayachi gathers them with their shells to comply with orders from Bangalore. Ex-butlers still find it worthwhile to book orders from out-stations. For the Sunday dinner in the English Club of Bangalore usually 1,000 oysters are packed off on Saturday from here. Munia Padayachi is able to do that much, if he is in water all Friday.

Gunny-bags for Gourmets

The butler middleman pays the fisher Munia Padayachi eight annas for 100 oysters with shell; 200 are packed in a gunny worth eight annas per 100 or four annas for a gunny full. At Rs. 1-4-0 therefore five such sacks find

Eat More Oysters !

He is thankful, however, for this money he is able to make by pursuing an ancestral occupation. He complains his children do not take to oyster-catching. Fancy prices are no doubt paid when oysters are sought after for medicinal purposes, but even the steady demand from Bangalore and other occasional orders from Madurai and Tiruchirappalli do not justify the pursuit of the trade as a means of livelihood for any individual, much less a family.

When I suggested that he should try to feed his oysters Munia Padayachi burst out laughing. He said they just "grew" (may be like Topsy) and all he had to do was to put into the water sufficient quantity of rough stones for the oysters to adhere to and grow. The idea of fattening for the market is still unpopular with livestock producers in our scorched earth. Munia Padayachi believed mere salt water was good enough for his oysters and the only time he was anxious was when floods in the River Pennar held out for more than four days. Oysters gasp for fresh water and die out and the seeds are destroyed for some time.

But then there is the other persistent danger of a change in one's eating habits, even in the Englishman's preferences in India, and then there will be no more orders for Munia Padayachi. Perhaps it would be wise to popularise oyster-eating locally and create a taste and a steady and cultured demand for this rare delicacy. Even though they are "horrible" and "hideous", the pangs of widespread hunger in the stomachs of the common man will not allow discrimination on this ground and in time to come, like *Oliver Twist*, they will ask for more and then perhaps the sons of Munia Padayachi will be assured of a living.

Sweet Toddy for Jaggery

The Government have permitted tapping of coconut trees for sweet toddy for jaggery manufacture on cooperative basis in Coimbatore Taluk and Vaniputhur Firka of Gebichettipalayam Taluk in Coimbatore District.

Provision of House-sites

The housing problem is one of the most difficult to tackle. The more one attempts to tackle it, the more it grows in magnitude and complexity. The Government have been assigning lands at their disposal for house-sites to Harijans wherever possible both in urban and rural areas. In the rural areas, they are providing house sites to Harijans who do not already own house-sites, by acquiring private lands. House-sites are provided in cases where the existing cheries are congested and also to avert threats of eviction of Harijans from private lands and for shifting of cheries due to insanitary conditions prevailing in the existing places. Prior to 1936, the practice had been to recover the entire cost involved in the acquisition from the assignees in annual instalments. In 1936 the policy was revised, according to which the Government undertook to bear the entire cost of acquisition of the land required for common and communal purposes and also as a special concession, to pay half the cost of the land required for house-sites subject to a maximum of Rs. 150, Rs. 250 and Rs. 350 per acre in the case of dry, garden and wet lands, respectively, the balance being recovered from the assignees in easy annual instalments not exceeding five. In 1949, the Government liberalised their policy and have undertaken to provide every Harijan family including converts from Harijans who do not already own any house-site, with house-sites at the rate of three cents in wet and five cents in dry areas, the assignment being free of cost, except in cases where the assignee can afford to pay. In urban areas, however, acquisition is resorted to only in cases where the Harijans pay the entire cost of acquisition.

In the case of Tanjore District, where the Harijans including agricultural labourers were reported to be in danger of eviction from their manikats by the mirasdars, the Government sanctioned a special staff in 1950, to provide them with house-sites by assignment of Government lands and acquisition of private lands. The special staff has been working from September 1950 onwards. A sum of Rs. 2,44,288 has been spent so far in this district alone till now.

The following figures show the progress made during the years 1948-51 in the matter of provision of house-sites :—

Year.	Assignment of Government land.		Acquisition of private land.		Amount spent on acquisition.
	Extent.	Number of house-sites.	Extent.	Number of house-sites.	
(1)	(2)	(3)	(4)	(5)	(6)
	ACRES.		ACRES.		RS.
1948-49	16.34	425	35.32	497	32,571
1949-50	8.72	191	41.05	576	30,853
1950-51	247.91	3,999	204.84	3,500	2,35,716

Provision of Sanitary Amenities

The Government also provide wells, pathways, burial grounds, playing enclosures, lavatories, etc., for the benefit of Harijan inhabitants. In the year 1950-51, a provision

of Rs. 1,47,040 was made for expenditure on these amenities. During the year 1951-52, an amount of Rs. 1,14,100 was provided for the same purpose.

Enforcement of Provisions of Temple Entry Authorization Act and Civil Disabilities Removal Act

The Temple Entry Authorization Act and the civil Disabilities Removal Act were passed as early as 1939 and were suitably amended in 1947. Although these Acts have been in force for more than a decade, there are still stray cases of harassment of Harijans by the so-called Caste Hindus. During the year 1950-51, thirty-seven such cases were detected and proceeded with and 22 ended in conviction. Instances of this kind were promptly dealt with by the District authorities under the Law. Social service bodies, notably, the Harijan Sevak Sangh, have also co-operated with and assisted Government officials in detecting such cases and bringing to book offenders. In this connexion, I need hardly stress that however much the Government may try to put an end to the curse of untouchability by legislation, without the co-operation of the people and social service organizations, it would be an uphill task, nay, an impossible one, to achieve any measure of success in this field.

So much for the work already done in the field of Harijan uplift. Earlier, I have alluded to the task ahead. We have to endeavour and bring about a sincere and unreserved change of heart among the so-called higher classes towards the Harijans who have been regarded and treated as untouchables. In this connexion, I may say that the Government have rightly accepted the suggestion to observe the 30th of every month, regarded as sacred by the people of this country on account of the death of Mahatma Gandhi on that day, as Harijan Day. This day is being observed throughout the State in nooks and corners of all taluks and villages under the guidance of District officials, non-officials and with the co-operation of the general public. The object of these celebrations is to focus public attention on the unfortunate and pitiable thies in the work of Harijan uplift. If these celebrations could bring about a genuine change of heart among all who regard the Harijans as untouchables, the purpose will have been well served.

I take this opportunity in appealing to all of you to extend your co-operation and help in the Government's task of Harijan uplift and to make this State which is in so many other ways a pioneer in undertaking progressive measures, an example to the entire country in respect of Harijan uplift work. I need hardly remind you that the standard of life of its poorest people, just as the strength of a chain is judged by its weakest link.

Jai Hind!

(Adapted from a Telugu talk broadcast from A.I.R., Madras)

Silage Scheme Extended

The Government have sanctioned the continuance during the year 1952-53 of the scheme for the preparation of silage at the Agricultural Research Stations, Wynaad and Taliparamba.

A Road to New India

"Quit India" was the ultimatum Mahatma Gandhi issued to the British rulers, for they stood in the way of Ram Raj. This was not too long ago. But what is Ram Raj?

By Ram Raj Bapu meant the glorious days of old when every one had plenty to eat and plenty to wear; when the individual lived for the family, the family for the village, the villager for the district, the district for the province, the province for the country. Ram Raj was to him an article of faith, not a figure of speech. Rama was the monarch of the people. Rama administered justice regardless of caste or creed. He administered to the needs of life equally and and equitably, through the servants of the State.

Today

Today where do we stand?

The eight millions of refugees have been more or less absorbed, most of them housed, large numbers of them provided with the means of livelihood. Much yet remains to be done. It was a hard task. Centuries could not be replaced overnight.

Meantime giant factories have already sprung up and many more are in the making—the Chittaranjan Locomotives, the Sindri Fertilizers, the Bangalore Machine Tools, the Hindustan Aircraft, the ship-building yards, the automobile factories, the engineering schools and colleges, the institutes of higher technology, the big laboratories of science. Yet more and more are coming in. More are yet to come to serve the increasing needs of the people.

The giant multi-purpose projects are forging ahead, projects which will bring more water for irrigation, more electricity to supply power to factory and light to town and village. Tractors and bulldozers are blasting the jungle, reclaiming vast tracts of virgin land. New towns and villages are springing up for the increasing population. But the plenty we looked for is yet far off. We still need to import cereals in order to meet the demand for two square meals a day. We need steel to run our industries.

As a nation we are hungry, we are diseased, we are ignorant. A hungry, diseased and ignorant man is least suited for freedom, much less suited for the *inquilab* of the spirit. For freedom to be a reality, hunger must be quenched, disease must be eradicated, ignorance must be liquidated and replaced by enlightenment. Whither is the way?

And Tomorrow . . .

Tomorrow can then bring us again a day of harvest songs in the open field; the frolicking children around the family hearth in the evening, the folk songs, the folk dances and the village opera on moon-lit nights. Instead of looking with envious eyes to other lands we can look forward again to guests from abroad whom we can regale with our customary abundance, we can write new philosophy, new epics and new folk-lore.

Our cattle can again be members of our household. They will plough deep, as they wag their tails, as they race furrowing across the soil. Our children can again be our partners on the job instead of being treated for rickets.

Our hearths can again be rich and warm and inviting as they were once. Our doors can again be flung open, for when there is plenty for all, why be afraid, and of whom?

Community Project

The Five-Year Plan of the Government visualises movement in all directions—multi-purpose schemes for water and electricity, flood and malaria control, factories to produce tools and the means of production, and to produce consumer goods in ever-increasing quantities, transport and communications to facilitate exchange of commodities, exchange of ideas between regions; the Community Project—a project of the people, by the people, for the people. What is the Community Project and what is its purpose?

According to the latest census the rural population of India constitutes 82.5 per cent of the total, the remaining being urban. Democracy is based on the major number. India has been pledged to be a democratic republic. Numbers therefore count. The rural population, accordingly, should receive the prior and major attention of Government.

If the villager is to be made community-minded, he has to have ample food, ample health, ample clothing and ample shelter. He needs besides, ample recreation through which he can reinvigorate himself for the day's work, as also for the life in the community. All this can be achieved, if the villager produces enough with which he can feed himself amply and then have a surplus, enough to pay for the other amenities which he requires for the rest of his needs.

The Community Project, as conceived by the Government of India, has been designed to promote the pre-requisite for additional productivity, such as can cater to all the basic elements of rural life.

Initiative from the Villagers

A substantial part of the development necessarily falls on the shoulders of the villagers themselves. If the programme is to go through, villagers have to take the initiative in deciding what the need is most and in what order. They will have to gird their loins and get down to the ground with the axe and the shovel and start the multi-purpose development on their own—individually, collectively or in groups. The Government agencies will be there acting as complements to them in every phase of their activity and at every stage of the programme.

The Community Projects Scheme, at the present stage of the country's economy, has been made possible by the Indo-U.S. Technical Co-operation Agreement. Under this agreement, the equivalent of 55 projects has been launched throughout the States in India. The scheme covers about 16,500 villages and a population of approximately 12 million. The U.S. Government with their extensive experience in this direction, especially in the agricultural field, have come forward to help us. They have placed at our service monetary, material and technical resources to reinforce our own for the implementation of the scheme.

The present projects are to be implemented within a period of three years. The additional amenities created in the project areas are expected to be maintained with the additional resources resulting from an assured increase in the income of the people.

Operation 'Drag-net'

There is more than solid catch in deep-sea fishing, there is drama too. Aboard ASHOK and PRATAP, Government of India's motor-driven fishing trawlers bought from Holland, one comes across these almost everyday.

From its berth in Princess Docks, Bombay, ASHOK goes out for deep-sea fishing, with intervals of only two days in port. Its beat is along the coast-line of Bombay, 20 to 60 miles off land, each trip taking eight to ten days. The average catch, during a trip, ranges from five to ten tons. The cold storage space within the holds of the boat could, however, accommodate up to 30 tons. Ice plus the refrigeration plant keeps the catch in storage fresh all the time.

Cruising down the murky waters of Bombay harbour, ASHOK does a steady seven knots out into the sea. In the engine room, the 240 horse-power diesel engines develop enough power for the boat to scour areas where fishing could be most advantageously done.

Continuous Fishing

The boat uses a 62-foot drag-net, or trawl, kept in position by two huge wooden planks, the net being drawn on the sea-bed for about ten miles. This dragging process reduces the speed of the boat from seven knots to a bare two and a half. Mechanical winches and pulleys haul the net back with the catch.

The boat is engaged in continuous fishing. The trawl is usually down from four to five hours at a time. The common catch includes Daras, Ghols, Wams (eels), Pomfrets, Mulletts (of three varieties—silver, grey and red), Catfish and Skate.

Skipper Masson has an arduous task all the time. Problems of navigation—it is not easy to ply a boat with hundreds of tiny local fishing craft dotted around—assessment of suitable sites for fishing and similar duties keep him literally on his toes all the time.

At the bridge, with one hand on the wheel, he is always on the look-out. In that no-man's stretch of water, anything could happen, but usually does not.

Happy Family

The skipper has a crew of eleven—Mate, boatswain, two engineers, four deck-hands and three to attend the kitchen. An experienced seaman—he has been in the Royal Navy during the two World Wars—Skipper Masson knows his craft well. So does his mate, a young man who has had his training aboard fishing trawlers in the United Kingdom.

They are all a happy family, the skipper and the crew. Their living quarters inside the boat, the very picture of economy in space, are neat and comfortable—in the circumstances of the rolling and pitching which a choppy sea can give to a small boat! Whenever they are out on a trip, sufficient provisions and fresh water are carried on the boat. Early morning tea, breakfast at eight, lunch, afternoon tea, high tea at six, and dinner are served.

Their work is arduous and exacting. The hours of relaxation are few and far between. Alert all the time,

to see whether the net is being dropped correctly; whether it is in position; looking out for things that might look trivial but may matter much; the crew stands by all the time.

Team Work

The net is usually worked to a depth of 18 to 25 fathoms, but it could be lowered up to even 100 fathoms. Here comes team work, and everyone knows what exactly to do when the skipper gives the signal to drop or haul the net.

When the boat touches port, the catch is unloaded and passed on direct to the market or to a cold storage plant where it can be kept fresh.

Skipper Masson feels that with larger ships having greater power and the right kind of equipment, the quantity of the present catch could easily be doubled.

Asked what was the most interesting experience he had during his trips skirting the coast of Bombay, Masson said: "The most thrilling thing that I ever came across was a chance acquaintance with a whale, about 30 miles off the coast. It was a huge one and it just danced around the boat as if winking at us. Then it would dive under the boat and appear on the other side. I never had an experience like that in all my life!"

The Mirror Carp

The Mirror Carp is a freshwater fish found in temperate regions and in higher elevation in sub-tropical regions. It was originally cultivated in the ponds of Central Europe. The culture of Mirror Carp was taken up in the Middle East some time in the 18th Century and they were introduced in the tropical countries in the 19th Century. In India this fish was introduced first in the Nilgiris in 1939; they bred there for the first time after two years. Taking advantage of the breeding of this carp in ponds, the Fisheries Department gradually extended the stocking of Mirror Carp to various ponds and tanks in hilly regions above 3,000 feet-mean sea level.

Subsequently, they were also brought down to the ponds on the plains as in Vellore, Chingleput, etc. But it was found that they do not breed in waters in regions less than 2,500 feet mean sea level. Recently in September 1951, more than 20,000 Mirror Carp were transported from the Nilgiris and stocked in the lake in Kodaikanal.

The Mirror Carp grows fast, attaining a length of over a foot and 3 inches and a weight of 3½ lb. in the course of one year in the plains.

Control Orders in Force on 25th February 1952

THE MADRAS FOODGRAINS PRICE CONTROL ORDER, 1951

This Order has been issued in supersession of the Madras Foodgrains Price Control, 1949, and has come into force from 2nd December 1951. This Order fixes procurement and wholesale issue prices of foodgrains for the year 1951-52 in the several districts of the State. This Order contains seven schedules specifying the different procurement, ex-mill, f.o.r., and wholesale prices of paddy, rice and millets. The main changes made in this Order are:—

(1) The procurement price of paddy in the Intensive Procurement districts, viz., East Godavari, West Godavari, Krishna, Guntur, Nellore, Tanjore, Malabar and the Nilgiris have been increased by eight annas per maund of paddy. The f.o.r., ex-mill and wholesale prices of paddy and rice for these districts have also been correspondingly increased.

(2) Two separate f.o.r. prices have been fixed, one for deliveries by procuring agents and millets and another for deliveries by producers, which are exclusive of Sales Tax.

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, 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 fluctuation in interest and capital, extra transport charges, increase in cost of gunnies, etc.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

Consequent on the increase of eight annas per maund of paddy in the procurement price in the Intensive Procurement districts, viz., East Godavari, West Godavari, Krishna, Guntur, Nellore, Tanjore, Malabar and the Nilgiris ordered with effect from December 2, 1951, the f.o.r., ex-mill and wholesale prices of paddy and rice have also been revised and the revised prices notification to be in force for the kharif year 1951-52 incorporating all other minor corrections made during the year 1951 has been issued in G.O. Ms. No. 2292, Food and Agriculture, dated November 30, 1951, as the Madras Foodgrains Price Control Order.

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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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 7, 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, Narasapur and certain delta villages in Kovuru, Eluru and Tadepalligudem Taluks.

East Godavari.—The entire taluks of Kakinada, Amalapuram, Razole, Kothapeta and Ramachandrapuram and certain delta villages in Rajahmundry, Peddapuram and Pithapuram Taluks.

Krishna.—The entire taluks of Gudivada, Bandar, Kaikalur, Divi, and all villages in Vijayavada and Gannavaram Taluks lying on the southern side of the Southern Railway line, running from Gunadala to Eluru.

Nellore.—The entire taluks of Nellore, Kovvur, Kavali, Gudur and Atmakur and certain villages under Mopad Project in Udayagiri and Kanigiri Taluks and certain delta villages in Sulerpet Taluk.

Guntur.—Entire taluks of Tenali, Repalli and certain delta villages in Bapatla, Guntur and Ongole Taluks.

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., seeds for agricultural expenses for domestic consumption which are prescribed in the Order. A provision for the seizure and confiscation of 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 Government have issued an amendment to the Madras Foodgrains (Intensive Procurement) Order, 1951, in G.O. Ms. No. 1963, Food and Agriculture, dated 5th October 1951. This amendment has been issued for the purpose of revising the areas in Krishna, Guntur and East Godavari Districts to which the Order applies, as specified in Schedule I to the Order, so as to bring them into conformity with those specified in the Schedule to the Notification issued in G.O. Ms. No. 1161, Food and Agriculture, dated 5th June 1951.

Demand on the People

Fifty-five projects for India are a tiny speck on the vast expanse of this land, covering hardly one-thirtieth of the population. And yet the scheme costs nearly Rs. 40 crores. The standard of basic amenities, modest as they are, demand at least Rs. 80 crores in addition. Even then it may not be enough. A reproduction of this scheme thirty times this size will cost thirty times this sum. Where is the money to come from?

Land in India today produces about one-third of what the land produces in other countries. Yet our land is not less fertile, nor are our people less virile or less intelligent. If we are to provide the wherewithal for the rebuilding of New India, we must produce more from the soil. This can be done if the farmers in the project areas take full advantage of the agricultural measures visualised in the Community Project.

People can Work Harder

The people can work harder if they are in good health. This they can do if they act up to the preventive measures adopted by the health agencies in the project area. It is joy that produces. To have that exuberance of the spirit, it is necessary for the people to raise their stature by taking advantage of the adult education and recreation measures visualised in the project.

A farmer in India has approximately six months of spare time in the year. The landless labour has approximately eight months in the year running idle. If even a quarter of this idle time is used for building roads and schools, and in improving village drainage, creating open parks and playfields and grazing grounds, digging compost pits and attending to the thousand other necessities of life, the limited Government finances provided for the project area can be multiplied manifold.

Villager is the Ultimate Master

For us, the Community Projects programme is both an economic measure and an expression of the new democracy. We now spend Rs. 300 crores each year in foreign exchange to buy the food we need. This is more than seven times the cost of the 55 Community Projects now being created. Every maund of wheat or rice produced through community development will help reduce the enormous drain on the country's financial resources.

Herein lies the reason for the high priority of "Grow More Food" in the Five-Year Plan. Food is basic. In a country as large as India, economic stability must rest on sound agriculture. This, incidentally, is equally true of other countries including the United States of America, whose highly developed agriculture guarantees both food and raw materials and a market for industrial products.

In the ultimate analysis, it is the villager himself who can guarantee the success of community development. Once he is aware of his opportunities, the final pattern of his life will be determined only by himself—by the spare time, the surplus earnings and the active interest he can devote to his own betterment. This has been proved in many countries of the world. It has been already proved in the pilot projects in India.

Broad Features of Objectives

The broad features aimed at in the community project area as a final target are as follows:—

(1) *A Village Unit.*—A village on the average will consist of an approximate population of 500 distributed in about 100 families. A balanced distribution of the population to be used as a reference is given in Appendix I. The village should have the following amenities:—

(i) Two surface wells or tube-wells or tanks for drinking water.

(ii) Adequate facilities for drainage.

(iii) Agricultural extension service at the rate of one agricultural extension worker for every five villages.

(iv) Veterinary services through a veterinary hospital at the headquarters of the project area and through peripatetic agencies.

(v) Sanitary services through a sanitary inspector maintained at the block centres.

(vi) At least half of the agricultural land if possible should be served with irrigation through irrigation canals, tube-wells, surface wells, tanks and lift irrigation from rivers, lake, etc.

(vii) One-third of the area of the village should be kept reserved for the village housing, grazing fields and fuel forests freshly planted, if not already existing. Culturable waste land will be reclaimed.

(viii) The road system on the country side will be so developed as to link every village within the project area up to a maximum distance of half a mile from the village, the latter distance being connected by feeder roads through voluntary labour of the village population, only the main roads being provided for and maintained by the State or other public agencies.

(ix) Schools for primary education for all school-going children.

(x) Primary adult education and recreation centre in the open air or in the village school conducted by the village level worker with the assistance of the teachers of the school.

(xi) Centres for fisheries (where facilities exist).

(2) *A Mandi Unit.*—Villages should be linked up with a common market and a centre of other activities. Such units for the purpose of this project can be called the Mandi Units and unless already there, can be located as a nucleus of 15 to 25 villages depending on population. The Mandi Unit should include:

(i) A middle or secondary school.

(ii) A small dispensary connected with the primary health centre through mobile services health unit and having a Lady Health Visitor, midwives and Sanitary Inspector.

(iii) An agricultural extension service sub-head-quarters.

(iv) A post and telegraph office.

(v) A transport service centre.

(vi) A marketing centre.

(vii) An arts, crafts and cottage industry centre.

(viii) A marketing centre and storage godowns for agricultural produce.

(ix) A shopping centre.

(x) A community recreation centre.

(xi) A model farm including a horticulture garden, a seed multiplication centre and a breeding centre for birds and animals.

(xii) An open air dispensary for peripatetic veterinary services.

N.B.—Due to financial stringency, the Mandi Unit has been omitted from the Government-sponsored programme, it being hoped that the increased productivity in the project area as a result of the programme will in due course stimulate these centres through private initiative for the local population.

(3) *The Development Block.*—Four to five Mandi centres together with their satellite villages should constitute what can be called a Development Block. The headquarters of the Development Block should be a rural-cum-urban township with an approximate population of 5,000 distributed in 1,000 families. The area of a development block will approximate a thana or a sub-tahsil in the existing framework of the State. The rural-cum-urban township should have:

(i) Residential accommodation for about 1,000 families including latrines and baths.

(ii) Water works and water distribution system for drinking water.

(iii) Electricity provided through a power station or a transformer sub-station as the case may be.

(iv) A shopping centre.

(v) Industries covering arts, crafts and cottage, small and medium scale industries.

(vi) A post, telegraph and telephone office.

(vii) A transport centre.

(viii) Schools, primary, middle and high, preferably of the Basic type.

(ix) An agricultural school.

(x) A primary health unit consisting of 15 beds equipped for mobile work in the villages.

(xi) Administrative offices and police station.

(xii) A dairy and a poultry breeding centre.

(xiii) A nursery.

(xiv) A veterinary hospital.

(xv) Social education and community activity centre.

The pattern of the rural-cum-urban township together with an approximate distribution of the population as a target, in greater detail, is furnished in Appendices I and II.

N.B.—Due to financial and other limitations the rural-cum-urban townships have been omitted at present from the current Government-sponsored programme. Instead a Mandi Centre under the basic rural project has been provided at the headquarters of the block. This Mandi Centre, if properly planned in relation to the villages within the block, can eventually develop into a rural-cum-urban township through the independent initiative of the local population as a direct result of the increase in productive activity.

(4) *Urban-cum-Rural Township.*—Three Development Blocks consisting of approximately 300 villages will constitute the project area. The project area will approximate a tahsil or a sub-division under the existing district pattern of Government. The headquarters of this project area will be called the urban-cum-rural township. The urban-cum-rural township will have a population of 10,000 to

20,000. In addition to the features common with the rural-cum-urban township in the Development Block the project headquarters township will have the following:—

(i) A Basic Teachers' Training College.

(ii) A Technical Training Centre.

(iii) Arbitration and Law Courts.

(iv) A Tractor Service and Supply Station.

(v) A Transport Workshop.

(vi) An Engineering Workshop.

(vii) A Secondary Hospital equipped for all types of medical aid.

(viii) A Training Centre for village level workers.

(ix) A Dairy, a Poultry and Agricultural experiment station including Soil Research Laboratories.

N.B.—The urban-cum-rural township is not provided for under the scheme as it is already assumed to exist under the existing administrative set-up in the country. However, for the composite projects, which have been visualised only on a limited number to meet the needs, especially for the rehabilitation of displaced persons or those of very under-developed areas, one urban-cum-rural township has been programmed at the centre of the project area.

Appendix I.

Schematic distribution of the population of a village unit as a target.

Agriculturists	50.00
Agricultural labour, tractor and pump drivers, etc.	10.00
Arts, crafts and cottage industry workers .. .	12.00
Workers in urban small-scale industries .. .	10.00
Building trade workers .. .	1.05
Transport workers .. .	2.00
Shopkeepers .. .	3.05
School teachers including contribution of teachers to the zonal middle schools .. .	3.00
Health services including adult education and other welfare workers .. .	2.00
Postman .. .	0.25
Barber .. .	0.25
Butcher, cobbler, etc. .. .	0.50
Contribution towards administrative and supervisory services .. .	1.00
Contribution towards security and defence services .. .	1.00
Vagabonds .. .	3.00
Total .. .	100.00

Appendix II.

Sample distribution of families in Arts, Crafts and Cottage industries.

Carpentry .. .	1.0
Blacksmithy .. .	0.5
Tailoring .. .	0.5
Raw tanning .. .	0.5
Weaving and Calico printing .. .	4.0
Confectionary .. .	1.0
Pottery .. .	0.5
Oil pressing, gur making, condiments, bakery, etc.	2.0
Utensils, tin and coppersmith, pottery and miscellaneous other trades .. .	2.0

12 families

The Madras Foodgrains Intensive Procurement Order has been amended for the purpose of extending the Scheme of Intensive Procurement of Paddy and Rice to the villages in Pithapuram and Peddapuram Taluks of East Godavari District which are irrigated under Yeluru river. (G.O. Ms. No. 89, Food and Agriculture, dated 23rd January 1952.)

The Madras Foodgrains Intensive Procurement Order, 1951, has been amended for the purpose of bringing the purchase and sale of standing food-crops before harvest within the scope of the Order. (G.O. Ms. No. 106, Food and Agriculture, dated 28th January 1952.)

The Scheme of Intensive Procurement of Paddy and Rice has been extended to 84 villages in the upland taluks of Pithapuram and Peddapuram which are irrigated by the Yeluru river. Consequently the Madras Foodgrains Price Control Order, 1951, issued in G.O. Ms. No. 2292, Food and Agriculture, dated 30th November 1951, has been amended so as to make the notified procurement and f.o.r. prices applicable to these 84 villages also. (G.O. Ms. No. 88, Food and Agriculture, dated 23rd January 1952.)

THE MADRAS FOODGRAINS PROCUREMENT ORDER, 1947

Clause 4 of the Order has been amended so as to permit the removal by a landlord, the crop of a notified foodgrain in the form of sheaves to the threshing floor or place of storage in the village in which the crop has been harvested or to his (landlord's) usual threshing floor or place of storage in an adjoining village. (G.O. Ms. No. 60, Food and Agriculture, dated 18th January 1952.)

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 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.

An amendment has been issued to Schedule II to the Foodgrains (Levy Procurement) Order, 1951, for the purpose of altering scale of levy. Also South Kanara

District. In view of the several representations made to the Government that the previous scale of levy fixed for the district was excessive and deprived the producers of even their bona fide requirements, the Government have slightly reduced the scale so as to make it easy.

Amendments have been issued to the Schedule to the Madras Foodgrains (Levy Procurement) Order, 1951, for the purpose of altering the scale of levy fixed for Srikakulam District and also altering the names of certain villages in the Schedules to the Order in respect of South Arcot and Srikakulam Districts.

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 price varies between 12 annas to 15 annas per imperial maund. The Collectors of the districts have been empowered by the Central Government to fix the wholesale and retail prices of salt for each consuming area within their respective jurisdictions, subject to any directions issued by the State Government. 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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

THE MADRAS RATIONING (PREPARATORY MEASURES) ORDER, 1947

This Order enables Government to take the preliminary steps such as enumeration of house-holders, 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 authorized 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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector in respect of the Nilgiris District or the District Supply Officer concerned in respect of other districts.

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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector in respect of the Nilgiris District or the District Supply Officer concerned in respect of other districts.

THE MADRAS RATIONING ORDER, 1947

This Order regulates the distribution of rationed articles to house-holders, 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 members and within 14 days in the case of absence of a member from the household.
5. Change of address of card-holders 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 card-holder is leaving the ration area permanently, he should return the ration card to the Rationing Officer. If a card-holder 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 unauthorised dealer and except on a ration card.
11. A land-holder 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 consumption or for transporting the quantity outside the rationed area or for selling the surplus grain with him.
12. A land-holder 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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector in respect of the Nilgiris District or the District Supply Officer concerned in respect of other districts.

Under the Madras Rationing Order, 1947, the foodgrains transported illegally without a permit will, hereafter, be seized and confiscated together with the containers and coverings thereof and the animals, vehicles, vessels, or other conveyances used in carrying the said articles. (G.O. Ms. No. 2217, Food and Agriculture, dated 15th November 1951.)

Amendments have been issued to G.O. Ms. No. 478, Food and Agriculture, dated 27th May 1948, permitting the land-holders to import the produce of rice from their own lands at the rate of 12 oz. per adult per day for their personal consumption as against 10 oz. previously allowed.

The Madras Rationing Order, 1947, has been amended so as to empower the Rationing Officers to take samples of any articles for examination, in respect of which they have any reason to believe that any contravention of the Madras Rationing Order, 1947, has taken place or is taking place. (G.O. No. 77, Food and Agriculture, dated 21st January 1952.)

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 Essential Articles Restricted Acquisition Order has been made applicable to persons who carry on in the essential articles the business of a producer, if they draw those articles as rations from a ration shop on their ration cards.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector in respect of the Nilgiris District or the District Supply Officer or Collector concerned in respect of other districts.

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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector in respect of the Nilgiris District or the District Supply Officer concerned in respect of other districts.

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. At present the Order has been made effective only in the districts of Guntur, Krishna, East Godavari and West Godavari and according to this no person can cultivate the rainfed crop of chillies in these districts 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 miller's licence has been obtained, no other licence under the Order is necessary; (2) mixing or miller's 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 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."

According to an amendment issued on January 5, 1952, the approved form of licence issued under this Order will provide in future suitable columns for incorporating the following details at the time of the renewal of licences:—

1. Year for which licence is renewed;
2. Date of renewal;

3. Fee;
4. Chalan number and name of treasury;
5. Penalty if any;
6. Chalan number, date and name of treasury;
7. Signature of licensing authority; and
8. Remarks.

The three classes of licences issued under this Order will in future be issued in three distinct colours as shown:

Class of licence.	Colour.
1. Oil Mills	Green.
2. Dealers in manure	Red.
3. Firms engaged in manure mixing trade.	White.

THE MADRAS MANURE MIXTURE QUALITY AND PRICE CONTROL ORDER, 1950

According to this Order only firms of standing dealing in manure and approved by the Government of Madras on the recommendations of the Fertiliser Advisory Committee through the Director of Agriculture shall manufacture and market manure mixtures. The firms dealing in manure shall legibly mark on the manure bags the following particulars:—

- (a) The registered brand and name of the manure mixture;
- (b) The organic and inorganic, total P₂O₅, W.S. P₂O₅, K₂O contents of the manure mixture denoted by the letters N, P (T), P (S) and K respectively.
- (c) The registered name of the firm.
- (d) The crop or crops for which the manure mixture is suitable; and in the case of a general mixture for all crops the expression "All Crops".
- (e) The gross contents by weight in pounds.

The manure mixture will have to be sold at the prices approved by the Joint Director of Agriculture. The fertiliser mixture shall be put up in the market in sealed bags, to obviate the contents being tampered with without breaking the seal. The firms dealing in manure shall not alter the ingredients, or the guaranteed analysis, or the price of the manure mixture, except with the previous approval of the Joint Director of Agriculture.

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.

MADRAS FOODGRAINS CONTROL ORDER, 1947

This Order exercises control on the purchase, sale and storage beyond certain limit (i.e. 10 maunds in the case of purchase, sale and storage for sale and 15 maunds in the case of storage for purposes other than those of sale) 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), umbu (Bajra), ragi, korra, maize (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

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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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, 1951.

Under the Madras Foodgrains Procurement Order, 1947, the foodgrains transported illegally without a permit will hereafter be seized and confiscated together with the containers and coverings thereof and the animals, vehicles, vessels or other conveyances used in carrying the said foodgrains (G.O. Ms. No. 2258, Food and Agriculture, dated 24th November 1951).]

THE MADRAS RICE MILLS LICENSING ORDER, 1951

The Madras Rice Mills Licensing Order, 1947, has been re-issued as the Madras Rice Mills Licensing Order, 1951. This Order extends to the whole of this State and came into force on 18th 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 every 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. The 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 authorised 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

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 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 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 such anti-social activities. Harijans, co-operative societies, hand-pounding concerns, ex-akari contractors, ex-servicemen's associations, etc., are exempted in deserving cases from the conditions regarding the previous business standing.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

MADRAS FOODGRAINS (MOVEMENT CONTROL) ORDER, 1947

(G.O. Ms. No. 720, Food, dated 14th June 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. A week's ration at the prescribed scale forming part of the luggage of bona fide travellers and grains intended for bona fide sowing purposes granted under a certificate issued by an Officer of the Madras Agricultural Department not below the rank of District Agricultural Officer and foodgrains transported under Military Credit Notes are exempted from the operation of the Order.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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 paddy, rice, millets, wheat and their products (excluding products of foodgrains which are used as cattlefeed, viz., rice, bran, wheat bran, bran and husks of millets and maize), 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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

Double Dividends from a British Forest

By DONALD MACROW

Claiming more than 90 per cent utilization of every tree cut, Britain's largest State Forest (Thetford Chase, Norfolk) is already paying its way, though the earliest plantations were made only in 1922.

As yet, interest on capital invested is not included in the calculation; but over the 100-year period planned for many of the pine plantations, the yield of timber for a block of 5,000 acres will approach one million tons.

The forest extends for 48,360 acres of which 33,470 are plantations. Most of the trees are varieties of pine, though inter-planting with beech has been found possible in some areas. After the first full period of conifers, the soil over most of the forest area will have been improved enough to be suitable for some kinds of hardwoods.

There has been a progressive programme of planting since the first in 1922 and every year new blocks are coming to the stage when the first thinnings can be made. Planting density is 2,200 trees to the acre but in 18-22 years, after the first thinning, the number has come down to 1,300-1,400. Subsequent thinnings are taken at between three and five years' intervals, the number of trees getting smaller each time but the volume of wood remaining fairly constant at about ten tons an acre. Each thinning is carried out on the principle of opening the canopy to work towards a final crop of timber some 100-120 yards old.

Much of the timber grown could very easily be wasted if there were not a carefully planned system of utilization. Thinnings appear at the timber depot as single poles. Little more than the last year's growth has been cut from the top and any reasonable length of more than six inches diameter is sent off to the sawmills. As for the rest, by far the greater part of these early thinnings, suitable parts of more than three inches diameter become pit-props and the rest stakes, rustic poles, harvest poles and three varieties of pulp wood. In 1951, the yield was 26,000 tons of pulp wood, 20,000 tons of pit-props, 8,500 tons of stakes and sundries and 1,000 tons of sawn timber. This total of 5,500 tons of timber sold came from the thinnings of

DOUBLE DIVIDENDS FROM A STATE FOREST: Britain's largest State Forest Thetford Chase shows that the soil of large tracts of land may be improved whilst yielding a high financial dividend. Cutting timber in the depot at Brandon, Norfolk. The straight sections in which the diameter in inches can be made to equal the length in feet become pit-props.

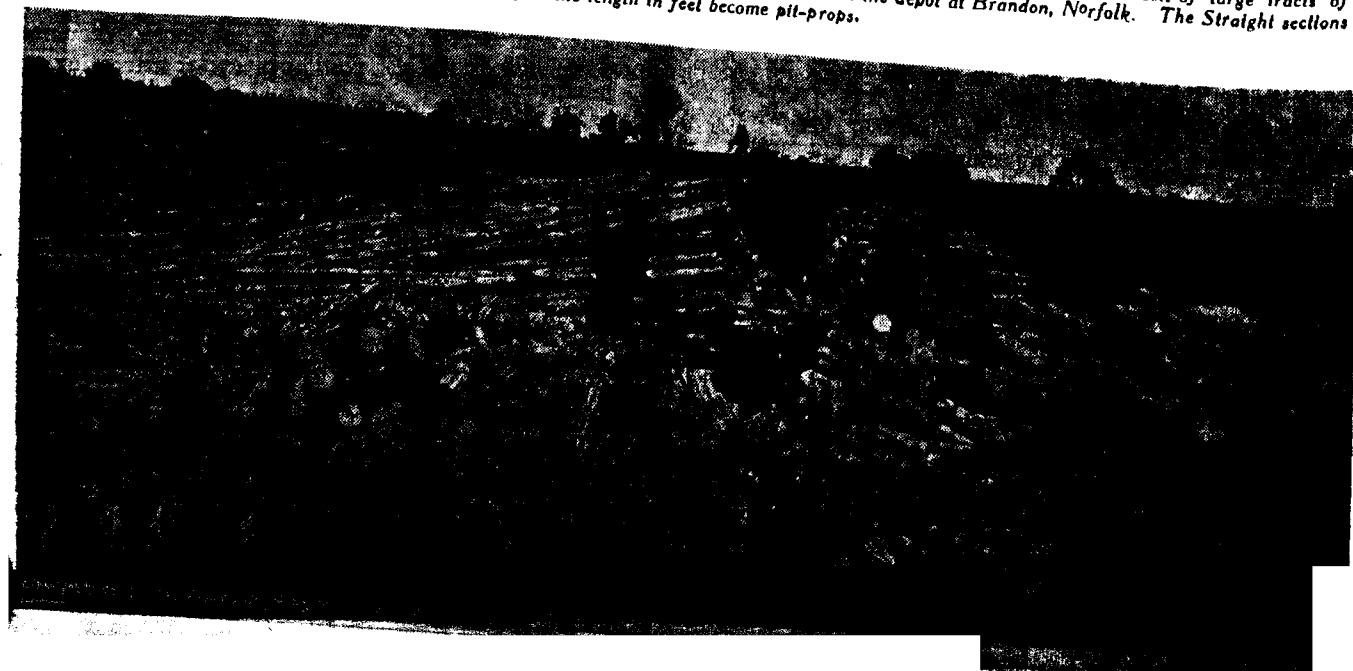


BEFORE PLANTATION: Thetford Chase State Forest. Taken Heath, one end of Thetford Chase, which has not been afforested. Much of the present forest area was in this condition before the plantations were made.

just over 5,000 acres, none of the trees being 30 years old. Paying outlets for bark and sawdust are not yet fully utilised.

"Brashings", the lower branches removed periodically by the forest workers, are left on the ground to rot and to improve the humus contents of the soil. Thetford Chase was very poor, sandy soil with sparse vegetation and large areas of bare, drifting sand before the Forestry Commission took it over. Already, in a little over 25 years, between three and five inches of loam has formed over the sand in the plantation areas. The interplanting of beech trees has already proved satisfactory and it is likely that, though most of the current planting is conifers, the whole area will be producing valuable hardwoods in a little more than 100 years.

—(B.I.S.)



CO-OPERATION

Co-ops and Pumpsets

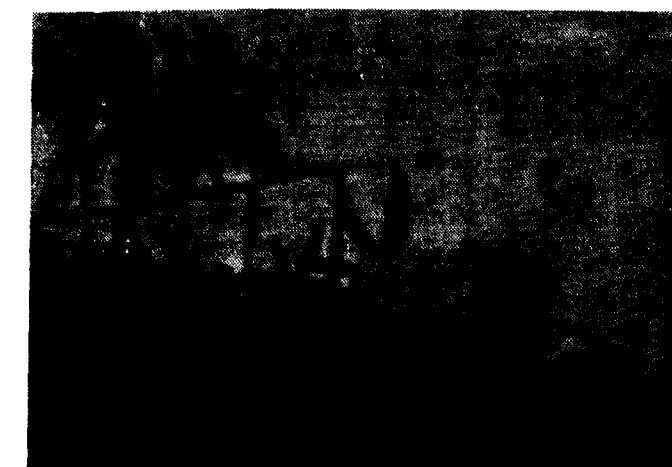
In Coimbatore District, the irrigation wells got dried up in several areas as a result of continued drought. The existing wells therefore require deepening and water has to be pumped from huge depths. The orthodox system of baling out water with a pair of bullocks involves much labour, money and time and the ryots have therefore realised the need for the improved system of irrigation through electric pumpsets. These pumpsets bale out water through electrical energy from a depth of 70 to 80 feet and the electrical charges are less than the cooly charges of the servant and the maintenance charges of the bulls that are necessary to draw water.

The Coimbatore Central Bank has been encouraging the ryot members of multipurpose co-operative societies to purchase and instal pumpsets by advancing loans. It has so far sanctioned five-year loans amounting to Rs. 52,100 to nine co-operative societies. These societies in their turn utilised the funds for financing the members for purchase and installation of pumpsets. So far 29 pumpsets have been purchased by the members of co-operative societies in Coimbatore District and 23 pumpsets are actually engaged in irrigation work. An extent of 229 acres was cultivated by the use of the pumpsets and 41 members of the societies were benefited.

The following instance will give an idea as to how far this system of irrigation has been beneficial to the ryots resulting in additional yield. Sri P. Muthukumaraswamy Gownder, a member of the Semmipalayam Co-operative Society in Palladam Taluk, who was the recipient of the loans issued by the Co-operative Society for the purchase of the pumpsets, utilised it for irrigating 24 acres of his land. Before the installation of the pumpset he could bring under cultivation only 18 acres of land, leaving fallow the remaining six acres; the yield then was about seven tons of cereals, three tons of cotton and three tons of tobacco fetching an income of Rs. 5,500. As a result of the installation of the pumpset, he could bring under cultivation the entire extent of 24 acres and as a result of the assured water supply the member expects to get an yield of twelve tons of cereals, six tons of cotton and about seven tons of tobacco. If the present prices continue the total income of the member is expected to be nearly doubled.



PUMPSETS are cheaper and more efficient than bullocks for baling out water from deep wells. In Coimbatore District Co-operative societies finance the purchase and installation of pumpsets as seen in the picture, for the use of members.

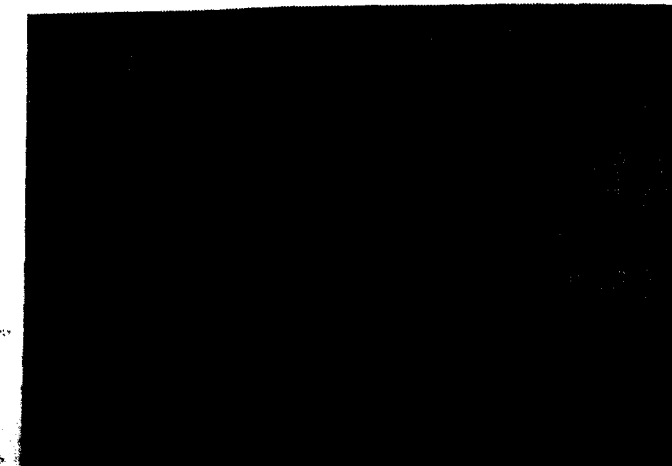


ELECTRIC Lamp-post and wire pole form suitable background for this pumpset installed in a Coimbatore farm.

Grants for Relief Works

The Government sanctioned grants amounting to Rs. 11,59,750 as shown below to district boards for executing road works to relieve unemployment among agricultural labourers affected by adverse seasonal conditions:—

	Rs.
1. Nellore District Board	1,19,000
2. Coimbatore District Board	73,250
3. Salem District Board	2,00,000
4. Madurai District Board	50,000
5. Chittoor District Board	1,79,500
6. Anantapur District Board	5,00,000
7. Cuddapah District Board	38,000
Total	11,59,750



CLOSE-UP of water pumped through electrical energy. So far 29 pumpsets have been purchased by co-operation in Coimbatore District.

fifteen firkas and centres where the Government have ordered that paddy or hand-pounded rice alone should be sold in ration shops.

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 Collector of Malabar has, by a notification issued on 9th January 1952, relaxed the ban on the movement of tapioca and its products except sago from Malabar District to all destinations for a period of three months or until the Collector's notification is revoked, whichever is earlier.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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

This Order imposes certain restrictions on the pledging of the procured stocks of paddy and rice with banks by the procuring agents in the State.

THE MADRAS SUGAR DEALERS' LICENSING ORDER, 1951

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.

The Collectors have been empowered to fix the wholesale and retail prices of sugar.

GRAM CONTROL ORDERS

Gram Control Orders in force in the State of Madras have been rescinded. The Government of India have fixed the prices of Bengalgram (whole), Bengalgram dhal and flour at which they may be bought or sold in Madras State at Rs. 15 per imperial maund, Rs. 17 per imperial maund and Rs. 18 per imperial maund, respectively.

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.

ORDER RELATING TO THE TRANSPORT OF FOODGRAINS WITHIN THE STATE

(G.O. Ms. No. 550, Food, dated 18th June 1948.)

Notification I.

This notification relates to the restrictions on the movement of paddy and rice, millets, wheat and their products from one district to another in Madras State. This is intended to check unauthorised and unlawful movement of grains from one place to another in the State.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

Notification II.

This relates to the restrictions on the import foodgrains into British Cochin. Permits are granted by the Commissioner of Civil Supplies, Madras, or by an Officer authorised by him or by the Revenue Divisional Officer, British Cochin.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector of Malabar.

ORDER RELATING TO THE TRANSPORT OF PADDY AND RICE WITHIN THE STATE FOR PERSONAL CONSUMPTION

(G.O. Ms. No. 478, Food, dated 27th May 1948.)

According to this Order, a landholder residing in a district other than that in which he owns lands can transport paddy or rice from the produce of his lands for his personal consumption in accordance with a permit issued by the Collector or any other officer authorised by him and in quantities not exceeding six months' requirements at a time.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

PADDY STRAW CONTROL ORDER

The Paddy Straw (Prevention of use for packing) Prohibition Order, 1951, has been rescinded by the Government of India (vide Order of the Ministry of Food and Agriculture, Government of India, No. F. 30-13/51-EP, dated 28th January 1952).

ZONAL SCHEME OF MOVEMENT OF PADDY AND RICE

(G.O. Ms. No. 1161, Food and Agriculture, dated 5th June 1951.)

According to this Order, paddy and rice or products thereof cannot be transported from any place within a zone to any place outside it formed in the districts of East Godavari, West Godavari, Krishna, Guntur, and Nellore except under a permit issued by the Collector of the district concerned or by any Officer authorised by him.

This Order was enforced in the interests of the intensive procurement.

The Order (i.e. G.O. Ms. No. 1161, Food and Agriculture, dated 5th June 1951) relating to the restriction on the movement of paddy or rice or products thereof from one zone to another zone formed in the districts of East Godavari, West Godavari, Krishna, Guntur and Nellore has been amended by adding certain villages to or deleting some from the list of villages mentioned in Schedule I to the notification appended to the Order (G.O. Ms. No. 2481, Food and Agriculture, dated 31st December 1951).

THE MADRAS FLOUR (USE IN MAKING PASTE OR STARCH) PROHIBITION ORDER, 1947

This Order prohibits the use of flour for making paste or starch except under a permit issued by the City Rationing Officer, Madras, District Supply Officer, etc., or an authorisation given by the Government.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

ORDER RELATING TO THE RESTRICTIONS ON THE OUTPUT OF BRAN WHEN MILLING WHEAT

(G.O. Ms. No. 940, Food, dated 22nd August 1947.)

According to this Order, all flour mills situated within the State of Madras shall, when milling wheat, restrict the output of bran to five per cent of the whole wheat.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

DEVELOPMENT DEPARTMENT

THE COTTON CONTROL ORDER, 1950

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

THE MADRAS DRUGS CONTROL ORDINANCE, 1949

In order to ensure that essential drugs continue 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).

RURAL WELFARE DEPARTMENT

THE MADRAS KHADI 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 producer or a dealer in mill-made yarn or cloth woven out of a such mill-made yarn shall carry on the business of a producer or a dealer in hand-pounded 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-span 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 WORKS 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 authorised 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.

Amendments issued to the Cement Control Order on 30th May 1951 provide that:

The price of all Portland cement produced in India, exclusive of the cost of containers, if any, shall not exceed Rs. 71 per ton;

The price of Digvijay, India and Travancore Cements, exclusive of the cost of containers, shall be Rs. 78-8-0 per ton full wagon loads f.o.r. destination.

The actual cost of gunny bags, subject to a maximum of Rs. 26 per ton of cement, if supplied wholly in new gunnies, may be charged, in addition to the price of the cement specified above;

The price leviable for the cost of packing for supplies in paper bags or old gunny bags, which may be settled between the purchaser and the supplier, shall not exceed Rs. 26 per ton of cement.

An amendment issued on 1st November 1951 provides further that an insurance fee of Rs. 0-10-0 (annas ten) per ton may be collected by the supplier when the cement is despatched in open wagons with the concurrence of the purchaser.

PUBLIC DEPARTMENT

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 the Government, the relaxation of technical restrictions including age bar will be considered.

Motor Vehicles Control Order

The Government have exempted all commercial imported transport motor vehicles from all the provisions except clause 23, of the Commercially Imported Transport Motor Vehicles Control Order, 1945.

The Pinayur River Pumping Scheme

The Government of Madras have recently decided that river pumping schemes should hereafter be worked only through co-operative societies specially formed for this purpose and that new schemes will be started only if the Registrar of Co-operative Societies is able to form co-operative societies to run them. Ten schemes have already been sanctioned by Government in the districts of Chingleput, Chittoor, Ramanathapuram, Malabar and South Kanara.

In the Chingleput District pumpsets were installed at Pinayur and Nelvoy. The Pinayur village was recently visited by the Registrar of Co-operative Societies. He was accompanied by the Joint Registrar (Resettlement) and local co-operative and agricultural officers, Sri Ramakrishna Iyer, M.L.A., and Sri Srinivasa Iyer, a leading pattadar. Three 14 H.P. oil engine pumpsets have been installed on the banks of the River Palar to lift water from a "spring tank" in the river and take it to wet lands in the village through a leading channel about a mile and a quarter in length. Two out of three pumpsets work regularly and the third is a stand-by unit. All the pumpsets are being maintained by the Agricultural Department with its technical and supervisory staff. The cost of maintenance is now partly subsidised by Government.

In addition to the three pumpsets, two smaller pumpsets have been installed on private lands on hire basis. The question of forming a lift irrigation co-operative society to take over all the five departmental pumpsets is now under consideration. The proposal is to start a co-operative society which will work the schemes and relieve Government of its obligation to maintain and run the pumpsets on a subsidised basis. The cost of the

pumpsets will be treated as Government loan, repayable in five to ten years. The society will maintain its own technical and supervisory staff and recover the cost of distribution of water to members' lands after each harvest. A meeting was convened at Pinayur, when the Registrar explained to the ryots the details of the scheme. The possibilities of organising co-operative societies in Pinayur and other places where river pumping schemes have already been sanctioned by Government, are being investigated by the Co-operative Department.

Indian Deodar for Pencils

A systematic investigation on pencil woods, carried out at the Forest Research Institute, Dehra Dun, has shown that not only is Indian deodar suitable for first-class pencils, but is also superior to the East African cedar, on which the Indian pencil industry largely depends at present.

The result of the investigations as well as the method of treatment of deodar are given in the Indian Forest Bulletin No. 149 recently issued by the Forest Research Institute, Dehra Dun.

There are very few timbers which can be satisfactorily used for pencil-making. In Eastern Red cedars, America has got the best pencil wood in the world. The supply of this wood is almost exhausted. Incense cedar of California is another timber used for the purposes; but this timber is stained and processed to give it a red cedar colour and improved softness.

PINAYUR RIVER PUMPING SCHEME: River pumping schemes will hereafter be worked only through Co-operative societies. In Pinayur village (Chingleput District) three 14 H.P. oil engine pumpsets have been installed on the banks of the River Palar.



Multipurpose Co-operatives

ANNIYUR

The Anniyur Multipurpose Co-operative Society, Anniyur Post, Villupuram Taluk, South Arcot District, was registered on 12th December 1919 and started on its work on 7th January 1920. The Society is affiliated to the Villupuram Co-operative Supervising Union and the South Arcot Co-operative Central Bank Limited, Cuddalore.

There are 271 members on its rolls with a paid-up share capital of Rs. 3,809. The maximum credit limit of the Society is Rs. 40,000 and the individual maximum borrowing limit is Rs. 1,000.

The Society borrowed Rs. 31,679 from the Central Bank during the period from 1st July 1951 up till now and there are no overdues under Central Bank loans on date. To carry on its non-credit activities the Society obtained a cash credit of Rs. 1,000 from the Central Bank. A sum of Rs. 24,713 is outstanding against members. The following are the investments made by the Society:—

	RS.
1 Shares in the South Arcot Co-operative Central Bank Limited, Cuddalore.	1,579
2 Share in the South Arcot District Co-operative Central Stores Limited, Cuddalore	25
3 Shares in the Villupuram Sale Society..	25
4 Reserve Fund invested in the South Arcot Co-operative Central Bank Limited.	314

The Society has taken up multipurpose activities. This Society is selected for the distribution of iron and steel, chemical manures, etc. During the year 1950-51, the Society distributed ammonium sulphate to the value of Rs. 1,908 and iron implements worth Rs. 235.

The Society has done much to inculcate the habit of thrift among its members. The savings effected by members through hundi boxes amounted to Rs. 94-8-6.

The Society employs one clerk and one peon. The panchayatdars are enthusiastic and take keen interest in the working of the Society.

MUDDANAGERI

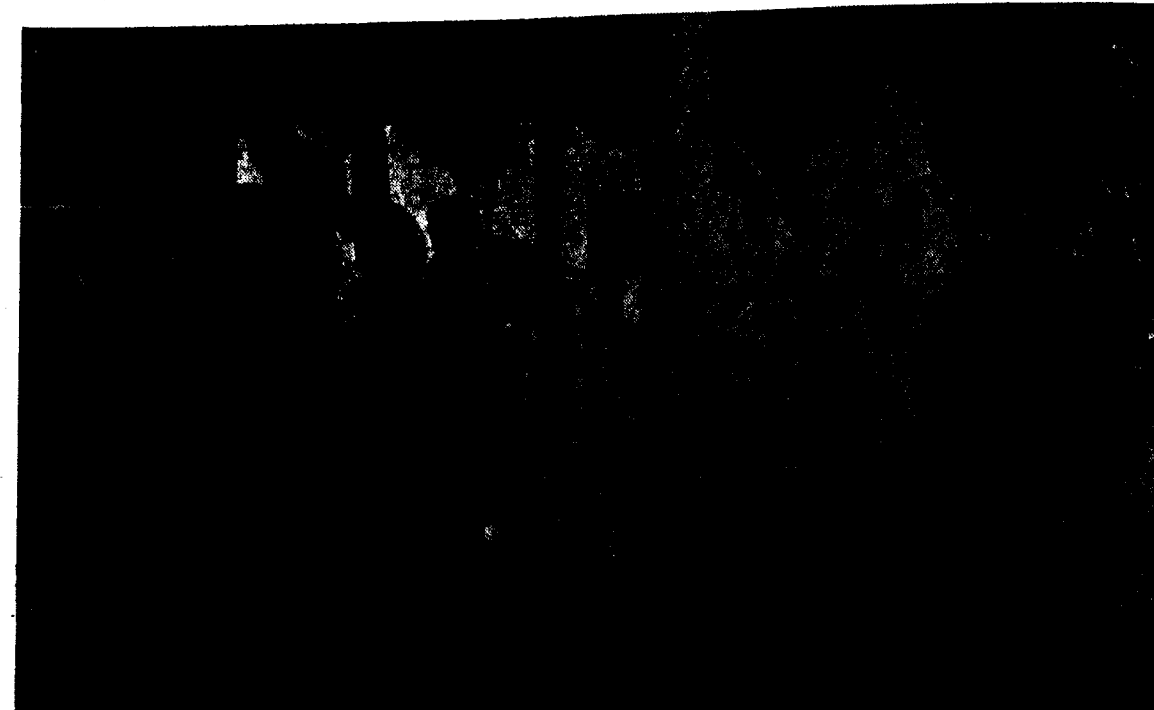
The Muddanageri Multipurpose Co-operative Society, Alur Taluk, Bellary District, is six miles away from Alur, the headquarters of Alur select firka and Alur Taluk in Bellary District. It was re-registered on 26th March 1949 and started on its work on 28th March 1949. It has now 78 members with a paid-up share capital of Rs. 2,253. There are 25 Harijans as members of this Society. The village has a population of 780 persons and the Society has served 390 persons. This works out at 50 per cent of the population as against a target of 30 per cent.

The maximum credit limit of the Society is Rs. 5,000 and individual maximum borrowing power is Rs. 250. The loans due to the Hospet Co-operative Central Bank is Rs. 3,500 and 19 loans due from members amount to Rs. 3,500. It has invested its Reserve Fund of Rs. 455 in the Hospet Co-operative Central Bank out of the total Reserve of Rs. 557-6-0.

It deals in controlled articles like rice, wheat, cloth, sugar, cart-tyres and iron implements.

It has provision in the by-laws for social and recreational activities, and it is one of the good working societies in the select firkas. An amount of Rs. 500 has been recommended as subsidy for 1952-53 to purchase a radio set for the recreation of the villagers.

THE PUMPSET: Inside the shed in which the oil pumps are erected. All the pumpsets are being maintained by the Agricultural Department.



The Malampuzha Project

The Government have seen criticisms in the Press in regard to the execution of the Malampuzha Project. The correct position is as follows :—

The Madras Government made a provision of Rs. 11-04 crores for capital expenditure on irrigation projects in 1951-52, including the Tungabhadra and Lower Bhavani Projects, subject to a lump-sum deduction of Rs. 167 lakhs for probable savings. In the normal course of events, this programme would have gone through without difficulty, if assistance to the extent anticipated from the Centre when the Budget was framed, by way of loans, or permission to float loans locally, or to sell Government securities, had been available.

Due to an unexpected turn of events, the Government of India found themselves unable to give the necessary accommodation assumed, with the result that the whole Development Programme had to be financed from local resources and the small loan that this Government was allowed to float. The anticipated savings of Rs. 167 lakhs, a large part of which was to have been found under the Lower Bhavani and Tungabhadra Projects, did not also materialise. Repeated representations were made to the Government of India, but the Central Government found themselves unable to assist.

Finally, after a high level discussion at Delhi, the Central Government agreed to allow help only in regard to the Lower Bhavani and Tungabhadra Projects; otherwise these two projects too would have had to be slowed down. But, inasmuch as the savings of Rs. 167 lakhs budgeted for originally could not be found and as the balance of amount budgeted for all other projects had been nearly spent, or commitments had been incurred which had to be liquidated before 31st March, drastic steps had to be taken to keep the expenditure within the resources of the State Government. Even in this reckoning, the Malampuzha Project was given the highest priority as a work in progress, but the expenditure on all projects and especially the Malampuzha Project, had reached, by November, almost the budgeted figures with the savings deducted, so that no resources were at all available to maintain the programme of execution scheduled for the projects. Government had therefore no alternative but to slow down the execution of all the projects.

Restricted to Essential Portions

To maintain activity on the Malampuzha Project at the level reached in December would have called for a large sum far beyond the resources in sight. The work on the Project was therefore restricted to the essential portions, namely, the spillway and the earth dam in the headworks, and to the two important aqueducts on the canal, both of which had to be done before the monsoon if the completion date was not to be unduly postponed. It may be pointed out that most of the earth work on the canal had been done already and it only remains to excavate some of the distributaries and also do the masonry work on the canal to complete it, up to the point on the canal taken up for the first stage of development. The reduction under other projects like the Mettur Canals scheme has been even more drastic. These works have all been affected in an even greater measure than the

Malampuzha, but not much momentum had been gained in their execution, so that the contraction of the programme meant postponement or stopping of works just started or scattered over large areas.

The works on the Malampuzha Project however is concentrated more or less in and around Palghat and the slowing down of work has been more striking. But for the specific help promised to the Lower Bhavani and Tungabhadra Projects, those projects also would have had to be slowed down appreciably. It was as a result therefore of the policy of the Central Government, necessitated by lack of funds, that this slowing down of execution of the other projects had been found inevitable. The State Government are not unaware of the difficulties attendant on such policy, but there is no escape from it, the situation having been forced on them due to circumstances beyond their control.

All the Workers Not Sent Away

It is not a fact that all the labour on the Malampuzha Project has been sent away. The reduction in the number of workers at the headworks is about 60 per cent of the total number previously employed, and in the canals about 70 per cent. A special difficulty about maintaining the pace of the programme was the method of execution adopted, which required that job workers had to be paid immediately work was done; so there was no way of postponing expenditure if the full programme was to be kept up. Some of the temporary works establishment, whose strength varies with the labour force, had necessarily to be discharged, but they will all be taken back as soon as funds become available and the Project can be resumed in a full measure.

As regards the amount of cement required, the offtake of cement depends on the nature of works undertaken and in as much as this is confined to the spillway which is in the river portion of the main dam, the most difficult part of the work, the requirements of cement are being so regulated as to use the existing stocks and with reference to the limited needs of the portions of the work which are in progress. Work can be done even in the rainy season on the other portions of the masonry dam and the other masonry items, and the offtake will then increase correspondingly.

The Government of Madras have made further representations to the Government of India, urging that Government to extend financial assistance towards the execution of the Malampuzha Project. If the Government of India agree to this, it would be possible to expedite the completion of the Project.

Distribution of Building Materials

The Government have entrusted the Co-operative Societies Stores, Thambarahalli, in Bellary District, with the distribution of building materials, such as iron and steel, asbestos cement sheets, etc., to the families displaced by the execution of the Tungabhadra Project.

Food Offences and Punishments Awarded

During the fortnight ending November 30, 1951, 766 cases of prosecutions against food offences were disposed of in the Madras State, except in the districts of Ramanathapuram and Srikakulam. The accused persons in these cases were people belonging to all classes of social standing and most of them belonged to the poorer classes. Fines, ranging from Re. 1 to Rs. 250 and sentences of imprisonment up to three months, were imposed.

K. Kunhiraman Nair, cultivator, Chervathoor, Kasargod Taluk, South Kanara District, who failed to deliver the yield of foodgrains and declare yield, was fined Rs. 300 or two months' rigorous imprisonment on the first charge and Rs. 20 or a week's simple imprisonment on the second charge. For possession of two bags of rice without a permit, M. Apparao, Visakhapatnam, was fined Rs. 300 or two months' simple imprisonment. A fine of Rs. 200 or simple imprisonment for a month was imposed on Chinnasami Mudaliar, landlord, Chingleput District, for possession of 826 Madras measures of paddy without a permit.

In Guntur District, V. Venkata Subbiah of Govada was fined Rs. 200 or three months rigorous imprisonment in default, for failure to deliver surplus stock of 69 bags of paddy and illicit disposal of the stock, and Nannapa-neni Tatiah of Nalapadu was fined Rs. 200 or rigorous imprisonment for three months, for running a mill without a licence, hulling paddy without permits and non-maintenance of accounts. K. Srichandra Sekhara Rao and M. Brahmanandam of Ramulapuram of West Godavari District were each fined Rs. 250 or rigorous imprisonment for three months for hulling paddy without a permit. In the same district, P. Subbarao and P. Rama Rao were each convicted to undergo rigorous imprisonment for three months and also to pay a fine of Rs. 200 or rigorous imprisonment for three months, for buying and selling of paddy without a valid permit.

• During the fortnight ending December 15, 1951, 364 cases of prosecutions against food offences were disposed of in the Madras State (except in the districts of Malabar and Ramanáthapuram and in the Madras City).

Koya Chowdrayya, Proprietor, Sri Rama Rice Mills, Madalavavigudam, Gannavaram taluk, Krishna district was convicted and sentenced to rigorous imprisonment for two months and to pay a fine of Rs. 400 or rigorous imprisonment for two months for milling paddy without licence. For illicit import of foodgrains, Allaaddin Sahib of Dharmapuram, Coimbatore District, was fined Rs. 200 or rigorous imprisonment for one month. Sentence of imprisonment till the rising of the court and a fine of Rs. 350 or rigorous imprisonment for four months, were awarded to Koduru Nangari of Moturpalem of Visakhapatnam District, for possession of rice in excess of the normally required quantity.

In West Godavari District, A. Venkanna of Arthamur was sentenced to imprisonment till the rising of the court and to pay a fine of Rs. 200 for illicit transport of foodgrains from East to West Godavari and Y. Bapaniah of Tadepallegudem was awarded six months' rigorous imprisonment for dealing in rice in wholesale quantities without licence. Valivolu Sivaiah, Govada of Guntur District, was fined Rs. 200 or rigorous imprisonment for three months for running the mill without a licence. In Srikakulam District, Yelagada Papayya cultivator, was fined Rs. 1,000 or rigorous imprisonment for four months. Bevara Thavitayya, Panki Gangayya, Gadapu Ganayya, Botcha Papayya, Girigala Appadu, Rowthu Venkiah, Gara Ramanna, Bevara Jogulu and Bankura Appala Naidu, cultivators, were each sentenced to undergo rigorous imprisonment for one month and also to pay a fine of Rs. 500 or in default, to suffer rigorous imprisonment for three months, for transport of paddy without a valid permit. In the same district, Wamburu Veeraju, trader, was fined Rs. 1,000 or rigorous imprisonment for three months for dealing in foodgrains without licence.

Quality Control of Manures

According to the amendments to the Madras Manure Dealers Licensing Order, 1949, published at pages 178-178 of the Rules Supplement to Part II of the *Fort St. George Gazette*, dated 5th December 1950, particulars regarding the analysis of the manures, viz., nitrogen, phosphoric acid and potash contents, have to be marked on the manure bags kept for sale to the public and a certificate as to the guaranteed analysis has to be given by the dealers to the buyers, when manures are sold in bulk. It has been brought to the notice of the Government that many dealers still plead ignorance of the above Order and its implications.

The attention of oil millers, bone millers and dealers in manure are therefore once more drawn to the amendments to the Madras Manure Dealers Licensing Order, 1949, referred to above and they are advised to conform to the provisions therein. The Government also wish to impress upon the interests concerned the necessity to co-operate in the effective implementation of the Madras Manure Dealers Licensing Order, 1949, in order to ensure the quality in manures and enable the Agricultural Department to check adulteration of manures effectively. They also wish to point out in this connexion that failure to conform to the provisions of the Madras Manure Dealers Licensing Order will involve penal action.

Electricity: Review for June 1952

Review of electricity work done during June 1952 is given below:

Machkund Hydro-Electric Scheme.—Lands taken over by Orissa Land Acquisition Officer from the parties after payment of final compensation were yet to be handed over to this Department. The departmental road from Lamptaput to Machkund was completed. About 75 per cent of the eight-mile road from Sogurue to Jalaput was metalled; the work on bridges and causeways was progressing. The construction of permanent camp buildings at Onakodelli was nearing completion. Work on temporary buildings at Jalaput was in full swing and that at Chickempet camp was already over.

Excavation at Jalaput dam was in progress. Bore-holes were being drilled at the downstream side to find out the rock level for founding the dam. About 47.4 per cent of excavation and 39 per cent of masonry were completed at the diversion dam. About 65.7 per cent of excavation and lining of the flume channel was over and further work including masonry at the piers of the Burdial aqueduct was progressing. The flume tunnel was driven through and about 60.7 per cent of lining was completed. At the tunnel pond dam about 96.4 per cent of excavation, 16.6 per cent of masonry and 1.3 per cent of concreting for buckets and apron were completed.

Pressure tunnel has been driven through and sides and top concreted. Final invert concreting for pressure tunnel and providing reinforcement for pipe tunnel lining were in progress. Grading valve house, penstock slopes and laying haulage track were in full swing. Levelling powerhouse site was completed. Excavation for powerhouse, levelling transformer yard and excavation for tail race were in good progress. Penstock pipes and heavy machine parts were being received at Visakhapatnam and transported to project site. Labour force during the month was 4,108.

Moyar Hydro-Electric Scheme.—All the civil works from head works to powerhouse have been completed and the first 12,000 KW limit was commissioned in April 1952. Erection work on the 2nd and 3rd units and the balance of works in switchgear erection were progressing. The II penstock line is expected to be ready for service by the middle of July 1952. Work on the III line in the lower reaches was continued and about 85 per cent work having been completed so far.

Pykara III Stage Extensions.—At the Pykara Dam construction of masonry for wing wall and main dam structure and concreting for R.C.C. Borewall were continued. The new (IV) penstock line was completed and filled with water. Concreting of differential surge tank was in advanced stage of progress. Erection of steel structures for the Singara Powerhouse Extensions remains to be done.

Madurai Thermal Scheme.—Collection of materials, earth work excavation and flooring concrete for covering water pond were in progress. Providing reinforcement for turbo-set pedestal and concreting were under progress. Boiler material for the 10,000 KW set were being received, verified and carefully stacked at site.

South Kanara Scheme.—Realignment in certain reaches in Hiradka-Udipi section was continued.

Tungabhadra Hydro-Electric Scheme.—Soil samples obtained for hearting of the forebay bund were being tested for suitability. Detailed survey for camp and roads nearing completion. Terminal connection at dam powerhouse was being investigated in connection with the existing line and the alignment of the high level canal of the Public Works Department.

The profiles and pole schedules for Gooty-Anantapur and Cuddapah-Kodur lines were completed by the field.

Madras Plant Extensions.—The construction work of B station at Basin Bridge was in progress. There was not much progress in the building steel work due to non-receipt of fabricated materials. All roof slabs have been concreted for main power station superstructure. Firing floor turbine operating floor and all the ventilators in the boiler house roof were concreted. Drilling operations for the borewell near the Electrical stores were continued. Erection of steel work for turbo-alternator block No. 1 for the 2nd stage extensions was commenced. Works on erection of boilers 2 and 3 and turbo-alternator set was continued. Work on mechanical coal handling plant, chimney, switchgear, etc., was progressing.

Vijayawada—Vizag. Powerhouse Extensions.—(i) Vijayawada—Work on second raw water well was progressing. Other civil works were also continued.

(ii) Vizag.—Work on west and south side extensions was continued.

Nellore Thermal Scheme.—Staff quarters at Gudur Sub-station was progressing. Sewage and drainage work on dispersion trench was completed. Manufacture of doors and windows for pump room was in progress.

Operation Branch

Hydro Areas.—The water conditions in Hydro areas improved during the last week of the month. As a result of this, the 50 per cent cut in consumption was reduced to 25 per cent with effect from 18th June 1952 and was completely lifted from 1st July 1952.

The Hydro systems continued to run in parallel with the Madras Electricity System. The number of units generated, peak load and the services connected during the month in the three hydro systems were as follows:—

Name of System.	System peak load in K.W.	Generation in millions of units.	Services connected.		
			Agricultural.	Industrial.	Domestic.
Pykara	36,500	14.4	52	..	426
Mettur	35,800	5.1	..	..	..
Papanasam ..	18,900	4.7	36	..	93
		13.7	54	..	247
		1.8	..	..	..

* 5.1 million units were generated at Moyar Powerhouse.
† 1.8 million units were generated at Madurai Thermal Station.

The Moyar Powerhouse with a peak load of 12,500 KW and Madurai Thermal Station with a peak load of 3,300 KW were giving relief to the three hydro systems.

Shri Sri Prakasa, Governor of Madras, visited the Mettur Powerhouse on 28th June 1952 and the Pykara Powerhouse on 17th June 1952.

Thermal Areas and Ceded Districts.—During the month the Madras Electricity System continued to give relief to hydro systems except during peak load hours in the evening. The first boiler of B station which was commissioned in May 1952 was supplying steam to the steam gauge of A station. Consequently the generation at A station above reached a figure of 25,600 KW (against 22,000 KW of the A station so far).

The peak load, generation and the number of services connected up during the month in the several areas were as follows:—

Name of System.	Peak load in K.W.	Units generated in millions.	Service connected.		
			Agricultural.	Industrial.	Domestic.
1 Madras	28,500	14.99	13	24	216
2 Vijayawada—					
Steam	8,420	3.65	26	3	111
Diesel .. ..	....	....			
3 Visakhapatnam—					
Steam	3,540	1.36	..	2	50
Diesel	1,100	0.13	..	..	..
4 Kakinada	800	0.02	2	21	44
5 Rajahmundry ..	550	0.04	..	..	..
6 Narasaraopet ..					
7 Srikakulam	100	0.02	..	1	16
8 Ongole	88	0.02	..	..	11
9 Narasannapeta ..	15	0.003	..	..	..
10 Nellore	900	0.270	1	1	28
11 Proddatur	102	0.024	..	..	19
12 Kurnool	310	0.098	..	2	34
13 Anantapur	155	0.045	..	1	17
14 Cuddapah	215	0.642	..	1	11
15 Nandyal	130	0.022	..	2	23
16 Tadipatri	65	0.011	..	..	25

Power Purchased from Mysore:

Hindupur	220	0.068	..	2	9
Ceded Districts ..	2,832	1.164	6	11	97

* Station shut down as power supply has been made available from the Vijayawada System.

In the Madras Electricity System 77 Nos. D.C. services with an approximate connected load of 93.73 KW were changed over to A.C. supply on a voluntary basis.

In Visakhapatnam area 80 per cent of work on the Gram-Bobbili 11/33 K.V. line was completed. In Rajahmundry-Kakinada area, work on extension of supply to Vishrantipuram Sanatorium was completed. In West Godavari area, the Bhimadole-Madinarapalem-Munduru 11 K.V. line has been energised giving supply to en route 11 K.V. line was energised on 30th June 1952 and supply to Narasaraopet distribution was given from Vijayawada Powerhouse enabling the Narasaraopet diesel station to be shut down from 1st July 1952.

Warning Against Incompetent Technical Institutions

An instance has recently come to the notice of Government where a private organization started a technical institute in this State offering training in Diploma courses such as L.M.E., L.E.E., etc., against the advice of and without the approval of the Department of Industries and Commerce, Madras, and was forced to close it down after the students had put in one year study when it was discovered that the Institute was not competent to run the Diploma courses. In order to prevent a repetition of cases of this kind with consequent suffering for students, Government wish to warn all concerned that any technical institution in this State which starts working precipitately without previous affiliation will run the risk of being disqualified for purposes of affiliation and grant.

Registration of Cottage Industries for Government Purchase

The following procedure has been suggested for registration of cottage industries firms:—

(a) The cottage and small scale industry units desiring registration as approved contractors with the Directorate-General of Supplies and Disposals, should apply for this purpose on the prescribed form obtainable from Section C. S. 4 Office of the Directorate-General of Supplies and Disposals, Shahjehan Road, New Delhi, on payment of Rs. 5 and such requests should be routed through the State Director of Industries concerned.

(b) The State Director of Industries on receipt of applications for registration shall examine the same to ensure that the particular unit which has applied for registration is capable of manufacturing the various stores according to the specifications for the stores laid down by the Government of India. He shall also certify to the effect that the particular unit is equipped with the necessary plant and equipment for the manufacture of the stores, that the productive capacity i.e., the monthly or annual rate of production is sufficient and that the unit is financially sound.

(c) The State Director of Industries shall recommend the application only in those cases where in addition to the manufacturing capacity he is also fully satisfied about the financial soundness of the unit applying for registration on the approved contractors' list of the Directorate-General of Supplies and Disposals after the State Director of Industries has satisfied himself about the financial stability of the unit.

(d) The cottage and small scale industry unit should produce Income-Tax clearance certificate duly certified by the Income-Tax Officer of the area concerned.

During the month thirty-one extensions were sanctioned by the Chief Operation Engineer (South) and Chief Engineer for Electricity at an estimated total cost of Rs. 15,04,430.

The Madras Record Office

By SRI M. G. BALIGA, Curator, Madras Record Office

The records of a Government, especially if that Government has had a long history, cannot but constitute a rich mine of material for historians and administrators. For, while the former will find in them the whole picture of the past, social, economic and political, the latter will find in them the whole host of precedents and policies that have gone to the making of the present. Nor can such records fail to be serviceable to several sections of the public whose interests are locked up in them. These people will always seek in them the title deeds of their rights and privileges. And the records of the Madras Government, coming as they do from 1670 down to the present and that too in unbroken series in continual official custody, are naturally of immense interests to the historians, administrators and others.

Most of these records were for a long time kept in the Secretariat and there, while their administrative value was indeed recognised, their historical and legal value was utterly neglected. They remained almost a sealed book to all but the departments of the Secretariat. An attempt was, however, made to concentrate them in one place and to arrange them and make them available for official reference. The credit for doing this belongs to Lord William Bentinck who as long ago as 1806 centralised the Secretariat records and appointed a Record-keeper and a small staff to look after them and to furnish them on requisition to the various departments. The departments seem to have kept in their possession in the last century only the last five to seven years records as current records and transferred the rest to the custody of the Record-keeper who came to be called also the Superintendent of Records.

Weeding of Useless Records

However, a mere centralisation made like this was soon felt to be not enough. As years rolled on and administration grew, the records quickly grew in bulk, demanded more and more space and called for "weeding". In the meantime, the enquiries started by the Royal Commission on Public Records in England in 1833 not only justified judicious weeding of useless records but also pointed the need for making all valuable records available for historical research and for legal purposes.

The Government then appointed George Garrow, William Huddleston and Talboys Wheeler, successively in 1837, 1858 and 1860 to weed out useless records; and in 1871 and 1893 they encouraged William Huddleston and A.T. Pringle to publish some Selections from and Reprints of old records. As yet, however, there was no complete centralisation, no regular programme of publication, no systematic attempt at preservation and not the least attempt at making the records available for legal purposes or for historical research. These could be achieved only by establishing a Central Record Office.

Construction of New Blocks

This was done in 1909. In that year seven large Blocks of the Madras Record Office were constructed, one for housing the administrative section and the other six

for housing the Secretariat and other Departmental records. In 1929 a seventh Record Block was built for housing all the Pre-Mutiny records; and in 1938 the eighth and the ninth Record Blocks were added to the buildings to house all the records of the Board of Revenue and the Survey Office. Ever since the separate establishment of the Madras Record Office every endeavour has been made to organise the office on the most up-to-date lines.

Since 1934 it has been laid down that the Curator of the office should possess high academic qualifications in history and receive, after appointment, special archival training in England. The office also is a member of the British Records Association and the International Council on Archives and is intimately in touch with the latest archival developments that are being carried on in England and America. It is now acknowledged without question that of all the State archives the Madras archives are the best organised in India.

Arrangement of the Office

It is possible to give here only a bird's-eye-view of the office and its activities. Its buildings which are all of solid construction, are situated in a spacious compound in Egmore. An idea of their size and capacity may be obtained when it is stated that the floor area of the Record Blocks is no less than 50,000 square feet and their stack area no less than 162,000 cubic feet. Special arrangements have been made to provide proper shelving, plenty of light and ventilation and effective protection against thefts and outbreaks of fire.

In most Blocks iron racks 22 feet high are arranged on either side of a central passage at right angles to it and partitioned horizontally by two floors of iron gratings above the ground floor; and each of the sub-passages between two racks on each floor are lighted up by windows provided with glazed shutters and iron bars and, on the ground floor, with iron shutters in addition. The entrances to the Blocks are provided with iron doors; the walls of the Blocks are covered with glazed tiles and their floors are made of cement concrete or Cuddapah slabs. As against thefts and outbreaks of fire the buildings are provided with watchmen, tell-tale clock, hand-fire engines, stirrup pumps, sand and water buckets, static water tanks and fire hydrants; and the entire staff is regularly trained in the use of fire-fighting equipment.

Nature of Records Preserved

In the buildings so carefully designed and safeguarded are centralised all the records of the various departments of the Secretariat, both non-confidential and confidential, from the earliest times down to 1947. There also are centralised all the records of the Board of Revenue and the Survey Office from the beginning to 1938, and all the records of the District Collectors from the earliest times down to 1857. There too are received and kept in safe custody all the strong room documents, all the documents of the land mortgage banks and Co-operative Societies, all kinds of covenants, agreements, etc., and all the Electoral Rolls of this State prepared under the present Constitution.

There again are preserved a large number of old miscellaneous series of records, such as the Mayor's Court records, the Sheriff's records, the Corner's records, the Army records, the Surgeon-General's records and some Dutch, Danish and Persian records.

There also are preserved all the records of the extinct Departments, such as the records of the Director of War Publicity, of the Madras Provincial Selection Board and of the Cadets' Training School. And there it has been recently decided to transfer the Pre-Mutiny records of the merged States of Sandur, Banganapalle and Pudukottai. The Office, in fact, not only centralises all important series of records but also exercises supervision over all other non-current series of records which still remain in the custody of other Government offices.

Methods of Preservation

Of the methods adopted for the arrangement and preservation of records only the briefest indication can be given here. Suffice it to say that the arrangement adopted is strictly departmental and chronological; that is, the records of each Department are separately arranged in chronological order and no collections of any sort on any subject are made. To facilitate, however, the tracing of press-lists or guides have been provided for the various series of records. Both the volumes and bundles have been properly catalogued and labelled and they are all regularly dusted by vacuum cleaners.

Folded documents in the bundles are flattened, mended and put under manilla docketts, and old volumes are reconditioned with chiffon and re-bound. Several methods are employed in mending, such as backing, filling in of holes, feather-edged patch work, inlaying and repairs with chiffon. All these cannot be described here. It is

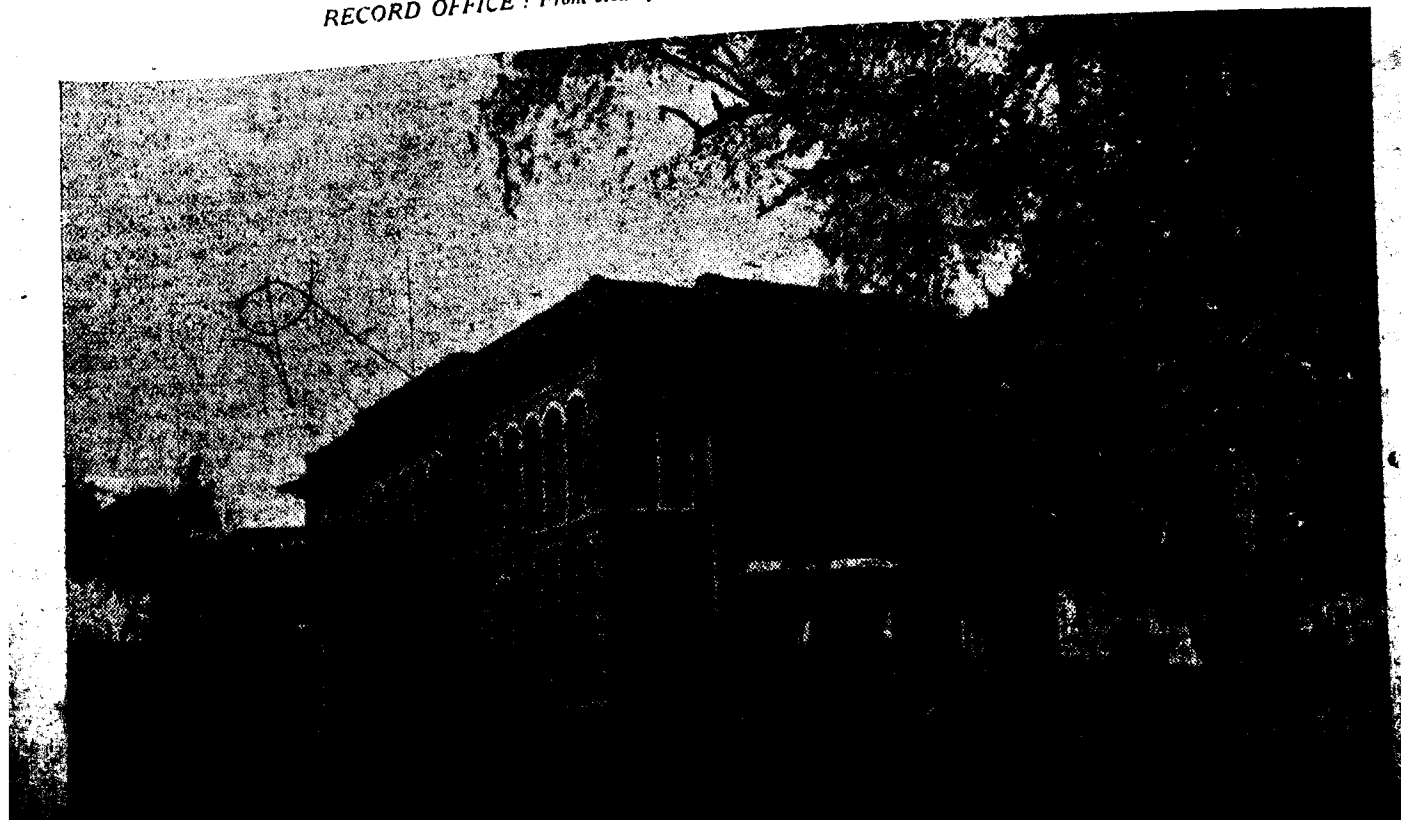
enough to observe that a file or volume requiring repairs is first separated into sections and sheets. Then, if the sheet is very brittle and the ink spreads under water, it is carefully damped by a wet towel or sponge; otherwise it is damped by immersion in water for few seconds. A dry towel is next rolled over it to remove dirt, creases and excess of water. Mending of holes, provision of patches, guards, etc., are done at this stage by moistened bits or strips of mending paper. If the sheet has writing only on one side it is backed up by mending paper, but if it has writing on both sides it is pasted over with chiffon on both sides and provided with guards.

Mending and Reconditioning

The mended sheets are finally kept in the press, gathered into sections and stitched into files or bound into volumes. Maps and plans are flattened, backed or repaired with chiffon. All these methods are technical; and of the materials used, the mending papers are of all-rag hand-made varieties and chiffon is of the best quality. The paste is made of cornflour mixed with a dash of arsenic (2 per cent) as a repellent against insects.

A very large number of manuscript volumes of records have been mended and reconditioned in this manner. All the volumes of the Secretariat records from 1670 to 1800 and some of the volumes of the same series from 1801 to 1857 have already been mended and re-bound. So also have been mended and re-bound hundreds of volumes of the District records, the Mayor's Court's records, the Dutch and Danish records and a large number of maps, plans, etc. The office is now engaged in mending and reconditioning the records of the Secretariat, the Board of Revenue and other offices of the period 1800 to 1857 and in repairing all folded files in the bundles. It also repairs all the damaged G.Os. of the modern period,

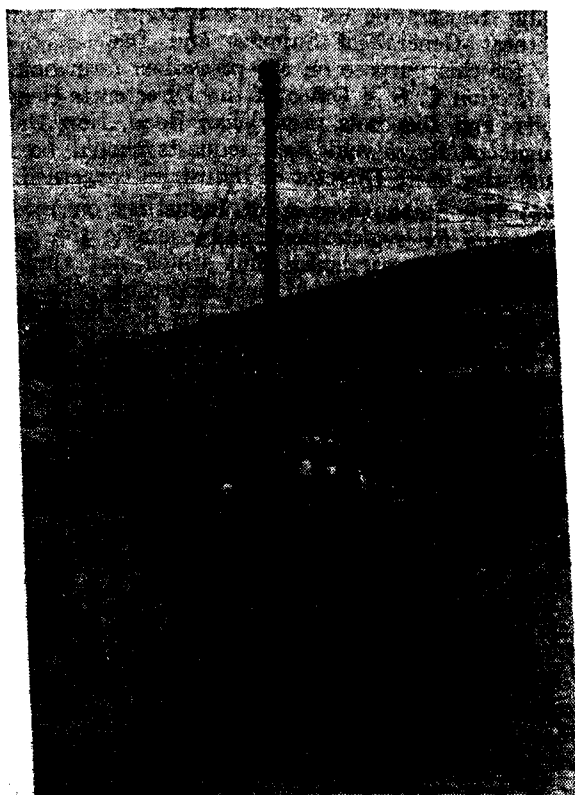
RECORD OFFICE : Front view of the Madras Record Office in Egmore, Madras City



Contour Bunding in Chittoor District

Among the various famine relief works in progress in Chittoor District contour bunding the sloping dry lands had also been taken up as an important relief work in Chittoor and Vayalpad Taluks of the district during June 1952 and is progressing rapidly.

The great majority of the famine-stricken is the ryot population and hence the important feature of the contour bunding work as a relief measure is that it provides work for the multitudes of the tillers of the soil and at the same time enables permanent improvement to their own lands by their own hands. Lands hitherto exposed to the vagaries of soil erosion lost not only a major portion of their productive top layer of the soil but also a major portion of the little rainfall received in the tract. Continued soil erosion if not checked in time washes off the previous soil and exposes the boulders and rocky strata underneath, rendering cultivation uneconomical if not impossible. Contour bunding, properly laid, will check these menaces and enable the lands to receive the little rainfall as a friend, resulting in due course, in increased productive capacity of the soil, increased yield, replenishment of underground springs, rise in level of water table and permanent improvement in the agricultural economy and ultimately the betterment of the lot of the ryots.



POWER DRILL: At Chennimalai in Coimbatore District a power-drill is used for boring a well for the Panchayat Board.



CANAL WORK: At the Lower Sagilleru Project, canal work is being done in Badvel Taluk, Cuddapah District.

Numerous Labourers Employed

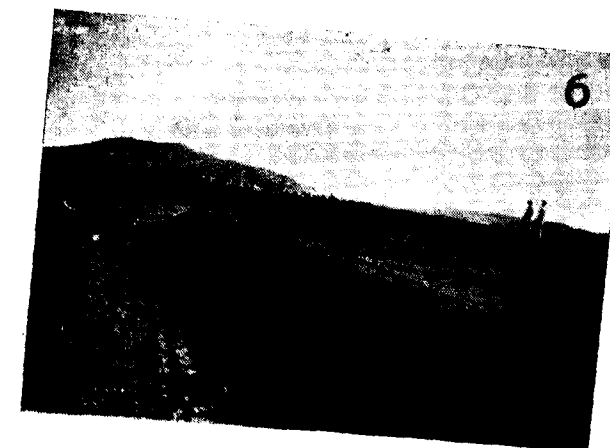
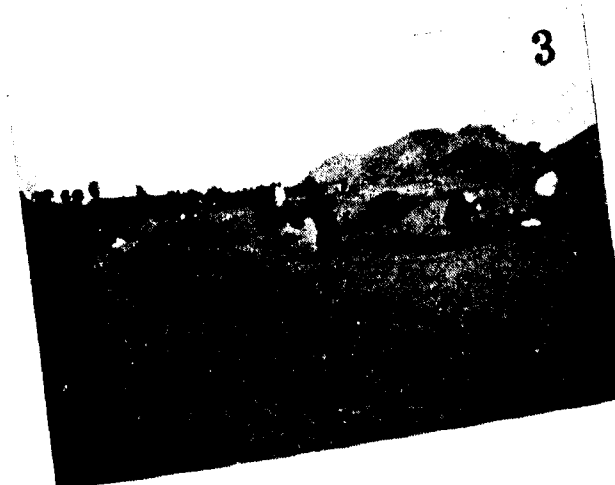
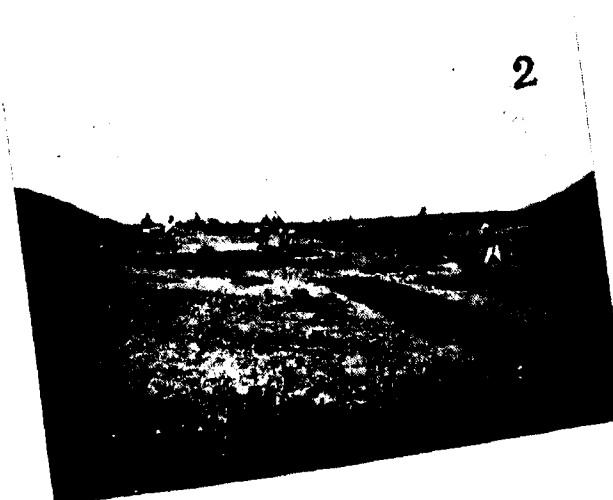
The experiences gained in the contour bunding work under execution in Chittoor District reveal that this work can be executed with ease by the agriculturists, as it involves only earthwork excavation and does not require, therefore, any technical skill in the matter. Numerous labourers are engaged in the work in groups, many of the groups constituting the entire families of the farmers. As would be seen from the illustrations in the photographs even women squads are able to work in separate groups and easily earn their living every day. The burrow pits provided for earthwork excavation are only six inches in depth and this enables extraction of light work from the labourers. It is noticed that even old men, women, girls and boys are able to take part in this bunding work and earn their living.

Contour bunding has to be necessarily taken up on catchment basis only and therefore, the work will be concentrated in a single catchment of a large area. A greater number of labourers can therefore be easily supervised by the minimum staff. As such relief can be afforded to a greater number of famine-stricken labourers at the minimum cost on the supervisory and other staff.

Contour bunding and other soil conservation measures are as such ideal for undertaking as a famine relief measure in the famine-stricken areas.

Nomination to Licensing Committee

The Government have nominated Sri J. M. Lobo Prabhu, I.C.S., Secretary to Government, Development Department, as the representative of the Madras Government, for co-option on the Licensing Committee, whenever the Committee, constituted under the Registration and Licensing of Industrial Undertakings Rules, considers applications from Madras State.



CONTOUR BUNDING IN CHITTOOR DISTRICT

The Government have sanctioned the execution of contour bunding works on over 6,500 acres in Chittoor and Vayalpad Taluks of Chittoor District as a 'Famine Relief Measure work'. Pictures show work in progress:

1. Continued soil erosion washes off the precious soil and exposes the boulders and rocky strata underneath.
2. Contour bunding provides work for all.
3. Men and women at work.
4. Gully plugging in bunding area.
5. Marginal bund on the road-side.
6. After completion.
7. After a slight rainfall the ryots take up ploughing in the bunding areas.

BOOKS

and takes particular care to see that no records are sent out on an requisition unless they are rendered fit for handling.

Aid to Historical Research

So much about centralisation and preservation. As to the making of records available for historical research, revised rules have been recently issued, throwing open all records down to 1902 for bona fide historical research. Many scholars and University students are availing themselves of this opportunity and, conducting research in this office, but considering that the field is vast and that the portion yet covered is negligible, it is to be hoped that more and more scholars would come to explore the archives.

It is impossible to indicate here the nature and variety of the subjects dealt with in the records. Yet some indication of this is perhaps necessary. The records of the early period then reveal the political chessboard of the Carnatic and the neighbouring States. Those of the period 1800 to 1865 delineate the formative epoch of Madras administration. They depict in detail the introduction of the ryotwar system, the Collector-magistracy, the organised system of police, the entire hierarchy of courts, including the High Court and whole body of Civil and Criminal laws.

They also depict the initiation of social reforms like the abolition of slave-trade, slavery, sati and human sacrifices; of prison reforms like segregation of prisoners, male and female, debtors and felons, juveniles and hardened criminals; and of educational reforms like the establishment of the Madras University, and of the Arts, Training, Engineering and Medical Colleges. The records of the subsequent period describe the steps taken for the expansion of roads, railways, canals, telegraph, irrigation, sanitation, medical aid, elementary education and what is perhaps most interesting, for the introduction of local self-government and constitutional reforms. All these records await exploration.

Reprints and Publications

In order to encourage and assist historical research, the office has undertaken the publication of Indices, Press lists, Guides, Reprints, Calendars and Selections. Most of the manuscript Indices of the old series of records have been printed up; and all the new series have been provided with printed indices. Press lists have been prepared and published for all series of records covering the period 1670 to 1800, giving in brief the contents of each and every document. Guides have been prepared and printed for all District Records down to 1835.

Reprints or publications *in extenso* have been issued in the case of all volumes from 1670 down to 1750 numbering more than 300 volumes, and they are now being issued in the case of volumes of the period 1751 to 1765. Calendars are being compiled for the Revenue Records from 1765 to 1800; and Selections are being made of the Judicial Records of the period 1800 to 1857. It has been proposed to issue Selections from the records of all Departments of the Pre-Mutiny period. Besides this, some old Dutch and Danish records and Ananda Ranga Pillai's Diary have also been published.

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MADRAS INFORMATION

Administrative References

But it is not in historical research alone that this office is interested. It is interested in furnishing daily information and records to the various departments of the Secretariat, the Board of Revenue, the Courts, the Collectors and other Heads of Departments on all sorts of matters that arise in the day-to-day administration of this State.

That they are indeed not so ignored, that they are now even more frequently used in day-to-day administration than formerly is eloquently borne out by the larger number of requisitions for them now daily received from the Government. An idea of the volume of work turned out in this connection can be formed when it is realised that in every year more than 17,000 calls for information and records are dealt with in this office and more than 35,000 documents are furnished in answer to these calls. The work involved in picking up and furnishing and in recalling and restoring the records when returned, is necessarily heavy. About 500 to 750 searches on intricate or important matters are also annually undertaken by the office, some of them covering more than a century of records and all of them demanding careful investigation.

Service to the Public

There is indeed no subject too minute or too big which is not referred to this office for elucidation. These subjects vary from individual claims to public policies. On all difficult or important subjects the records are not only traced and studied, but full notes based upon them are written and submitted. Notes have thus been prepared and submitted on a variety of subjects, such as certain claims of the Nawab of Arcot and the Nizam of Hyderabad, the abolition of the Zamindari system and the introduction of ryotwari system in Zamindari areas, tenancy problems, riparian rights, irrigation rights, separation of the executive and the judiciary, reforms in Agency areas, revival of art, cottage industries and the possibilities of mining of lead, silver, copper, coal and lignite in the State. The notes on these and similar subjects have been found very useful by the Government and several of them have been recently published for official use in two volumes under the title of "Studies in Madras Administration".

Nor is this all. The office is also interested in helping all those who seek the aid of records to uphold their legitimate rights or claims. Although it does not deal directly with parties, it conducts hundreds of searches every year to dispose of copy applications received through the Board of Revenue. To mention only a few instances, it is doing a large amount of work connected with the tracing of documents applied for by landholders and inamdars under the Estates Abolition Act of 1947. Those who wish to prove that their inams are pre-settlement inams, that they possess in them both melwaram and kudiwaram rights, frequently apply for copies of old sanads and other documents. Very often in these cases the records covering long periods have to be examined to trace the relevant documents. Again, the office receives from the Board of Revenue and the Collectors summonses issued by the Civil Courts for the production of old records required for trying civil suits. It is also often approached by private individuals for documents throwing light on the birth, death, nationality, or services of their ancestors.

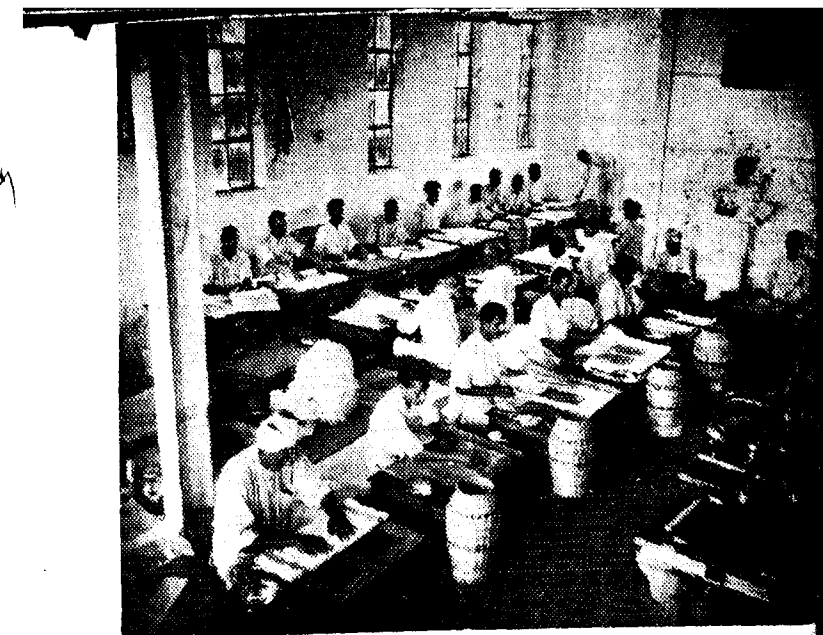
AT THE RECORD OFFICE

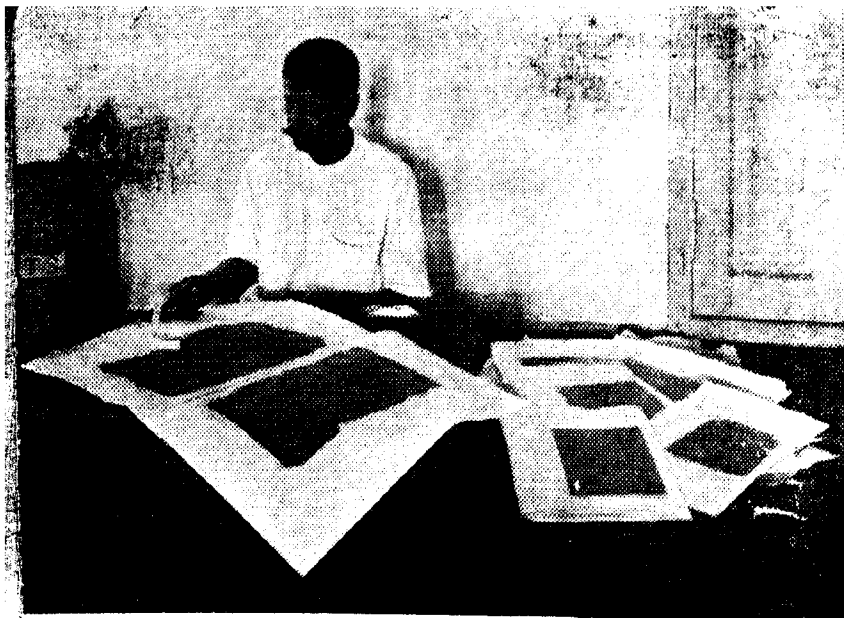
The records of the Madras Government, from 1670 down to the present in unbroken series in continual official custody, are of vital interest to historians, administrators and the public. At the Madras Record Office are preserved and kept in safe custody all the various records of the various Departments of the Secretariat, from the earliest times down to 1947; records of the Board of Revenue, Survey Office, District Collectors; documents of land mortgage banks, co-operative societies, covenants, agreements; Electoral Rolls; Mayor's Court Records, the Sheriff's Records, the Coroner's Records, the Army Records, the Surgeon-General's Records and Dutch, Danish and Persian Records.

The pictures show the methods adopted in the mending and preservation of old records.

A general view of the Mending Section at work (Top). The sheets requiring repair are put in water, (Centre) and then water removed from the wet sheets (Bottom).

(More pictures overleaf)





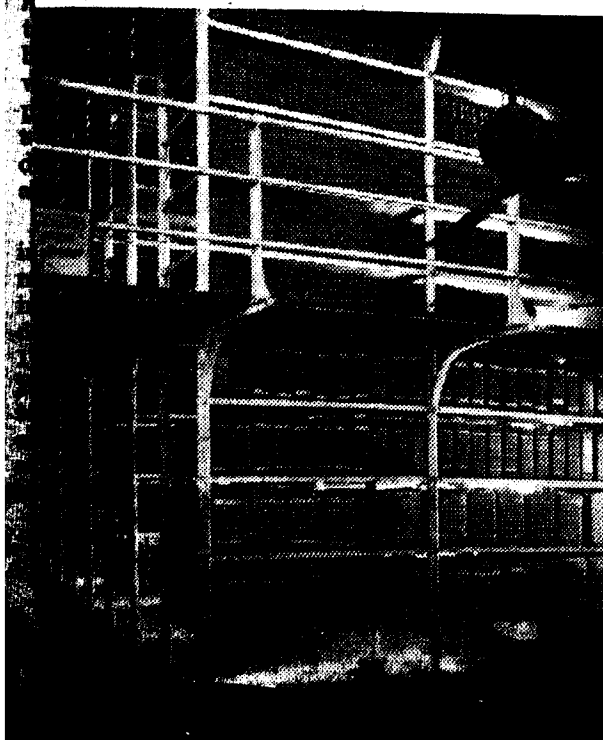
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PRESERVING THE RECORDS

After the sheets are dampened and dried, they are trimmed carefully (*Top*).

If the sheet has writing only on one side it is backed up by mending paper. But if it has writing on both sides it is pasted over with chiffon on both sides and provided with guards (*Centre*).

The mended sheets are finally pressed, gathered into files or bound into volumes. The documents are catalogued, arranged in order, labelled, indexed and then stored in blocks like the one at left (*Bottom*).





Madras Information

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"WE SEEK TO SERVE AND NOT TO COMPETE"

April 1952

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COVER PAGE—

H. E. Sri Prakasa, who assumed office as Governor of Madras State on March 12, 1952.

SECOND COVER PAGE—

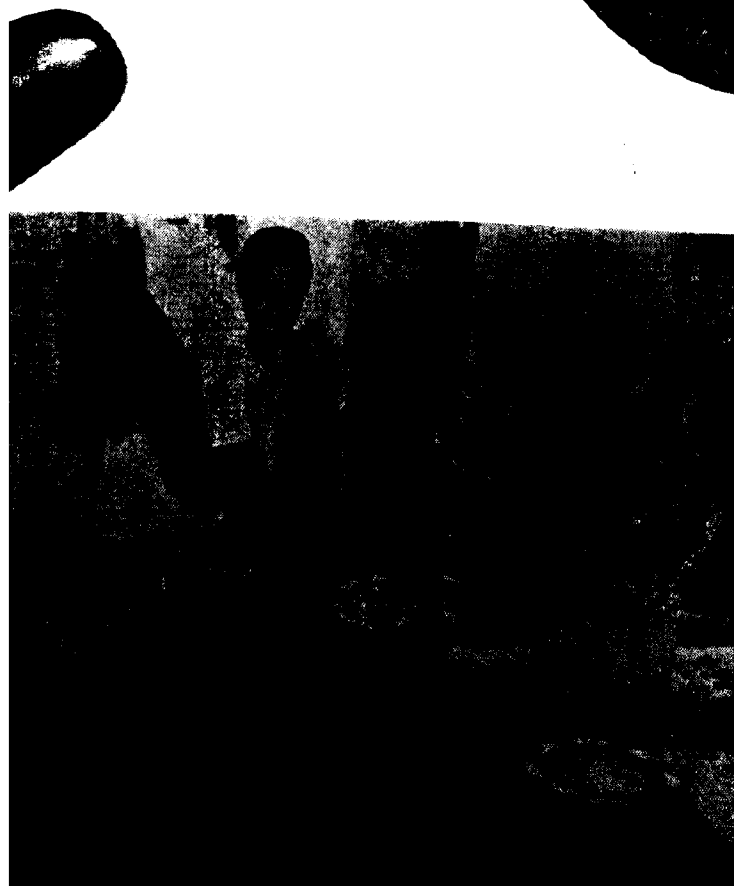
H. H. the Maharaja of Bhavnagar, who demitted office as Governor of Madras State, and H. H. the Maharani of Bhavnagar.



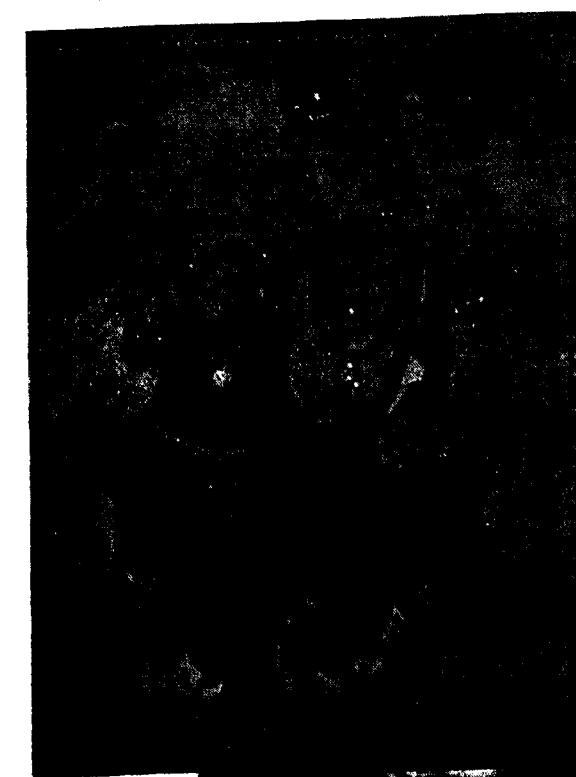
Tanjore has always been famous for its arts and crafts, and many of the products presented by the respective artisans who follow the profession with a traditional vocation, enjoy country-wide renown. From patterns evolved by time-honoured practice are created exquisite objet d'art which are at once collectors' items and connoisseurs' delight.

On the left is seen the making of the famous Tanjore plates—salvers of cunning blend of brass and silver, done in detailed mythological motifs. The silver centrepiece is separately worked, and then fused onto the brass outer. Pictures show the delicate hammering done by a master craftsman, the modest workshop where the plates are designed, and close-ups of two elaborately contrived plates, silver inlay of Nataraja and an ornamental vessel displaying the Dasavatar.

Equally famous are the Tanjore pictures, shown at right. On a specially prepared papier-mache board is traced the picture—Radha and Krishna here—in the unvarying style of the old school, and the figures filled in with repeated washes of gay colours. Then begins the process of gilding, when the jewels and laces are highlighted by spangles to obtain a gold-sequined effect. The picture is mounted in an ornate frame, and is now ready for sale.

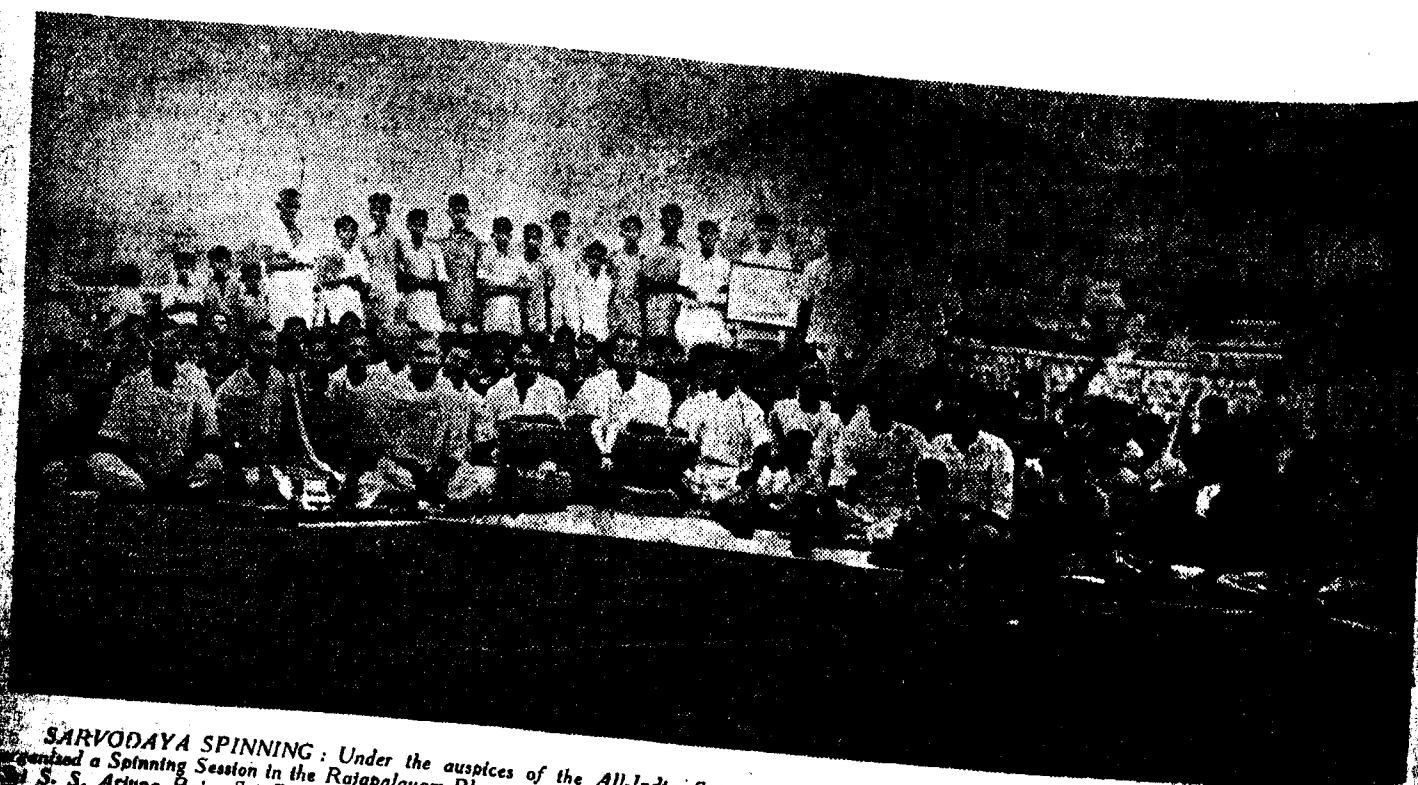


TANJORE ARTS AND CRAFTS





F.A.O. FOOD EXPERT: Mr. Norris E. Dodd, Director-General of the Food and Agricultural Organisation of the United Nations, recently visited Madras City. Here he is seen addressing Officials of the Madras Government.



SARVODAYA SPINNING: Under the auspices of the All-India Spinners' Association, Tamil Nad, the Rajapalayam Sarvodaya Committee organised a Spinning Session in the Rajapalayam Bhoopathi Raju Co-operative Bank premises. Prizes were awarded to the best spinners. Photo shows S. S. Arjuna Raja, Sri P. V. Natarajan of the All-India Spinners' Association, and others. About 150 women and children joined in the Spinning session.

NEWS AND NOTES

3

MADRAS INFORMATION

"An Essential Unity Knit Us Together"

Farewell Message By H.E. the Maharaja of Bhavnagar



H.E. the Maharaja of Bhavnagar

view to understand and appreciate at first hand our pressing problems. I had the pleasure of meeting many people of all communities, creeds and classes and hearing various shades of opinion. It was my good fortune to have met with uniform kindness and unaffected courtesy all through my period of office wherever I went. The active support and hearty co-operation extended to me by all sections of the people sustained me in the discharge of the functions of my office.

I would take this opportunity to congratulate and thank our efficient and able Services in this State which deservedly enjoy a countrywide reputation.

Owing to compelling domestic and private reasons, I requested early in December 1951 to be relieved of my office. The President has kindly agreed to do so now. I need not tell you how much my wife and I cherish the momentous experiences of these three and a half years in your midst. Although I will be laying down my office early tomorrow, I will certainly continue to take an abiding interest in the progress and welfare of this great State which we admire and love so much.

Immediate Problems

The immediate problem for the State is to make available the basic necessities of life, like food, clothing and shelter. The task before us is neither simple nor easy of solution. There are no short-cuts to prosperity. It can be achieved only by a process of gradual change and evolution. The pace of progress has, no doubt, to be accelerated. We had to labour, and are even now labouring under special handicaps. Efforts to increase food production have been rendered largely nugatory by a succession of adverse agricultural seasons. I do not propose now to describe the dangers and difficulties which beset the birth of our Republic and the heroic manner in which we survived the infirmities of infancy. I would only submit that it is necessary to bear in mind the national and international background when we direct our criticism against our present insufficiencies. Now that the General Elections are over, let us unite with faith in ourselves and animated by a spirit of co-operative effort and work and achieve small and large-scale schemes and projects of development. I would beg of you to remember that nothing substantial can be achieved for long by playing on the want, ignorance and cupidity of the masses. The only hope for our country is an intelligent and instructed democracy.

I would be failing in my duty were I not to express my heartfelt gratitude to the Press in Madras, which, in my opinion, is second to none in the creation of informed public opinion. My wife and I met with unfailing courtesy and goodwill from all sections of the Press in this historic and great State. I am grateful for all the help and co-operation given to us throughout my tenure of office and I thank the Press for all that they have done for us.

And now, my wife and I sincerely thank you, beloved people of the State of Madras, for your kindness and affection. We hope and pray for your prosperity.

Jai Hind!

(By courtesy, A.I.R., Madras.)

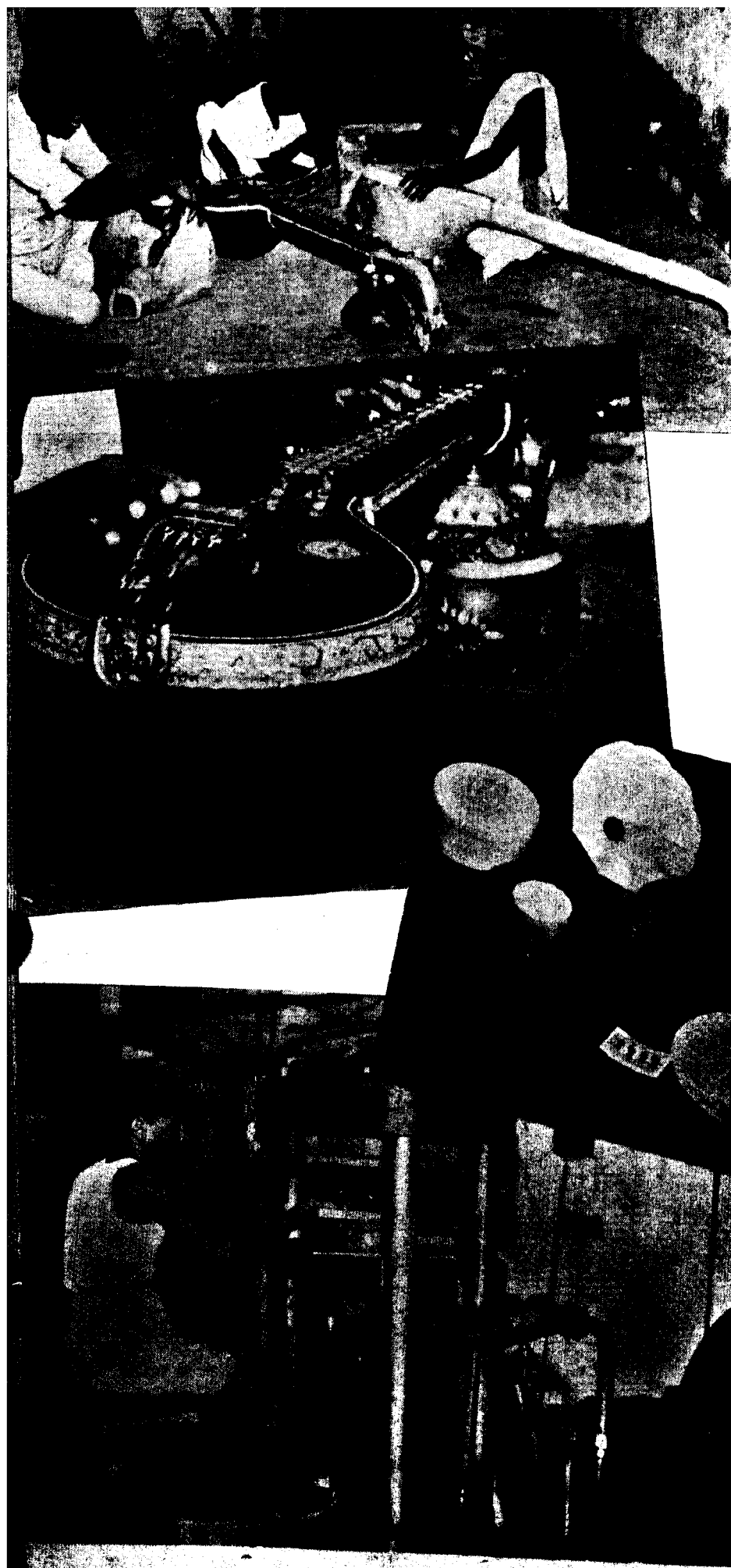
I thank the All-India Radio for this opportunity to bid farewell to the citizens of this historic State of Madras on the eve of demitting my office as Governor. During these three and a half years of my office, my wife and I have been one of you. We have met so many of you and it is not easy for us to think how much we will be missing in the years to come, so many familiar faces, so many familiar voices and all the familiar scenes and landscapes of this beautiful State which we have come to love, and also, the sight of toiling masses whose industry is the backbone of the State's prosperity. It is hard to say "Farewell" and believe me, we are feeling very sad indeed to have to say it.

On this occasion, my mind naturally goes back to August 1948 when my appointment as Governor was announced. I confess that when I was offered the appointment, I felt in the first instance not a little diffident and hesitant to accept the high office of responsibility in what were then to me unfamiliar surroundings. But I was quite clear on one point and that was that I should obey the call of our country's leaders and serve our people in the place they chose for me.

Essential Unity

I had several handicaps. I belonged to the Princely Order. I was neither a politician nor a Parliamentarian. I did not belong to any political party. I was not even an expert in general administration. I came from a different part of our country. In spite of all these shortcomings, I accepted this great honour to demonstrate that it was the duty of the ancient nobility to identify themselves with the common people and make democracy a success in our country.

Very soon after assuming office, I discovered to my great relief that the differences of customs and manners were only on the surface and that an essential unity and brotherhood knit us together. I travelled throughout the State with a



TANJORE INDUSTRIES

One of the leading industries of Tanjore is the manufacture of veenas. With meticulous regard for the rigid principles of veena-making laid down by the ancient guild, these hereditary craftsmen turn out with loving care hand-made instruments of jack, brass and ivory that satisfy the requirements of even the most exacting of musicians.

Tanjore has modern industries too, and one popular small-scale enterprise is the plastics plant. Here with modern machines are manufactured a variety of products—soap-boxes, electrical fittings, buttons, toys, cups and saucers, trays and ash-trays.

NEWS AND NOTES

MADRAS INFORMATION

"Two Madrassis"

"My wife and I are hereafter two Madrassis, in and out of the State, intensely interested in the welfare of this great and historic State." Thus observed His Excellency the Maharaja of Bhavnagar at the party held on behalf of the Government of Madras, to bid farewell to the Maharaja of Bhavnagar, Governor of Madras, and Her Highness the Maharani of Bhavnagar, at Rajaji Hall, Mount Road, by Sri P. S. Kumaraswami Raja, Chief Minister.

The hall was tastefully decorated and about 1,200 guests among whom were Ministers, ex-Ministers, High Court Judges, prominent non-officials, legislators, journalists, representatives of consular services, Secretaries to the Government and Heads of Departments. Major-General Mohite, Area Commander, and Sri K. M. Munshi, Union Food Minister, attended the party.

On arrival at the Government House Estate, His Excellency the Governor and Her Highness were received by the Chief Minister and other Ministers and conducted to the hall. After refreshments, the Chief Minister spoke bidding farewell to the Governor and the Maharani. The Maharaja of Bhavnagar, in his reply, thanked the Chief Minister and his colleagues for the kindness and affection shown to him during the period he was Governor of this State. At the close of the function, a beautiful casket made of rose-wood, with the picture of Lord Krishna delivering the message of the Gita to Arjuna embossed on the lid, was presented to the Governor.

The Chief Minister, bidding farewell to His Excellency the Maharaja of Bhavnagar and Her Highness the Maharani, said that it was no exaggeration when he stated that the regret they all felt on the occasion of the Governor's departure from Madras was shared by everyone not only in the City but throughout the State.

H.E. the Governor's Reply

His Excellency the Maharaja of Bhavnagar in his reply, said: "Those were very kind and generous sentiments indeed, which have just been said about Her Highness and myself, and we shall always treasure this gift in token of your affection for which we offer you our heart-felt thanks. Believe me, we are even more grateful to you for the expression of this evening's sentiments than for your kindnesses in the past, which are too many to recount on an occasion like this. Great as is my gratification at so signal a

reward, I assure you that it is doubly gratifying to me to hear your generous references about my wife for merits in which I certainly can claim no part, and of which I am therefore free to testify that in her case your judgment is justified.

"The charm of the South is not as well known as it should be to some of our friends in North India. Reference has been made to the Princely Order from which I have been called upon by the leaders of our country to serve this great State. No doubt in the first instance I felt not a little diffident to accept the unique honour bestowed on me to serve you. But I felt that there was never a more urgent time than the present juncture in our history, in which there was greater need and scope for the ancient nobility of the soil to identify themselves with the common people and justify themselves as worthy sons of Independent India.

"Happy and Proud"

"You, Mr. Chief Minister, have been pleased to refer to the manner in which I served this State under our new Constitution. May I take this opportunity to record my unstinted praise and gratitude to yourself, your distinguished predecessors, your colleagues, all the dignitaries in the State and all the Services, but for whose utmost and willing co-operation I could not have discharged the functions of my office in the manner that it has pleased you to refer to them? My wife and I are happy and proud to have been styled by you as two fellow Madrassis, and I felt and acted and that is how she and I were treated by the citizens of this great State.

"Now, in conclusion, may I as one Madrassi to another and in the strictest confidence, because there is diffidence in the air, express a strong hope and belief that if we Madrassis have done well in the past, we shall do even better in the future, for we Madrassis are quite capable of taking care of ourselves and when occasion demands, of others also? Sad though it certainly is to part, it is in that note of robust optimism, belief and faith, that my wife and I bid you farewell. She and I are hereafter two Madrassis, in and out of the State, intensely interested in the welfare of this great and historic State. We thank you, once again for your affection and we pray and hope for your prosperity and happiness."

INDIAN ART EXHIBITION IN CAIRO "COMPROMISE OF THE CONSORT": A painting by Sri T. V. Ratnam, Madras, was exhibited at the Indian Art Exhibition held recently in Cairo.



NEWS AND NOTES

Chief Minister's Tribute

Sri P. S. Kumaraswami Raja, Chief Minister, paid the following tribute to His Excellency and Her Highness, the Maharaja and Maharani of Bhavnagar.

Your Excellency and Your Highness!

It is with a heavy heart that I get up now to say a few words to you both on the occasion of your departure from Madras, and it is no exaggeration when I say that the regret that we all feel on this occasion is shared by every one, not only in the City of Madras, but also throughout the State. In 1948 when you first came to Madras, you were strangers here, but today you are remembered with affection and gratitude by all and the feeling that is uppermost in our minds is that we are bidding good-bye to two good Madrassis, near and dear to us all.

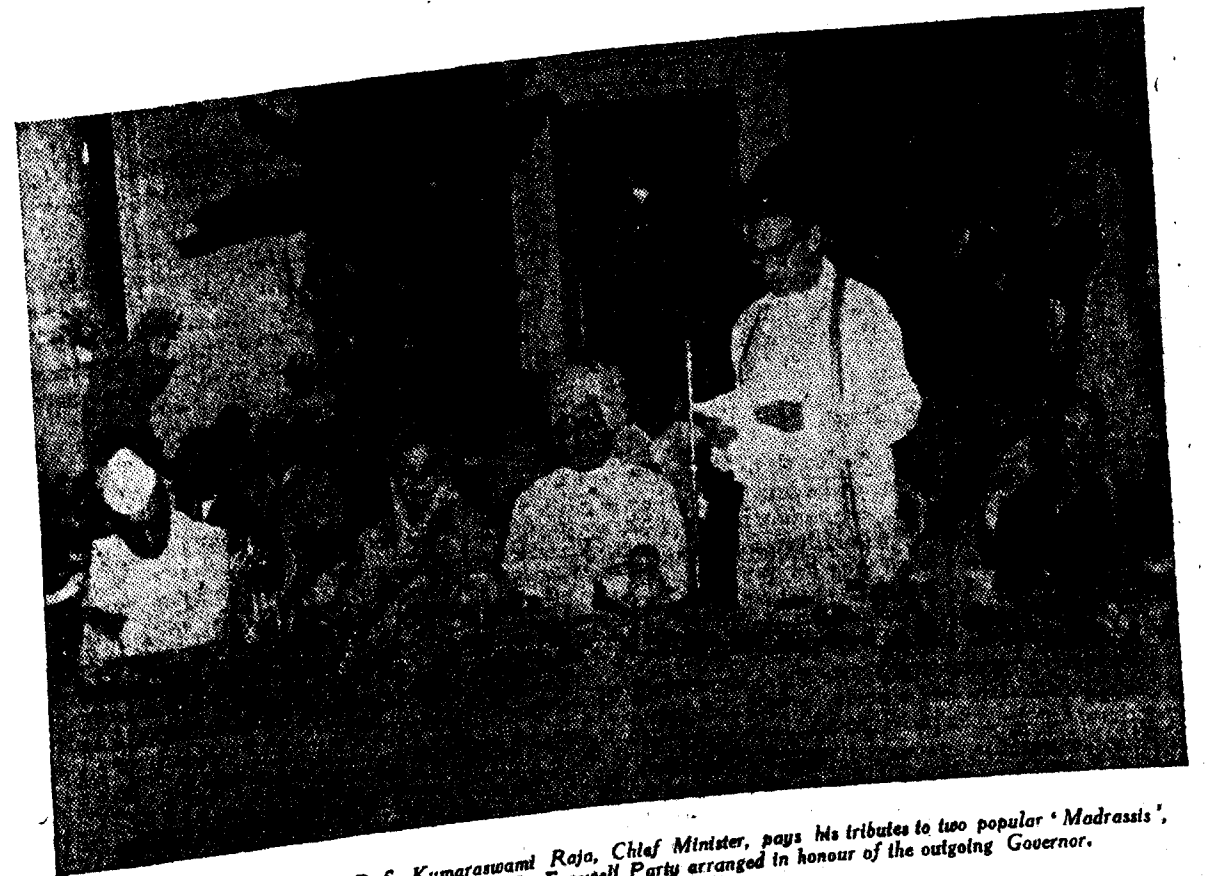
It may not have been an easy task for Your Excellency and Your Highness, brought up as you were in princely surroundings, to adapt yourselves to the conditions brought about by the transfer of power in 1947, but the manner in which Your Excellency has during the last three and a half years discharged the duties attached to your high office has commanded the admiration of all. No doubt under a democratic set-up, it is the Ministry that is responsible for

the initiation and the carrying out of the policies of Government, but the Governor of a State has his own special position as Head of the State, and Your Excellency has by your example shown the rest of India how a Governor should function under our new Constitution.

Courteous and affable by nature, Your Excellency and Your Highness have endeared yourselves to all sections of the population by your simplicity and accessibility. The poise and dignity with which Your Excellency has discharged your onerous duties, and the solicitude that you have shown for the welfare of the State, cannot but be a source of inspiration to others. The Maharani Sahiba's special interest in matters relating to the women and children of this State is well known, and the ready manner in which she associated herself with several charitable causes shows how deeply she is interested in them.

In bidding you both farewell now, let me hope that you will have many an occasion to renew your contacts and friendships in Madras, and let me add that we in Madras will always be more than glad to welcome you.

In conclusion, may I on behalf of my colleagues and myself, request you to accept a small token of our affection and gratitude towards you both.



FAREWELL PARTY: Sri P. S. Kumaraswami Raja, Chief Minister, pays his tributes to two popular 'Madrassis', the Maharaja and Maharani of Bhavnagar, at the Farewell Party arranged in honour of the outgoing Governor.

The Newer Knowledge of Nutrition

By SRI A. B. SHETTY, Minister for Health

Great advance has been made in recent years in the science of nutrition. The discovery of the important part which vitamins, minerals and certain proteins play in improving the quality of a diet has opened a new chapter in our knowledge of nutrition. A balanced diet should contain all the essential ingredients—carbohydrates, fats, proteins, minerals, vitamins, water and cellulose—in proper proportions. Health, growth and efficiency are more closely dependent on adequate diet of the right kind than on any other factor. A world-wide interest in nutritional questions has been awakened by the experiences of the last two World Wars. With the growing knowledge of the requirements of human nutrition and the nutritive values of common foodstuffs, it has become possible to plan satisfactory diets for various income groups. The newer knowledge of nutrition "calls for a new kind of statesmanship" that will plan the production and distribution of such kinds and quantities of foods as are needed for better nutrition of all the people.

Recent studies have shown how millions of people in all parts of the world suffer from inadequate development or from various degrees of ill-health on account of the low nutritive value of the food they consume. Malnutrition due to certain deficiencies in diet impairs physical as well as mental growth in children. It lowers vitality and reduces resistance to disease in the young and old. Further, it gives rise to certain specific diseases. It is held that, barring infectious diseases, nearly 75 per cent of human ailments may be traced to food deficiency. The newer knowledge of nutrition has ushered a new era for preventive medicine.

Towards the last quarter of the 19th century preventive medicine was chiefly a matter of improved sanitation and later of immunisation against communicable diseases. From the early part of this century the important part which proper nutrition plays in preventive sickness and promoting positive health is becoming increasingly evident. Recruits to the Army have been found to show definite improvement in their physical condition after a short period of good feeding. Marked changes have been noticed in the health and rate of growth of poor school children by providing them extra milk. Nutritional research has made a great contribution to preventive medicine by accumulating evidence to show that improper food is the underlying cause of many diseases.

Dangers of Malnutrition

Defective nutrition is found among large sections of the population even in well-to-do countries. In our poor country multitudes of people are malnourished, the level of physical efficiency is low and nutritional disorders of almost every kind are common. The diet surveys carried out by the health staff of our Nutrition Units show that protective foods like milk and milk products, meat, fish, eggs, etc., hardly find a sufficient place in the diet taken by even the higher socio-economic groups. Green leafy vegetables which are rich sources of Vitamins A and C and important minerals like calcium and iron are consumed only in small quantities even though they are very cheap

and easily available. Fruits including the cheapest of them—plantains—are rarely eaten. Nutrition surveys among children have revealed that the majority of them are under weight and short of height and they suffer from varying degrees of deficiency diseases on account of under-nutrition and malnutrition.

The three Regional Nutrition Units have been doing some educative campaign among the villagers, exhorting them to incorporate in their daily diet cheap protective foods like green leafy vegetables, groundnuts, sprouted pulses, etc., and demonstrating to them correct methods of cooking rice and vegetables to prevent loss of nutrients. Skimmed milk given as a free gift by the UNICEF and multivitamin tablets have been distributed in various places among children and expectant and nursing mothers. A free cereal mid-day meal to make good calorie deficiency, a glass of reconstituted skimmed milk and multivitamin tablets have shown remarkable effects in increasing the height and weight of indigent school children and improving their health.

Malnutrition is the root cause of human and animal diseases in this country. Ramifications of the science of nutrition extend also to food crops and to the soil. The richness of the soil aided by irrigation and manures determines the quality of the food crops, vegetables and fruits grown on it. Nutrition science has devised what is called the "enrichment programme" for artificially fortifying foods which are deficient in some nutrient. There is a proposal to combat malnutrition and beri beri in the Northern Circars by the supply of enriched and fortified rice with American aid.

Regional Diet Vagaries

The national diet of the Sikh, the Punjabi and the Pathan, consisting mainly of whole wheat and large quantities of milk and milk products, is the best in India. Madras and Bengal are the worst sufferers because the food consumed lack in essential nutrients. The main defects of the average South Indian diet are lack of animal proteins, fats, mineral salts and vitamins and an excessive proportion of carbohydrate. Animal proteins contain more of the essential amino-acids than do vegetable proteins and they are on the whole easier to assimilate. Milk, eggs, meat and fish have animal proteins which are of a higher biological value than the proteins and vegetables like pulses.

The large majority of people in Madras State subsist wholly on milled rice. The milling of rice lowers its nutritive value. Polished rice coming out of mills is favoured because it looks better, it cooks more easily and it has better keeping quality than unpolished rice. But the process of milling removes the outer layer of the grain which contains a good portion of its protein content as well as of mineral matter and vitamins. Parboiled rice even when milled is superior in nutritive value to milled raw rice. In the coastal Andhra districts people eat raw rice highly milled and many of them suffer as a result of it from beri beri which is a deficiency disease.

Responsibilities of Citizens

H.E. Sri Prakasa's Appeal

My brothers and sisters of Madras!

It is difficult for me to express in language adequate enough the gratitude of my heart for the very warm welcome that I have received from the people of this great State on the assumption of my office. I know I have done nothing that could merit an honour so high, and affection so bountiful, that it has pleased you to extend to me. And still I cannot help feeling that I come here as no stranger, for curiously enough, many ties, both material and spiritual, bind me to this fair State by family associations of very nearly 200 years. In fact I seem to feel that I owe everything I have, to you. The story would be a long one and you would scarcely be interested in it; but this I may say in all sincerity, that if I am able to pay back even a tithe of the great debt I owe you, I should deem myself fortunate indeed.

My first duty today would be to offer my tribute of praise and admiration to my predecessor, His Highness the Maharaja Saheb of Bhavnagar, who has left a great tradition of dignity and courtesy, of beauty and simplicity, which I realize only too well it would be difficult for me to follow and fulfil. To his gracious spouse, Her Highness the Maharani Saheba, we owe much; and the social services of Madras are the poorer today for her departure. I pray that I might be able to do what little I can, so that their great work may be preserved and carried on.

I am only too painfully aware of the many intricate problems that face us and which await solution at our hands. Madras is rich in story and in legend from the most ancient times; and the history of Madras in recent times is such of which we have every reason to be proud. Madras has given to the world some of the greatest persons in every department of human endeavour. So many of our great philosophers and literateurs, artists and musicians, lawyers and journalists, engineers and architects, politicians and statesmen, merchants and industrialists, have come from Madras; and surely it should not be difficult for men so well endowed to solve comparatively easily the many problems that face us today.

Pilgrim from the North

I come as a humble pilgrim from the North to this great South of varied attainments, to which I had always turned since the earliest days, for hope and comfort whenever things looked dark and dismal. It would be a mere truism to repeat that here in the South, despite all the clashes of cultures and civilizations, all wars and battles, all social and intellectual conflicts—you have maintained unimpaired all that was great and beautiful in our ancient past. If India lives today anywhere as India was some thousands of years ago, unspoiled in its pristine purity, surely it is here. And still you have never hesitated to welcome all that was good in the peoples that came to you and the ideas and ideals they brought with them; and you have certainly reconciled in a most wonderfully complete and beautiful manner the various forces that otherwise appeared irreconcilable. With such a rich heritage, there is nothing that you cannot do successfully in the years to come. You

can easily help in the solution of the problems not only of the State but of the whole land.

It has been a sad fact of our national history that whenever some strong power holds us, we remain one; but as soon as that power is removed, fissiparous tendencies set in and we are broken in bits. This process has been repeated over and over again, with the result that we have not been able to make that progress in the varied departments of life that we were otherwise richly endowed to do and which we otherwise would surely have done. With the departure of the British, the same tendencies in various ways became visible; and I beg of you, if I may, never to forget to keep the overall picture of the country in your view as to tackle the difficulties of the moment that surround us. I feel that we can never go far wrong if we determinedly hold fast by this fundamental truth. We of Madras, with our complex problems, must take a lead in this as in many other matters.

Food Problem

It will be naturally my endeavour to study and understand as best I can, the various difficulties and dangers that have overtaken us. Of late, the food problem is obviously the most acute and most important; and it must attract our most earnest and immediate attention. I may assure you that the Central Government are most anxious to do their utmost to surmount the difficulties that beset us here. The Hon'ble the Food Minister from Delhi has just visited the affected areas and our Prime Minister has generously sent me a lakh of rupees as a contribution from his Fund to help in meeting the situation. I have every confidence that the great people of Madras will rise to the occasion and strive their utmost to overcome the difficulties with which we are faced at the moment, for it is a truism that self-help alone can enable human beings to meet adverse circumstances as they arise. It is strange and unfortunate that Nature should have been so unkind as to deprive us of life-giving rains from year to year in the recent past. Man, however, has at various times and in various places, successfully struggled against the handicaps that Nature has imposed, and come out triumphant in the end. Let us hope that we in Madras will be able to do likewise.

Though scarcity of food is our immediate concern, I am not unaware that there are other serious problems of social and psychological nature that are facing us. It may sound as the merest platitude—but platitudes do contain the quintessence of wisdom begotten of the experience of ages—I cannot help saying that trust and goodwill, sympathy and understanding solve many serious human problems that otherwise baffle solution. As the days pass, I have no doubt that our innate commonsense will help us to surmount all the difficulties that face us today.

Civil and Social Duties

We must not forget at any moment and in any circumstances, that we have declared ourselves a Democratic Republic and have introduced adult suffrage as the basis

(Continued on page 48)

Interim Budget for 1952-53

By SRI A. B. SHETTY, Minister-in-charge of Finance

Sir, the budget which I am now presenting is only an interim one for 1952-53, although it has been prepared as usual, for the full year. It is intended just to give an account of the financial position of this State for the current year, and the prospects for the coming year on the existing structure of receipts and expenditure. The new Government which will shortly come into being, will consider the budget afresh and recast it, making provision for new schemes and taxation proposals, and this will be presented to both the Houses in due course. The Demands for full Grants, as contained in this budget, will not be presented to this Legislature. After the general discussion, a vote on account will be asked for, to meet the anticipated expenditure during the first four months of the next year.

A White Paper, explaining briefly the accounts of the year 1950-51, the Revised Estimates for 1951-52 and the Budget Estimates for 1952-53 as now framed, is being circulated to the Hon'ble Members along with the other budget documents. I shall not go over the same ground, but shall merely draw attention to a few matters of public concern.

Adverse Seasonal conditions

For the fifth year in succession, this State has suffered from adverse seasonal conditions causing widespread distress. The current year has been one of the worst, and severe drought conditions are now prevailing in the entire districts of Cuddapah, Chittoor, Chingleput and North Arcot. Scarcity conditions exist also in parts of Guntur, Nellore, Kurnool, Anantapur, Tiruchirappalli, Salem and the Coimbatore Districts. The Government are alive to the seriousness of the situation and the need for immediate relief. To avoid large-scale human mortality, gruel centres are being opened, wherever necessary, to sustain the aged and the infirm. Liberal remissions of land revenue and postponement of the collection of instalments of takkavi loans have been ordered. The Government are also granting subsistence and takkavi loans on a liberal scale. The programme of works on roads, rural water-supply and minor irrigation schemes is being accelerated in order to provide employment. Fodder is being arranged to be sold at subsidised rates to preserve the cattle wealth of the area. It may perhaps be desirable to subsidise the sale of foodgrains, especially millets, in the affected areas, to place them within the reach of the distressed people, but this would entail heavy outlay, beyond the resources of the State.

The cost on account of the various relief measures which may have to be continued till the close of the calendar year 1952, is estimated at well over Rs. 5 crores. The amount available in the Famine Relief Fund at the end of the current year will be only about Rs. 60 lakhs. This Government have therefore approached the Government of India for substantial assistance by way of loans and grants and let us hope that our request will evoke a favourable response in quick time.

Speech of Hon'ble Sri A. B. Shetty, Minister-in-charge of Finance, presenting the Budget for 1952-53 to the Legislative Assembly and Council of Madras on the 15th March 1952

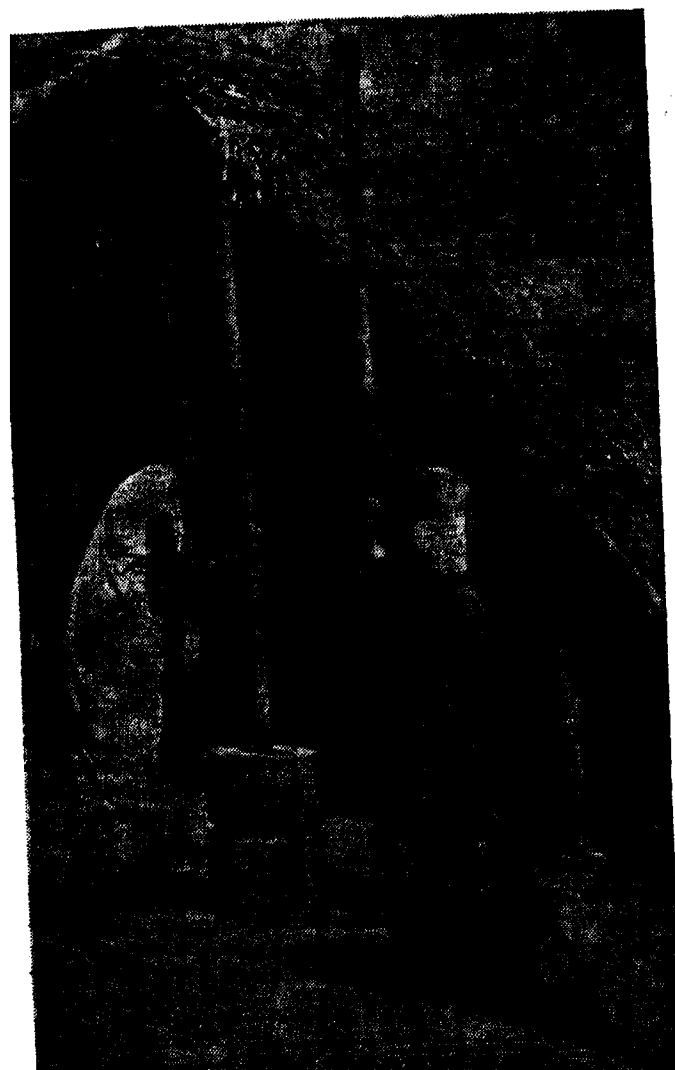
The Revised Estimate for 1951-52 was framed one month ago on the basis of the information then available, and it is very likely that the actual amount of remissions and expenditure on other relief measures in the current year will be much more than what were then anticipated. In the result, it is fairly certain that the deficit of Rs. 10 lakhs shown in the revised estimate for the year may be materially exceeded.

Budget, 1952-53

The interim Budget for 1952-53, as now presented, presumes that seasonal conditions in the ensuing year will not be unfavourable. Revenues have been estimated on the existing basis of taxation and no provision has been made for new schemes to be introduced during the year. Even so, the anticipated revenue will fall short of expenditure by Rs. 86 lakhs. It is usual to make provision in the budget for new schemes of development costing about Rs. 2 to 3 crores each year and this additional expenditure used to be met by the normal increases in receipts under the various revenue heads. But our major sources of revenue, such as Sales Tax and Motor Vehicles Tax, have reached the stage of peak out turn and a downward trend may set in now.

As the Hon'ble Members are aware, there has recently been a sudden fall in the prices of various commodities in this country. It is too soon to say how and at what level the prices will get stabilised, but this matter is one of great interest to this Government, as well as to the different sections of the public. A fall in commodity prices will have the healthy effect of narrowing down the wide disparity that has been existing, ever since the outbreak of the Korean War, between the prices of foodgrains and the prices of commercial crops, and as such, may prove an incentive to the agriculturists for the production of more food. The working classes, particularly in industrial towns, have been adversely affected by the increased prices they have had to pay for rice from the 2nd of this month (March 1952) consequent on the stoppage of the food subsidies by the Central Government. The rise in their cost of living may be set off, to some extent at least, by a reduction in the retail prices of other articles which they consume.

The stabilisation of prices is a matter largely for the Government of India, and they may perhaps attempt to maintain parity between the prices of commercial products and foodgrains. So far as this State is concerned, one effect of a large fall in prices will be to diminish the revenues, particularly under General Sales Tax. New resources will therefore have to be tapped, if provision should be made for new schemes as contemplated in the Five-Year Plan. The Planning Commission had taken note of the inelasticity of our existing revenue resources and for that reason, had recommended additional taxation to the extent of at least Rs. 4 crores per year. Among the new proposals for expenditure to be considered is the one to launch a pilot scheme for mining the lignite deposits located in the South Arcot District. In this investigation, we have now reached a stage when we should attempt an open-cast mine to make sure that the exploitation of this precious resource



HAND-POUNDED RICE is more nourishing than mill rice

Value of Protective Foods

Nutrition experts lay special emphasis on the need for including in our diet sufficient proportions of milk and milk products, green vegetables, fresh fruits, meat, fish and eggs. These are known as "protective foods" because they contain valuable food factors like animal proteins, fats, vitamins and mineral salts which are essential for health and growth. Such protective foods form but a scanty portion of the diet consumed by the mass of the population. Protective foods are not available in sufficient quantity and they are also more costly. Poverty and ignorance are the two main causes of widespread malnutrition in under-developed countries. The elimination of poverty requires a long-term plan.

Much can be done to remove ignorance regarding the nutritive values of the foodstuffs commonly used. Wise selection of articles of foods which are within the means of poorer classes and proper methods of cooking will improve the diet. Steps should be taken to adjust food habits in accordance with the nutritional needs and the availability of foods in particular localities. Let the rice-eaters be encouraged to consume hand-pounded rice which

is more nourishing than milled rice. Failing this, let them at least use parboiled under-milled rice. The nutritive value of the diet can be raised if the rice-eaters will include millets like ragi as a part of their daily food. Any combination of wheat or millets with rice is preferable to a mere rice diet.

Milk and Fats

Milk is the greatest nutritional need in South India, particularly for vegetarians. It is Nature's complete food as it contains essential nutrients in harmonious combination. Egg is also a very valuable protective food for the same reason. Sufficient consumption of milk is specially important for mothers and children. Women during pregnancy and lactation need more protein than at other times. Growing children also require sufficient protein in their diet to serve as building material for the body. Milk contains protein of high biological value and an abundance of calcium which also is necessary for both mothers and children. Those who cannot afford to get enough milk can have skimmed milk which is cheap and as rich in protein as whole milk. Half a pound of reconstituted skimmed milk made out of imported milk powder has a wonderful effect on ill-nourished children. It is the cheapest form of milk at present available.

Buttermilk also is as cheap and good as skimmed milk. Fat is of value to the body but the diets of the poorer classes are low in fat. Animal fats such as butter and ghee are more valuable as they contain Vitamin A, but since they are expensive the poor have to use vegetables, fats and oils. Oilseeds and nuts are rich in fats. Vitamins are found in all simple natural foods, such as whole cereal grains, milk and its products, fresh fruits and green vegetables. Lack of Vitamin A is a very common defect in our diet. Fish liver oil is rich in this vitamin. Shark and saw-fish liver oils which are manufactured in our State are now extensively used as substitutes for cod liver oil.

Vegetables and Fruits

Increase in the consumption of green leafy vegetables is an easy and cheap way of making food the deficiency of Vitamin A. The B group of vitamins is responsible for deficiency diseases like beri beri. Parboiled rice, whole wheat, millets, pulses and nuts, milk products, yeast, lean meat, liver and eggs will supply this group of vitamin in sufficient quantities. Fruits provide useful amounts of minerals and vitamins and add variety to the diet. Vitamin C is found in fresh fruits and green leafy vegetables. Nellikai is very rich in Vitamin C. When greengram or bengalgram is allowed to sprout or germinate, Vitamin C is formed in it, and the consumption of such germinated gram is recommended for this purpose. Vitamin D is found in milk and eggs and particularly in fish liver oils. Exposure of the body to the sunlight is a cheap way of obtaining this vitamin. Increased consumption of cheap fish like mackerel and sardines will secure protein of high biological value. The Fisheries Department is adopting various measures for the development of our marine and inland fisheries. Improvement in culinary practices is necessary for preventing nutritive losses on cooking. Repeated washing of rice before cooking and using large quantities of water for boiling rice and throwing away such water results in the loss of vitamins and minerals.

(Continued on page 30)

Leprosy Work in the Firkas

By SRI T. N. JAGADISAN, Honorary Leprosy Prevention and Relief Organiser

The Government of Madras have for long been specially interested in village leprosy work. Their concern in this work was fully expressed by Dr. T. S. S. Rajan, then Minister for Health, in his inaugural address to the Third All-India Leprosy Workers' Conference, Madras, on 3rd October 1950.

"Leprosy is very largely a rural disease. It is a chronic disease but not a killing one. It may deform a patient but it does not disable him altogether except in rare instances. It is a disease of protean manifestations, with this contradiction that sometimes the more obvious forms are less infective and some forms of infective leprosy, especially in the early stages, are difficult to detect. Our approach to the problem must be to take due note of all these peculiar traits. Our plans should be to reach at the villages and to build a network of curative and preventive measures in order to control leprosy in the population not only by dealing with the more obvious advanced infective cases but also by dealing with the inconspicuous and therefore peculiarly dangerous types of infective cases. The emphasis should be on village work. The approach should predominantly be a public health approach."

Intensive Rural Service at Minimum Cost

On 24th January 1949 Government appointed Sri T. N. Jagadisan Honorary Leprosy Prevention and Relief Organiser for the Firka Development Department (now Rural Welfare Department). In G.O. No. 69, Government said: "The question of tackling rural leprosy with a view to control, relieve and prevent the spreading of the disease in the villages without heavy expenditure to Government has been engaging the attention of Government for some time past."

"As most of the firkas and centres selected for Intensive Rural Reconstruction work are endemic with leprosy, the Government consider that it would be best to start the work of leprosy prevention, relief and control in the selected areas. The Government are therefore pleased to appoint Sri T. N. Jagadisan, Honorary Secretary, British Empire Leprosy Relief Association, as the Honorary Leprosy Prevention and Relief Organiser for the Firka Development Department."

Nature of Schemes for the Firkas

The Honorary Leprosy Prevention and Relief Organiser has put up proposals, so far, for the following firkas:—

- (1) Kadambuliur, South Arcot District,
- (2) Kumbia, South Kanara District,
- (3) Gara, Srikakulam District,
- (4) Kalasapakkam, North Arcot District,
- (5) Tirumangalam, Madurai District,
- (6) Veerapandi, Salem District,
- (7) Chinnasalem, South Arcot District, and
- (8) Nagari, Chittoor District.

In assessing the prevalence of leprosy in the various firkas the Honorary Leprosy Prevention and Relief Organiser has had the invaluable help of the Health Officer in charge of the State Leprosy Survey Unit, Vellore, and the Health Officer in charge of the South Arcot District Leprosy

Survey Unit. Though the particular schemes for the particular areas depend upon the special circumstances of the area, some general principles govern the nature of the schemes proposed for the firkas. The proposals contemplate the linking up of preventive and curative effort in a plan which would not be very costly to Government.

In view of the paucity of medical men available for rural work and in view of the cost of employing full-time medical personnel for rural leprosy work, the proposals, except in special circumstances, contemplate that an Honorary Medical Officer (either a private medical practitioner or a District Board employee in a rural hospital) after due training, will be responsible for the over-all general supervision of the curative and preventive work for leprosy in the area.

He will be assisted effectively by a Kushta Nivaran Sevak, a lay worker, who would be adequately trained for a period of six months.

Work of Kushta Nivaran Sevak

The Kushta Nivaran Sevak will assist the Medical Officer in running the clinic and besides, organise night segregation centres, village segregation centres, or advise the infective cases about home-segregation. His function is very important in the scheme and on him hangs the whole lot of follow-up and welfare work. He should constantly go round the villages, see that patients take to treatments regularly and that the infective cases observe one or other known modes of isolation. The Sevak should be in close touch with the population in order to detect new cases. He should particularly observe the contacts of cases and keep a continuous record pertaining to them. He should keep up the morale of the patient by acting as his friend, philosopher and guide. He should encourage the patients to occupy themselves. He should teach spinning to patients as this is the one occupation that can be taught to a wide number of people and is found to be particularly suitable for leprosy patients. He should try to resolve the social, personal and domestic difficulties of the patients with sympathy, imagination and resourcefulness. Where a problem is too difficult to be tackled by him he should call in the help of the senior authority in charge of the work.

From the preventive point of view his functions will be—

- (i) to keep a definite record of leprosy cases, their contacts in the households and the number of early cases infected by the patients;
- (ii) to discover new cases in the areas;
- (iii) to advise and arrange for the isolation of the patients in their homes or at least prevention of close contact between patients and their children; and
- (iv) to ensure continued attendance of patients at the dispensary.

Besides the Kushta Nivaran Sevak, the Medical Officer will have an injector and a nursing orderly to work under him. The Kushta Nivaran Sevak will be trained for a period of six months at the Government Lady Willingdon



BUDGET, 1952-53: Sri A. B. Shetty, Minister-in-charge of Finance, presenting the Madras State Budget, 1952-53.

economically feasible. The experts who have been at this job for the past few years have now unanimously recommended that the cost of about Rs. 1 crore on the pilot scheme is a hazard worth undertaking, and therefore it is now up to this Government, with the assistance of the Government of India, if that should be forthcoming, to sanction the scheme forthwith.

There is also for consideration the vexed question of enhancement of dearness allowance to non-gazetted Government servants, which has been agitating the minds of many Hon'ble Members. An all-round increase in the rate of dearness allowance by Re. 1 per mensem will result in an extra cost of about Rs. 37 lakhs per annum and, therefore, Hon'ble Members can easily appreciate the financial implications of this issue. In the circumstances in which we are placed today, it is not for me to suggest or for the present House to implement the measures necessary to tackle these problems adequately. Let us hope that the newly elected representatives of the people and the Ministry installed by them would resolve these issues to the satisfaction of the public.

Capital Expenditure

On the side of capital expenditure, we have had a most anxious time throughout the whole year. Hon'ble Members can see from the White Paper that we had budgeted for a capital expenditure of about Rs. 22½ crores which included about Rs. 9½ crores on irrigation projects and a similar sum on electricity works. Productive investment of this kind can usually be met from out of loans raised from the public; but under conditions which were expected to obtain in the money market, we could not have hoped to raise the sum from the public. Actually the open market loan for the year fetched us only Rs. 3 crores last September. The

Government of India have been taking note of our difficulties and while accommodating us to the extent considered possible, they have been advising us to slow down some of the newly sanctioned projects with a view to restrict the outlay to the resources available. They have given us a loan of Rs. 5 crores from out of the Special Development Fund, earmarked for the Tungabhadra and the Lower Bhavani Projects. A further loan of Rs. 1 crore has been promised us under this head and it is hoped that this and any further assistance would reach us before the close of the year. They have also transferred to their account securities worth Rs. 5 crores from our holdings and thereby released to us credit to that extent.

Even so, there has been a wide gap between the resources available and the expenditure budgeted for, and this has caused embarrassing ways and means difficulties throughout the year. With a view to bridge the gap, the Government were constrained to review the Capital programme and some economies had to be ordered recently, care being taken to ensure that only the minimum dislocation was caused in the process. The revised Capital programme for the year stands at Rs. 19½ crores, the details of which are given in the White Paper. It is hoped that the deficit still remaining under the Capital heads could be covered by the sale of securities to any further extent found possible, before the end of the year.

Most of our Capital works, such as the Tungabhadra and the Lower Bhavani on the irrigation side, the Machkund and Moyar on the electricity side, are in an advanced stage of construction, where slowing down would involve wasteful outlay. If all our works should proceed according to schedule, we should provide for an outlay of about Rs. 25 crores during the ensuing year. But considering the difficulties we had to face in this respect during the current

year and the none-too-bright prospects of raising large sums in the open market, we are constrained to budget cautiously. The demands made by our engineers for the different schemes, have therefore been pruned down to the extent possible consistent with general economy, and the capital budget for the ensuing year has been fixed at Rs. 19.87 crores including Rs. 8.97 crores on irrigation and Rs. 8 crores on electricity projects.

This sum has to be found during the course of the year by raising as much as we can from the open market, by the sale of securities to the extent possible, by borrowing from the Government of India whatever sums they can spare us and, in the last resort, by levying new taxes. Hon'ble Members might have noticed that the Central Government is placing increasing reliance on revenue surpluses to finance capital expenditure. This is an indication that, if we should develop our natural resources at a pace which is not unduly tardy, we should also resort to similar methods; but this, however, is an important question of policy which we must necessarily leave to the new House for consideration.

Reserves

On the 1st of April 1946, we held securities worth about Rs. 43 crores as unattached reserves. We have been drawing on these reserves to the extent necessary, to meet our capital expenditure during the post-war years. After meeting all the outstanding liabilities, we may expect to close the current year with an unattached balance of about Rs. 19 crores. We have thus depleted the reserves to the extent of Rs. 24 crores during this period, but this should not cause us any grave concern because, during this period, we have invested on capital works the sum of Rs. 62 crores, of which Rs. 25 crores are on irrigation and Rs. 30 crores on

electricity projects. We have borrowed during this period only Rs. 11½ crores from the open market and Rs. 18 crores from the Government of India (including Rs. 3½ crores which we hope to get before the end of this year) and, therefore, a sizeable portion amounting to about Rs. 8½ crores of our capital investments during this period, came out of current resources. The balance of Rs. 19 crores in the reserves, may be sufficient to support our capital commitments for another year or a little more; but by about that time, a good many of our irrigation and electricity projects would have been completed and begun to yield us some additional revenue.

Onerous Task

The finances of this State have been under the able administration of Sri B. Gopala Reddi during the last five years and it will be seen that, during this period, our revenues have increased and our resources have been utilised for productive purposes. Sri T. A. Varghese, the Finance Secretary, and members of his Department have as usual applied themselves diligently to their onerous task during this year of exceptional difficulty. My thanks are also due to the Governor of the Reserve Bank for continued help to this State.

Under the very exceptional circumstances in which this Budget is being presented, I do not propose, as is usual on such occasions, to comment on the different aspects of our administration. The authority on these matters can now be properly exercised only by our successors who will have the right and the privilege to recast this Budget. I hope that the Hon'ble Members will keep in mind this material limitation, while offering their comments on the present proposals.

MADRAS BUDGET, 1952-53—ABSTRACT.

(Figures in thousands of rupees.)

A. REVENUE AND EXPENDITURE ON REVENUE ACCOUNT.

	Accounts, 1950-51.	Budget Estimate, 1951-52.	Revised Estimate, 1951-52.	Budget Estimate, 1952-53.
(1) Revenue	58,16,34	59,62,50	63,48,02	63,90,21
(2) Expenditure	59,45,21	60,29,78	63,57,64	64,76,18
(3) Deficit (—)	1,28,87	67,28	9,62	85,97

B. TRANSACTIONS OUTSIDE THE REVENUE ACCOUNT.

(1) Receipts—Open market loans	4,39,75	..	3,01,49	..
Loans from the Government of India	1,46,33	..	9,59,00	7,50,00
Total Receipts..	5,86,08	..	12,60,49	7,50,00
(2) Disbursements—	15,55,91	22,58,07	17,30,53	20,15,31
(a) Capital expenditure	2,87,84	1,99,99	3,13,07	97,68
(b) Loans to local bodies, etc. (Net)	11,57,60	25,32,67	13,42,09	14,30,12
(c) Deposit transactions, etc. (Net)	6,86,15	74,61	7,01,51	6,82,87
Total Disbursements	1,00,07	74,61	5,58,98	67,13
(3) Excess of Receipts over Disbursements (+)	..	..	..	..

C. BALANCES.

(1) Opening Balance	2,50,40	43,87	4,79,34	70,02
(2) Closing Balance	4,79,34	51,20	70,02	51,18

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Leprosy Sanatorium, Chingleput, and the Kasturba Gandhi Leprosy Home, Mazhavanthangal. The injector and the nursing orderly except where otherwise specified will receive training for three months at the two institutions mentioned above. The schemes contemplate the putting up of buildings necessary for the operation of the scheme by voluntary effort.

We now proceed to a detailed consideration of the various schemes for the firkas.

Kadambuliur Firka (South Arcot District).—As early as March 1947, i.e., nearly two years before his formal appointment as Honorary Leprosy Prevention and Relief Officer for the Rural Welfare Department, Sri T. N. Jagadisan, Honorary Secretary of the British Empire Leprosy Relief Association, now *Hind Kusht Nivaran Sangh*, with the help and co-operation of Dr. T. R. Gopalakrishna Sarma, Field Leprosy Investigation Officer, Vellore, made an extensive survey of this firka. Subsequently Sri Jagadisan submitted proposals on which orders were passed in G.O. Ms. No. 4242, Public Health, dated 15th December 1948. Two Leprosy Clinics at Semmedu and Veeraperumanallur villages, with night segregation centres attached, were sanctioned. Sanction was also accorded to the employment of one Civil Assistant Surgeon, one compounder-cum-injector, one nursing orderly, one female helper and one peon. Sanction was also accorded to the following items of expenditure to the extent noted against them :—

	RS.
Recurring—	
Diet	1,200 per annum.
Medicines	500 per annum.
Repairs and renewals.	200 per annum.
Non-recurring—	
Furniture	500
Equipment	420
Gardening and other tools.	40
Microscope (to be used for both centres).	1,800
Buildings	11,200

A Medical Officer, who has been found to be enthusiastic and industrious and filled with a zeal for relieving and controlling leprosy in the area, has done extensive surveys. There are about 400 lepromatus (infective) cases out of a total of 1,987 cases of leprosy registered at the Veeraperumanallur Centre and about 170 lepromatus cases out of 857 leprosy cases registered at the Semmedu Centre. Sulphone treatment has been started at both the centres. The work has been done so well that the time has now come for putting up more detailed proposals for treating each and every case and for bringing in every infective case under one or other of the known modes of preventive measures. An encouraging feature of the work is that at both the centres public-spirited gentlemen of the locality have come forward with gifts of land and buildings.

Kumbala Firka (South Kanara District).—The Honorary Officer made an extensive survey of the firka and submitted proposals for opening a leprosy clinic at Perdala village in charge of Dr. P. S. Shastri, a local medical practitioner who evinces deep interest in leprosy work and who has trained himself for the work at his own expense, with the following staff :—

One Kushta Nivaran Sevak, one male injector and one nursing orderly.

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The Kushta Nivaran Sevak and the male injector finished their training and joined duty at Kumbala on the 16th January 1952, while the nursing orderly finished his training by the end of February. The actual work of the scheme has been started from 16th January 1952. At present the work is done in a building given for use rent free by the Honorary Medical Officer. A separate clinic is being built by local endeavour which is shortly expected to be ready. An expenditure of Rs. 1,000 on the purchase of equipment for the clinic and Rs. 1,000 for medicines has been sanctioned.

Gara Firka (Srikakulam District).—An extensive survey was made of the firka by the Honorary Officer with the help of Sri V. Ramanarayana, a social worker in leprosy of rare zeal and at present Honorary Secretary of the Srikakulam District Branch of the Hind Kusht Nivaran Sangh. Proposals were submitted. The Government have accepted the recommendations of the Honorary Officer for opening a clinic at Vomaravalli, to be placed in charge of a Medical Officer of the District Board Dispensary at Calingapatam which is about three miles away from Vomaravalli, in G.O. No. 1, Rural Welfare, dated 2nd January 1952, with the following staff :—

One Kushta Nivaran Sevak, one male injector and one nursing orderly.

Action is being taken by the Honorary Officer for selecting the requisite personnel or the staff and their training. After the training of the staff, i.e., in about a period of six months, the clinic will begin to function.

Kalasapakkam (North Arcot District).—In February 1949, the Honorary Officer conducted with the help of Dr. G. K. Sarma, Field Investigation Officer, a survey of Kalasapakkam and villages around it. The incidence of leprosy was found to be high and proposals were put up for a clinic at the place. Dr. Hariharan, Health Officer, Provincial Leprosy Survey Unit, conducted an extensive survey of Vilvarani (Polur Taluk) and its environs to ascertain the incidence of leprosy in January 1951. He was of the view that Kalasapakkam Firka was highly endemic for leprosy, there being in Vilvarani group alone 119 infective cases of a total of 225 cases, i.e., more than 50 per cent of the cases were infective. He stated that the situation required preventive and control measures of an intensive type. On receipt of this report and in response to the request of Sri S. Theodore, a compounder who is running a leprosy out-patient clinic at Vilvarani giving treatment once a week to the local public, the Honorary Officer visited Vilvarani on 11th February 1951. The out-patient clinic of Sri Theodore was visited and it was found that the disease in this area was serious, many cases being of advanced lepromatus (infective type with crippling deformities). Though the work of Sri Theodore did not naturally touch the fringe of the problem, it had created a favourable atmosphere for detailed measures of control.

In view of the seriousness of the disease and the peculiarity of its incidence in that more than 50 per cent of the cases were infective, the Honorary Officer considered that only intensive treatment including sulphone therapy and selective isolation would check the spread of the disease in this area and eradicate it. With this end in view, it was recommended to Government that a colony of 100 patients may be established, the colony to be of semi-pucca construction, with provision for occupational therapy. The cost of construction was estimated at Rs. 35,000 with regular staff as for a hospital at a cost of Rs. 6,800. The scheme

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has been approved for being considered as a Part II scheme in the Budget for 1952-53.

Tirumangalam (Madurai District).—During his visits to the firka in 1949, Sri Jagadisan found that the firka was badly infected with leprosy. He met Dr. Palaniappan, a private medical practitioner trained in leprosy work at the Lady Willingdon Leprosy Sanatorium, Chingleput, and an enthusiast in the cause of leprosy relief and control. Dr. Palaniappan offered his help in running a clinic at Kallupatti pending full proposals through the Rural Welfare Department. Sri Jagadisan advised the authorities of the Gandhi Niketan Ashram to start a clinic in some temporary shed with Dr. Palaniappan's help and they did so.

Again Sri Jagadisan visited the place in 1950 to see the clinic run by Dr. Palaniappan. About a 100 patients attended and it was pathetic to see that most of the patients had not received any treatment worth the name previous to the starting of the clinic. Sri Jagadisan therefore addressed Government in October 1950 for starting a clinic at Kallupatti which was sanctioned in their G.O. No. 1197, Rural Welfare, dated 14th November 1951. The clinic will be placed in charge of Dr. Palaniappan. A Kushta Nivaran Sevak has been selected for training and he joined the Chingleput Sanatorium on 1st February 1952. The selection of the male injector and the nursing orderly will be made in time for them to take their training soon. Government have also sanctioned the purchase of furniture and medicines, viz., Rs. 1,000 each.

Veerapandi (Salem District).—The public of several villages of the Veerapandi Firka represented to Government about the seriousness of the leprosy situation in the firka. This representation was forwarded by Government to the Honorary Officer for examination and report. Dr. Hariharan, Health Officer, Provincial Leprosy Survey Unit, Nellore, was therefore requested to make an extensive survey of the incidence of leprosy in the firka. He made a full and very valuable report. The Honorary Officer also visited three villages in the firka and several homes and it was found that the leprosy situation was fairly serious in some of the villages, especially because of the presence of a large number of infective cases and also because of the high rate of child incidence. Most of the villagers are weavers living in insanitary and over-crowded conditions which facilitate the spread of the disease. Proposals were therefore submitted to Government for the establishment of a leprosy clinic to be run in association with a Primary Health Centre in the village of Elampillai and the organisation of a colony of weavers with infective leprosy in the neighbourhood of Elampillai.

As regards the clinic, Government stated that as the opening of a Primary Health Centre has been deferred, the medical officer in charge of the District Board dispensary at Elampillai may be given training in leprosy relief work and placed in charge of the clinic on payment of a modest honorarium. The question of opening a colony of weavers will be taken up later. As soon as orders of Government are received, the training of the Kushta Nivaran Sevak, the male injector and the nursing orderly will be taken up by the Honorary Officer.

Chinnasalem (South Arcot District).—The Honorary Officer in company with Dr. A. Panchapakesan, District Leprosy Survey Officer, South Arcot, visited this firka

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on the 10th September 1951 and found that the firka was in the heart of an endemic belt for leprosy. Practically nothing has been done here so far for the treatment of leprosy, not to speak of the prevention of leprosy. The extensive survey of some of the villages conducted by the Health Officer in charge of the Provincial Leprosy Survey Unit confirmed the view that the situation in this area should be considered serious for leprosy.

Proposals were therefore made for the opening of three clinics, at Kallakurchi Hospital, at the L.F. Hospital, Chinnasalem, and at the L.F. Hospital, Kacharapalayam, with a staff of one Kushta Nivaran Sevak, one male injector and one nursing orderly, the clinic in each case being in charge of the medical officers of the respective places who will be paid an honorarium. Provision was also made in the scheme for the purchase of equipment and other non-recurring expenses at Rs. 500 for each clinic and Rs. 2,000 for the purchase of medicines for each clinic. The scheme is awaiting sanction.

Tiruvallur Firka (Chingleput District).—The firka is reported to have leprosy only in a few villages. The Health Officer in charge of the State Leprosy Survey Unit is making a detailed investigation of the leprosy situation in the firka. Proposals will be framed by the Honorary Officer after the receipt of the survey report.

Nagari Firka (Chittoor District).—A study of the admissions in the Government Lady Willingdon Leprosy Sanatorium, Chingleput, and the reports personally given by the patients indicated to the Honorary Officer that Nagari was one of the areas badly affected with leprosy. This view was borne out by the findings of Dr. N. Vijayaraghavan, Health Officer, State Leprosy Survey Unit, who made detailed suggestions. In a simple survey of 51 villages in the firka 589 cases were detected; of these as many as 318 were of the lepromatus (infective) type. Considering that the survey was a sample one, it may be expected that there are perhaps actually twice the number of cases detected. A scheme for the control of leprosy in the firka was therefore submitted to Government by the Honorary Officer in November 1951. The compact range of the area was considered to present very favourable conditions for the control of leprosy by a wide-scale and well-planned administration of sulphone drugs, a method now advocated by leprologists all over the world. It was suggested that the problem should be tackled by taking sulphone drugs to the door of the patient as far as possible by organising a wide number of clinics and ensuring that the maximum number of patients in the area received the most regular treatment with sulphone drugs.

For this purpose it is considered that the Medical Officer and his staff should move about in a jeep and take the treatment to as many groups of villages as possible. There will be a treatment and a preventive unit for leprosy with headquarters at Nagari and with a central well-equipped clinic at Nagari which will also have six beds for leprosy cases needing temporary hospitalisation for reactions, inter-current illness, minor surgical conditions, etc. The clinic and ward may be located in a rented building in or near Nagari. The unit will be provided with a jeep to enable the Medical Officer and his staff to organise and visit about ten other treatment centres in badly affected villages like Damarapakam, Pannuru, Chivada etc.

D. CAPITAL LIABILITIES AND ASSETS.

	On 31st March 1951.	On 31st March 1952. (Revised Estimate).	On 31st March 1953. (Budget Estimate).
(1) Liabilities—			
(a) Bearing interest	.. .. .	.. .. .	.. .. .
(b) Free of interest	.. .. .	.. .. .	.. .. .
	41,78,80	52,33,31	58,09,00
	56,23,82	48,32,69	38,28,64
Total, Liabilities	98,02,62	1,00,66,00	96,37,64
(2) Assets—			
(a) Producing revenue—			
(i) Productive	.. .. .	.. .. .	.. .. .
(ii) Unproductive	.. .. .	.. .. .	.. .. .
(b) Civil works debited to Capital Account	69,89,29	80,82,08	90,61,00
(c) Securities in the Sinking Fund Investment Account.*	19,84,30	28,47,73	36,81,74
(d) Securities in the Madras Famine Relief Fund *	3,59,14	4,75,21	6,56,15
(e) Securities in the Electricity Reserve Funds *	1,85,72	1,85,72	1,85,72
(f) Securities in the Cash Balance Investment Account and in the Revenue Reserve Fund.*	94,37	66,37	64,55
(g) Securities in the Zamindari Abolition Fund	2,91,62	3,62,67	4,50,32
(h) Closing Cash Balance	33,08,87	19,35,62	3,36,62
	— 4,79,34	30,00	51,00
	70,02	51,18	
Total, Assets	1,27,33,77	1,40,55,42	1,45,38,28
(3) Excess of Assets over Liabilities	29,31,15	39,89,42	49,00,64

* Purchase price of securities.

1. Report on an Enquiry into the Conditions of Agricultural Workers in Village Brindabanpur in West Bengal State (pages 87).
2. Report on an Enquiry into the Conditions of Agricultural Workers in Village Khapri in Madhya Pradesh State (pages 73).
3. Report on an Enquiry into the conditions of Agricultural Workers in Village Magupara in Assam State (pages 76).
4. Report on an Enquiry into the Conditions of Agricultural Workers in Village Khuntuni in Orissa State (pages 94).

Issued by the Government of India, Ministry of Labour, New Delhi.

The Reports deal with the conditions of agricultural workers in villages Brindabanpur (West Bengal State), Khapri (Madhya Pradesh State), Magupara (Assam State) and Khuntuni (Orissa State). These villages were surveyed during the course of the preliminary agricultural labour enquiry during the period June to November 1949.

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White Paper on the Budget, 1952-53

White Paper on the Madras Budget, 1952-53, as presented to the Legislature.

This Paper gives a brief review of the financial results of the last year 1950-51 and the revised estimate for the current year 1951-52 and explains the basis on which the interim budget for the next year 1952-53 has been framed.

ACCOUNTS, 1950-51

The Revised Estimate for 1950-51 anticipated that the total Revenue in the year would amount to Rs. 59.70 crores and the Expenditure on Revenue Account to Rs. 59.07 crores, leaving a surplus of Rs. 63 lakhs. According to the final accounts of the year, the Revenue amounted to only Rs. 58.16 crores, while the expenditure increased to Rs. 59.45 crores, with the result that there was a revenue deficit of Rs. 129 lakhs in that year. The decrease of Rs. 154 lakhs in the revenue was mainly due to the fact that (a) against Rs. 80 lakhs taken credit for as Grow More Food grant from the Government of India in the Revenue Account, the Government of India gave a provisional credit of only Rs. 20 lakhs, pending the final settlement of the accounts; and (b) that a sum of Rs. 62 lakhs of the food procurement bonus given by the Government of India was adjusted in the Capital section of the accounts instead of in the Revenue Account as originally contemplated. A large decline in the receipts by way of sales of agricultural machinery also contributed to the final worsening, notwithstanding an increase under Land Revenue (by way of larger collection of rents due to Zamindars) and General Sales Tax. Increased expenditure occurred mainly under Road Works and Police.

The capital outlay excluding State Trading Schemes amounted to Rs. 18.94 crores against the Revised Estimate of Rs. 18.45 crores, showing a decrease of Rs. 1.51 crores, which occurred chiefly in respect of Irrigation, etc., works. As regards State Trading Schemes, the revised estimate anticipated that the actual adjustments in the accounts of the year in respect of various transactions would result in a net credit of nearly Rs. 3 crores, while the actual credit was only Rs. 138 lakhs. This was due chiefly to larger adjustments made towards the purchase of rice, wheat and other grains before the close of the year than was originally anticipated.

Including the net outlay on State Trading Schemes, the total capital expenditure was practically the same as contemplated in the revised estimate (Rs. 15½ crores). Under 'Loans and Advances by the State Government,' the net disbursements (Rs. 288 lakhs) indicated an increase of Rs. 89 lakhs over the revised estimate (Rs. 199 lakhs), the increase being due mainly to larger disbursements of loans under the Agriculturists' Loans Act.

REVISED ESTIMATE, 1951-52

Revenue Account

The revised estimate for the current year anticipates a total revenue of Rs. 63.48 crores, against the budget figure of Rs. 59.63 crores. The figures of expenditure on Revenue Account also show a rise from Rs. 60.30 crores to Rs. 63.58 crores. As a result, the revenue deficit is now expected to be about Rs. 10 lakhs only, as compared with the budgeted deficit of Rs. 67 lakhs. The variations are spread

over several heads of revenue and expenditure and these are explained in the Budget Memorandum for 1952-53. The noteworthy increases in revenue are—(a) Rs. 137 lakhs under Income-tax receipts, based on the latest intimation from the Government of India and (b) Rs. 115 lakhs in the receipts from the Madras General Sales Tax. The revised estimate under Land Revenue allows for special remissions to the extent of Rs. 50 lakhs with reference to the prevailing adverse seasonal conditions. (The actual remissions may, however, prove to be larger.)

Among the factors contributing to the increase in expenditure may be mentioned—(1) a provision of Rs. 30 lakhs for transfer to a special fund, out of the estimated surplus revenue from the Zamindari areas taken over by the Government since 1949-50, (2) large expenditure on the purchase and maintenance of agricultural machinery and on the purchase of seeds under the Seed Multiplication Scheme, resulting in an increase of nearly Rs. 1 crore under the head "Agriculture", (3) larger expenditure (from Rs. 50 lakhs to Rs. 85 lakhs) on Rural Water-supply Schemes and larger grants to local bodies mainly in connexion with the various works undertaken for the relief of unemployment (the total grants have risen from Rs. 100 lakhs to Rs. 142 lakhs) and (4) increased expenditure on elections held under the new Constitution. (The total expenditure on elections in this year is now expected to be about Rs. 90 lakhs, of which one-half will be recovered from the Government of India. The original budget estimate assumed that the expenditure on this account would be about only one-fourth of this.)

Capital Expenditure, 1951-52

The total capital expenditure outside the Revenue Account excluding State Trading Schemes is now estimated at about Rs. 19½ crores, against the budget anticipation of Rs. 22½ crores. The revised estimate includes Rs. 905 lakhs for Irrigation, etc., works (Rs. 340 lakhs for the Tungabhadra Project, Rs. 260 lakhs for the Lower Bhavani Project, and Rs. 305 lakhs for other works), Rs. 725 lakhs for Electricity schemes and Rs. 116 lakhs for civil works (buildings). The provision made for payment of compensation to landholders on the abolition of the Zamindari system is Rs. 168 lakhs, while the capital expenditure on Industrial development is estimated at about Rs. 44 lakhs.

Having regard to the limited resources available to the Government for financing capital expenditure as a whole, the Government had to impose a drastic cut of about Rs. 2 crores in the expenditure on Electricity schemes and of about Rs. 1 crore in the expenditure on buildings. A smaller cut had to be made in regard to Irrigation schemes also. The transactions on account of State Trading Schemes in the year are now expected to result in a net credit of about Rs. 2.24 crores, due mainly to the anticipated adjustment of certain arrear credits. This estimate represents only the result of the transactions likely to be actually booked in the accounts of the year and does not represent the profit to the Government in the year under State Trading Schemes as a whole.

Loans and Advances, 1951-52

In respect of loans and advances by the State Government, the Budget for the current year took credit for recoveries amounting to Rs. 232 lakhs and provided for advances

The following staff was recommended for the work :—

- One Civil Assistant Surgeon.
- One Female Nursing Orderly.
- One Male Nursing Orderly.
- One Thotti or sweeper.
- One Peon.
- One Kushta Nivaran Sevak.
- One Health Inspector.
- One Peon for the Health Inspector.

Government were requested to sanction a recurring expenditure of Rs. 9,000 and a non-recurring expenditure of Rs. 4,000 for the scheme, besides provision for the purchase of a jeep for the use of the Unit. The proposal will be treated as a Part II scheme during 1952-53.

It is devoutly hoped that these carefully conceived, if modest schemes, will be executed with enthusiasm and devotion. In these firkas chosen for intensive rural development, the schemes have every chance of success, for here we have a set-up in which the first essential for success—public co-operation—can be stimulated and maintained.

(Continued from page 26)

The Newer Knowledge of Nutrition

The science of nutrition today has advanced enough to make it established as one of the major branches of preventive medicine. The FAO and WHO joint expert committee has drawn attention to the need for giving more adequate instruction on the principles and practice of nutrition to medical men and public health workers. Knowledge of nutrition should spread among the people so that the available food resources can be used to the best advantage. Health Bulletin No. 23 on the "The Nutritive Value of Indian Foods and the Planning of Satisfactory Diets" published by the Nutrition Research Institute, Coonoor, gives most valuable information. The nutrition work of the Public Health Department will shortly be reorganised and steps taken to spread the knowledge and application of the principles of nutrition among teachers, students and the general population. It is proposed to give training in nutrition to persons in charge of hotels, hostels, industrial canteens and other public feeding institutions with a view to enable them to prepare cheap balanced diets.

The problem of well-balanced diets for the masses in our country lies in being able to suggest how eight annas could be made to do the work of a rupee. It is the duty of the State to bring enough of the right kinds of food within the reach of all its people. The agricultural policy must be related to the nutritional requirements of the people. The encouragement of the production and consumption of protective foods should become an important part of our public health work. A marked improvement has taken place in the national dietary of several countries compared with pre-war years as a result of increased food production and effective nutrition teaching and propaganda. It must be our endeavour to raise the nutritional level of our people in a similar way.

—A.I.R., Madras

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Synthetic Rice

By DR. V. SUBRAMANIAM, D.Sc., F.R.I.C., F.N.I., Director, Central Food Technological Research Institute, Mysore

The subject of synthetic rice has aroused a great deal of interest both in this country and abroad. We do not ourselves call the product 'synthetic rice'. We call it 'synthetic grain', as our object is to reconstitute the properties of a grain. The very term synthetic, though scientifically sound, does not carry the right popular appeal.

The concept of producing such a grain arose from the acute grain shortage in the country. We are deficient in regard to all types of grain, but the biggest shortage is in regard to rice. The rice-eating population constitutes the biggest group in the country. The demand keeps on increasing from year to year, while our production is not able to keep pace with it. It naturally occurred to us that, to make up the deficit, we should try and evolve a composition corresponding to that of rice from food materials which are either abundantly available or which, at any rate, can be produced in much larger quantities per acre than rice. This composite produce should then be made into a grain that can be cooked and consumed in the same way as rice. If, added to that, we can give the produce the shape and size of rice, it will have a greater popular appeal.

Speaking broadly, natural rice has 75 to 80 per cent starch, and about 7 per cent protein. It also contains some percentage of water, minerals, certain water-soluble vitamins, and so forth. The grain is not considered to be very nutritious, chiefly because the protein, though of good quality, forms only a small percentage. On the other hand, the grain is very easily cooked and is easily digested. It is versatile in its application, so much so that a rice-eater never tires of it. It is well known to nutrition scientists that starch from one source can take the place of the same ingredient from another source.

Tapioca and Groundnut

Among the sources of starch, tubers have long been known to be the heaviest yielders from land. Under almost similar conditions, potato, sweet potato or tapioca will yield more starch per acre than any form of grain. Among these, the potato is already being consumed as a vegetable and is rather expensive. The sweet potato contains sugar and certain other principles which do not make it readily acceptable. Tapioca, on the other hand, is relatively easy to produce abundantly. The flour has also a satisfactory taste.

To make up the deficiency of protein, we found groundnut flour to be eminently satisfactory. This flour can be obtained as an attractive white product if the necessary precautions are taken to remove the adhering dirt and the silver skin, also known as cuticle. If the treated groundnut is then pressed it loses most of the oil, and can then be ground to an almost white flour. If the oil can be completely removed by select extraction, the product will be still more satisfactory.

We found that a combination of 90 per cent white tapioca flour and about 10 per cent groundnut flour had nearly the same composition as rice. The nutritive value

was also of the same order. To make it still better, we found it desirable to make groundnut flour 12½ per cent to 15 per cent of the product. We also add small quantities of calcium to further enrich the product.

Evolving a Satisfactory Grain

It was not an easy matter to convert this apparently simple mixture into a satisfactory grain. We found, however, that on mechanical shaking the tapioca groundnut flour mixture, with the correct amount of water, lends itself to the formation of a round grain. This grain, by itself, has no strength, so we found it necessary to gelatinise the starch by pre-heating the moist grains to some extent. If the grain is then carefully dried and then given a further period of roasting, it forms hard grains that can be easily cooked and eaten in the same way as rice.

The method of cooking the product is practically the same as that of rice, with the slight difference that the grain has to be dropped into the water after it comes to the boil. The cooking is usually complete in 7 to 8 minutes, which is about one-third of the time taken by rice. After cooking, the gruel can be drained out in the same way as in the rice. The grains will then stand apart and can be used with savouries or sweets as may be desired.

Apart from the usual growth experiments with animals, we have also conducted extensive consumer trials. Most consumers have found the product readily acceptable and easily digested. At the same time, a fair number have pointed out that the product is inclined to be somewhat more glutinous or sticky than rice. This is a physical property inherent in all tuber starches, and we are now concentrating on altering this property to correspond to that of rice starch.

A fair size unit can produce anything from half to one ton of grain per hour. Even one such unit will be sufficient to feed a population of fifty to seventy thousand people. If many more such units can be installed, we can easily produce lakhs of tons of grain, which will go a long way towards meeting our present shortage.

Cheaper than Rice

The programme of producing synthetic grain need not, in any way, interfere with the present projects for producing more rice in the country. Tapioca comes out well on dry land, as also on hill slopes where rice cannot be grown. It is a heavy yielder, and although the average yield on a poor soil is only about 3 tons per acre, as high yields as 40 tons on rich soils have been reported. In the plantation areas and delta districts, we can ordinarily expect a yield of 7 to 10 tons per acre. Groundnut is also abundantly available, and if necessary precautions are taken, a substantial part of the groundnut produced in the country can be made into an attractive flour suitable for use as a human food. We can also incorporate some of the pulses, or small percentages of certain millets such as jowar, which would further improve the flavour of the product.



NATIONAL SAVINGS FORTNIGHT: Sri S. A. Aiyaswamy Chetty, State Savings Officer, addressing a crowded gathering at the Rajaji Hall, Madras City, when Sri A. B. Shetty, Minister-in-charge of Finance, inaugurated the National Savings Fortnight in Madras State.

to the extent of Rs. 432 lakhs. According to the revised estimate, the corresponding figures are Rs. 284 lakhs and Rs. 597 lakhs. The increase in the advances is mainly due to the provision made for the liberal grant of takkavi and other loans in the areas affected by drought and for short-term loans to ryots in selected districts for the purchase of chemical manures.

Under recoveries, a smaller credit is anticipated on account of the delay in the conversion of well subsidy loans into grants, but this is more than made up by the anticipated recoveries of loans granted for the purchase of fertilisers.

Borrowings, 1951-52

An open market loan for Rs. 3 crores repayable in 1962 was issued in September 1951 bearing interest at 3½ per cent per annum and at an issue price of Rs. 99-12 per cent. The Government of India have so far given a loan of Rs. 5 crores bearing interest at 3½ per cent per annum and repayable in ten years, towards the expenditure on the Tungabhadra and Lower Bhavani Projects in the current year and the revised estimate assumes that further loans to the extent of Rs. 3½ crores will be available before the end of the year to meet capital expenditure generally, including Grow More Food irrigation schemes and special loans in distressed areas. The Government of India have also given a temporary advance of Rs. 100 lakhs repayable before the end of the year in connexion with the scheme of distribution of chemical manures. A loan of Rs. 9 lakhs has also been received, for being utilised in connexion with Industrial Housing Schemes.

On the disbursements side, the revised estimate makes provision for the repayment of the temporary advance of Rs. 100 lakhs for chemical fertilisers and of the special advance of Rs. 10 lakhs received last year for the expansion of cotton cultivation, besides the usual annual repayment of about Rs. 5 lakhs towards the consolidated debt. The revised estimate also allows for the repayment made in

the early part of this year of a sum of Rs. 1 lakh received from the Government of India last year for financing an advance to a Fishermen Society. No treasury bills were raised during the current year, but large ways and means advances were taken from the Reserve Bank of India. The revised estimate anticipates that all outstanding ways and means advances will be cleared by the end of the year, by sale of securities to the extent necessary by transfer to the Government of India.

Ways and Means, 1951-52

The ways and means position for the year 1951-52 is accordingly expected to be as follows:—

	RS. CRORES.
A. Opening cash balance allowing for the ways and means advance of Rs. 1.64 crores outstanding with the Reserve Bank	6.43
B. Deficit in the Revenue Account	0.10
C. Capital expenditure excluding State Trading Schemes	19.55
D. State Trading Schemes—Net recoveries	2.24
E. Loans and Advances by the State Government (net disbursements)	3.13
F. Proceeds of open market loan	3.01
Less purchase and cancellation of previous loans	0.10
G. Loans from the Government of India for capital expenditure, special loans, etc.	9.59
H. Repayment to the Government of India	1.16
I. Deposits, etc., transactions—Estimated net receipts	1.58
J. Disposal of securities (including Rs. 1½ crores sold in the market and Rs. 5 crores transferred to the Government of India so far)	14.75
K. Closing cash balance	0.70

Debt Position

According to the revised estimate as now framed, the total outstanding balance of loans due to the Government of India on the 31st March 1952 will be Rs. 22.14 crores, and the outstanding balance of loans raised in the open market will be Rs. 22.41 crores. The total outstanding loans will thus be about Rs. 44½ crores which is only about 70 per cent of the present annual revenue. About one-half of this public debt will be covered by the loans repayable to the Government by local bodies, agriculturists and others (Rs. 21.73 crores).

At the beginning of this year, securities worth about Rs. 33 crores were held in the Cash Balance Investment Account and in the Revenue Reserve Fund. During the year, securities to the extent of Rs. 1.2 crores were added to these accounts by transfer from the ex-Pudukkottai State, the Hindu Religious and Endowments Board and other special accounts. The revised estimate for the current year contemplates that these securities will be reduced to about Rs. 19.4 crores on the 31st March 1952. In addition, the Government will hold separately securities belonging to the Sinking Fund, Famine Relief Fund, and the Electricity Depreciation and Special Reserve Funds, of the purchase value of over Rs. 6 crores.

BUDGET ESTIMATE, 1952-53

Revenue Account, 1952-53

The budget for the next year has been framed on the basis of existing taxation in regard to Revenue and existing sanctions only, in regard to expenditure. The figures are—

	RS. LAKHS.
(A) Revenue	63.90
(B) Expenditure on Revenue Account	64.76
(C) Deficit	86

As compared with the revised estimate for 1951-52, the Budget for 1952-53 anticipates that the total revenue will be higher by about Rs. 42 lakhs, while the expenditure will be greater by Rs. 118 lakhs. The variations that occur under individual heads are explained in full in the Budget Memorandum for 1952-53. The main variations are—

Revenue.	RS. LAKHS.
(a) Taxes on Income	32
(b) Forest Revenue	37
(c) General Sales Tax Receipts	25
(d) Industries (increased receipts are anticipated mainly from the Government Hydrogenation Factory)	66
(e) Civil Works—Transfer from the Central Road Fund	73
Total	45

Expenditure on Revenue Account.

	RS. LAKHS.
General Administration	38
(Increase is mainly on account of the adjustments pertaining to the Well Subsidy Scheme).	
Industries	44
(Mainly on account of the Hydrogenation Factory).	
Miscellaneous	49
(Mainly on account of a contribution of Rs. 50 lakhs to the village panchayats).	
Total	131

The budget estimate for 1952-53 provides for the transfer in that year of a sum of Rs. 20 lakhs to the Zamindari Abolition Fund from out of the surplus revenues derived from the zamindari estates taken over by the Government and also for the payment of Rs. 50 lakhs as assignment of land revenue to panchayats under the Village Panchayats Act.

New Schemes, 1952-53

No provision has been made for New Schemes of expenditure which will be considered by the new Government in due course. The Estimates on Revenue Account, however, include a sum of Rs. 30 lakhs as lump-sum provision for teaching, equipment, etc., grants to educational institutions and Rs. 50 lakhs for grants to local bodies for new road works.

Capital Expenditure, 1952-53

The provision made for capital expenditure in the next year (excluding outlay on State Trading Schemes) is Rs. 19.87 lakhs which is about the same as the provision made in the revised estimate for 1951-52 (Rs. 19½ crores).

The bulk of the capital expenditure will be on Irrigation Schemes (Rs. 8.97 lakhs) and on Electric Schemes (Rs. 8.00 lakhs). The provision for Irrigation works includes Rs. 75 lakhs for Tank Improvement Schemes and Rs. 75 lakhs for Grow More Food Schemes. The provision made for Capital Irrigation Schemes. The provision made for Capital Outlay on Civil Works—Buildings is Rs. 1.81 lakhs, while the provision for Industrial Development is Rs. 39 lakhs.

A sum of Rs. 70 lakhs has also been included for payment of compensation to the zamindars—Rs. 50 lakhs for advance compensations and Rs. 20 lakhs for interim payments. The advance compensation is in respect of estates which have not yet been notified or taken over but which may be notified and taken over next year.

The transactions pertaining to the State Trading Grain Supply are expected to be more or less balanced while in respect of other State Trading Schemes (mainly distribution of chemical manures), it is anticipated that there will be a net debit of about Rs. 29 lakhs in the next year.

Loans and Advances, 1952-53

Under Loans and Advances by the State Government it is expected that the next disbursements will be less than Rs. 1 crore, after providing Rs. 50 lakhs for

The raw materials used for the production of synthetic grain cost between Re. 0-2-3 and Re. 0-2-6 per pound. The processing will cost about Re. 0-0-9 per lb. and should not ordinarily exceed Re. 0-1-0 per lb. With increased production of raw materials and also improvements in the method of processing, it should be possible to bring down the cost of the finished product to Re. 0-3-0 per lb. or even less. This will make it distinctly cheaper than rice.

There is, however, need for caution in one respect. Although the scientists may prescribe the composition, it is possible that people who are not very scrupulous may bid cheap fillers to make up the bulk. This would yield an inferior product, of low nutritive value. To avoid this the Government should either set up its own factories, or, at any rate, license the manufacturers with the condition that the product should be open to Government inspection from time to time. Such a procedure is already under the serious consideration of some of the South Indian States.

Give it a Trial

We have had opportunities of demonstrating both the method of processing and the preparations made out of the

cooked product, during several exhibitions, and particularly during the All-India Exhibition held at Trivandrum during January-February 1951. More than a lakh of people saw the process, and several thousands ate and relished the product. We had the privilege of serving food made out of synthetic grain both to the Working Committee and to the All-India Congress Committee when they met recently in Bangalore. Many who were once sceptical about its possibilities are now gradually getting convinced not only about the usefulness, but also the importance of developing such a product.

We are anxious that in the interest of the consuming public, the Government should lay down the necessary rules and see that the right type of product, conforming fully to the specifications, is made and supplied to the public.

We are concentrating on producing a grain that will correspond to rice in its composition and nutritive value. This is, however, only a beginning. At comparatively very little additional cost, it should be possible to improve the nutritive value of the product, so much so that we can produce a product which will have $1\frac{1}{2}$ to 2 times the nutritive value of rice.

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The Coconut Industry in India

By SRI K. GOPALAN, Secretary, Indian Central Coconut Committee

Of the 1.51 million acres under coconut in India, two-thirds are in Kerala and the remaining one-third distributed over the South Kanara, East Godavari, West Godavari and Tanjore Districts of Madras State and certain portions of the States of Mysore, Bombay, Orissa and West Bengal. At the present prices, the annual production of coconut in India is valued at about 78 crores of rupees. The *Kalpavriksha*, "The Tree of Wealth" or the "Consul of the East", by which the tree is sometimes known, signifies the uses to which the different parts of the trees are put. In no part of India, however, does the tree so vitally influence the lives and fortunes of the people, as in Kerala, where it truly constitutes the staff of life on which millions lean. Preparation of copra, oil crushing, coir spinning and manufacture of mats and mattings are some of the important industries which have grown round the tree and provide occupation and the means of livelihood to tens of thousands of people.

Deficit Country

In spite of the fact that the area under coconut in India is, after those of the Philippines and the Netherlands East Indies, the highest in the world, ours is a deficit country in coconut. Prior to World War I, India had a surplus of coconuts and was one of the chief sources of supply of copra and coconut oil to the world markets. Since 1928-27, however, the country has been converted into a net importer of both copra and coconut oil. About that time, as a result of competition from other vegetable oils and animal fats, Ceylon had lost many of her foreign markets and she was looking for new outlets for her surplus stock of coconut products. And in India she found a convenient market near at hand and her loss of exports elsewhere was made good by dumping large quantities into this country. Ceylon's good fortune, however, spelt disaster to India. These large imports at "distress prices" had resulted in the catastrophic fall in the price of the local produce and great distress among the coconut growers in the country.

And as the World War II advanced, Ceylon lost almost all the European markets for her coconut products and she placed unusually large quantities on the Indian markets. This accounted for an all-time record net import of 184,329 tons (in terms of copra) of coconut products in 1940-41 or about 28 per cent of India's annual requirements. With the occupation by the Japanese of the coconut-growing countries of South-east Asia, the position was greatly altered. There was a demand from many quarters for Ceylon's coconut products and between 1941-42 and 1947-48 the distribution of the exportable surplus of copra and coconut oil in Ceylon came under the control of H.M.'s Government in the United Kingdom, who allotted to India only limited annual quotas. Since August 1948, however, India has been making her own arrangements with Ceylon with regard to the import of her requirements of copra and coconut oil. Because of the limited quantities of coconut products available in the surplus coconut producing countries for export, India's imports have in recent years declined to an appreciable extent. But there is no doubt

that if larger quantities were available, our imports of coconut products would have been on a much larger scale than at present.

Coir Industry

Round the coconut has also grown the coir industry which is one of the great fibre industries of the world. India is undoubtedly the world's principal producer of coir fibre and coir goods. Our annual output during the last five years was of the order of about 132,600 tons of coir fibre, valued at about 15 crores of rupees. During the last five years, India has accounted for an annual average export of 590 tons of coir fibre, 44,000 tons of coir yarn, 21,000 tons of coir mats, rugs and carpets, 4,000 tons of coir ropes and 3,800 tons of "coir, other sorts". At the same time she has also distributed for consumption in India about 1,400 tons of coir fibre, 19,300 tons of yarn and 22,500 tons of coir products.

It may be interesting to note some of the important reasons which have contributed to the conversion of the country from an exporter to a net importer of coconut products. For some years now there has been in the country an increasing demand for coconut oil to feed its growing industries, particularly those connected with the manufacture of soap and toilet articles. Recent years have witnessed a large development of the soap industry in the country and "for making cold process soap coconut oil is the oil *par excellence*". The pre-war annual consumption of about 30,000 tons of coconut oil in the Indian soap industry has now increased to about one lakh tons.

Demand for Coconut Oil

The large volume of imports during the period 1929 to 1939 had the effect of depressing the local price of indigenous coconut to uneconomic levels and this was followed by a widespread neglect of their gardens by our growers. Manurial and cultural operations were seldom undertaken and there was practically no under-planting. Regular under-planting is an important feature of coconut cultivation for every year a certain percentage of trees go out of economic production due to old age and the decline in production is usually checked by a judicious system of under-planting when the trees are about sixty years old. During the depression period, because of the uneconomic prices of coconut, most growers could not spare the capital required for the under-planting and cutting and removing old and unwanted trees. As a result of the twofold neglect of manuring and inter-cultivation and under-planting, the yield of the trees and the overall production in the country had suffered a great set back. The root and leaf diseases, which have affected the coconut trees in Travancore-Cochin, had contributed to make matters worse. About one-third of the area under coconut in the State has been so affected, and the intensity of the incidence of the diseases may be appreciated from the fact that there is now an annual loss of about seven crores of rupees on account of the reduction in the yield of coconut caused by these diseases.

grant of loans to local bodies, etc., for new works, as against the net disbursement of over Rs. 3 crores in 1951-52. The decrease is mainly due to the assumption that if the seasons during next year prove favourable, there may not be a need for special disbursements of takkavi loans as in the current year. It is also assumed that the Well Subsidy loans will not be continued during the year 1952-53.

Borrowings, 1952-53

The budget assumes that the Government of India will give a loan of Rs. 7½ crores towards capital expenditure. Following the usual procedure, no credit has been taken in the budget for the proceeds of any open market loan that may be raised by this Government during the next year, as the issue of such a loan depends upon many factors, which cannot be foreseen now. The outstanding balance of about Rs. 2 crores of the open market loan raised by this Government in 1937 and 1940 (3 per cent Loan, 1952) is due for repayment in September next. The budget makes provision for this.

Opening and Closing Balance, 1952-53

As indicated above, the year 1952-53 is expected to start with a Cash Balance of Rs. 70 lakhs and Securities worth Rs. 19.4 crores in the Cash Balance Investment and Revenue Reserve Fund Accounts. According to the estimates as now framed, the year will close with a Cash Balance of Rs. 51 lakhs and Securities worth about Rs. 3.4 crores only in the Cash Balance and Revenue Reserve Fund Accounts. This will be increased to the extent of the amount of any open market loan that may be raised or further loans that may be given by the Government of India. In addition, the Government will hold in the earmarked funds (Sinking Fund, Famine Relief Fund and Electricity Reserve Funds) securities of the purchase value of about Rs. 7 crores.

Assets and Liabilities

Appendix I to the Budget Memorandum gives the details of the liabilities of the Government and assets of certain kinds. The liabilities as on 31st March 1952 are estimated at about Rs. 101 crores and the assets at about Rs. 141 crores. The excess of the assets over the liabilities is thus Rs. 40 crores. According to the Budget Estimate for 1952-53, the excess of the assets over the liabilities will increase to about Rs. 49 crores on 31st March 1953.

Five-Year Plan

The Appendix to this paper contains a statement comparing the provision included in the five-year plan under the various developmental heads with the provision actually included in the revised estimate for the current year and the budget for the next year. It will be seen that against an allotment of Rs. 33 crores in the plan for the year 1951-52, the actual expenditure is expected to be only Rs. 29 crores. Similarly for the next year, the provision included in the budget is about Rs. 28 crores as against the allotment of Rs. 35½ crores in the plan.

The question of the further provision to be made for the schemes included in the five-year plan in the budget for next year together with the problem of finding the requisite additional resources will be considered by the Government.

APPENDIX.

STATEMENT COMPARING THE PROVISION MADE IN THE REVISED ESTIMATE, 1951-52, AND BUDGET ESTIMATE, 1952-53, FOR THE SCHEMES INCLUDED IN THE FIVE-YEAR PLAN WITH THE ALLOTMENTS ORIGINALLY MADE IN THAT PLAN FOR THESE TWO YEARS.

	1951-52.		1952-53.	
	Plan.	Revised Estimate.	Plan.	Budget Estimate.
	RS.	RS.	RS.	RS.
	LAKHS.	LAKHS.	LAKHS.	LAKHS.
I. Agricultural and Rural Development—				
1 Agriculture ..	478	536	352	394
2 Veterinary and Animal Husbandry.	20	20	20	17
3 Dairying and Milk-supply.	15	15	15	15
4 Forest ..	11	10	7	10
5 Co-operation ..	24	10	28	13
6 Fisheries ..	12	16	19	11
7 Rural Development.	29	24	31	32
Total, I ..	589	631	472	492
II. Major Irrigation and Power Projects.	1,804	1,471	2,268	1,544
III. Industry—				
1 Cottage Industries.	37	22	21	28
2 Other Industries.	59	46	27	46
Total, III ..	96	68	48	74
IV. Transport (Roads).	204	202	152	171
V. Social Services—				
1 Education ..	142	117	158	116
2 Medical ..	102	47	81	73
3 Public Health ..	168	145	173	106
4 Housing ..	120	91	120	91
5 Labour and Labour welfare.	..	..	..	..
6 Amelioration of backward classes.	93	124	93	118
Total, V ..	625	524	625	504
Grand total ..	3,318	2,896	3,565	2,785

Kurnool District

The Government have sanctioned the execution, under the Rural Welfare Scheme, of 11 road works, at an estimated cost of Rs. 1,86,000 in the Yerragondapalem Centre and the Tripurantakam area in Kurnool District.

This action has been taken in order to provide employment to labourers distressed by adverse seasonal conditions in Kurnool District.

FOOD

Food Offences and Punishments Awarded

During the fortnight ending December 31, 1951, 752 cases of prosecutions against food offences were disposed of in the Madras State (except in the districts of Chingleput, Ramanathapuram 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. 500 and sentences of imprisonment up to three months were imposed.

Kannekanti Venkatarama Rao, working Manager, Sri Malleswara Rice Mill, Agripalli, Krishna District, was convicted and sentenced to undergo rigorous imprisonment for one month and to pay a fine of Rs. 500 and in default of payment of fine, to undergo rigorous imprisonment for a further period of two months, for not maintaining correct accounts. For possession of ten bags of paddy without a permit, A. Mallikarjuna Rao, merchant of Visakhapatnam District, was fined Rs. 500 or simple imprisonment for three months. Palani Goundan of Salem District was awarded rigorous imprisonment for one week with a fine of Rs. 200 for unauthorised purchase of foodgrains.

In Tanjore District, Raju Mudaliar, rice supplier to a boarding house, was fined Rs. 200 or simple imprisonment for two months, for unauthorised sale of rice without a permit. In the same district, for transport of foodgrains without permits, Vellayan Chetty and Karupiah Manavar were fined Rs. 500 or rigorous imprisonment for one month and Rs. 200 or rigorous imprisonment for three months, respectively. N. Moideenkutty, Chathangottupuram, Malabar District, was fined Rs. 325 and O. P. P. Kunhankutty, Trippanachi, and V.M. Aydr, Chathangottupuram, Malabar District, were each fined Rs. 250 for failure to sell surplus paddy to the agent authorised by the Government. In West Godavari District, for attempt to transport rice from East Godavari to West Godavari, N. Narasimhamurthy and Mediseti Nageswara Rao of Rajahmundry were each fined Rs. 400 or simple imprisonment for six months, and P. Krishnamurthy and P. Suryarao of Chopella, East Godavari District, were each fined Rs. 200 with a day's imprisonment.

A fine of Rs. 200 or rigorous imprisonment for two months was imposed on Thimmappa of Bellary District, for transport of foodgrains without permit. Talluri Pichaiiah of Kuchipaddy in Guntur District was sentenced to pay a fine of Rs. 500 or to suffer rigorous imprisonment for three months, for illicit purchase and transport of paddy. In East Godavari District, for unauthorised transport of foodgrains, R. Nooharaju was fined Rs. 300 or rigorous imprisonment for three months.

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 192 cases to persons who were dealing in foodgrains.

During the fortnight ending January 15, 1952, 151 cases of prosecutions against food offences were disposed of in the Madras State (except in the districts of Guntur, West Godavari and Tiruchirappalli). Fines ranging from Re. 1 to Rs. 100 and sentence of imprisonment up to one week were imposed.

Other departmental punishments, such as warnings, fines, forfeiture and enhancement of security deposits, cancellation and suspension of retail and wholesale licences, etc. were also awarded during the fortnight to persons who were dealing in foodgrains.

During the fortnight ending January 31, 1952, 505 cases of prosecutions against food offences were disposed of in the Madras State, except in Madurai District and Madras City. The accused persons in these cases were people of all classes. Fines ranging from Re. 1 to Rs. 400 and sentences of imprisonment up to six months were imposed.

In Tanjore District, Perumal Vandayar, a Mirasdar, Govindan Ehali, a cooly, and Kumaraswami Vandayar, a ryot, were each sentenced to undergo rigorous imprisonment for six months and also to pay a fine of Rs. 100 or rigorous imprisonment for six weeks, for illicit transport of paddy. M. Ayddru, Tripanachi amsom, Malabar District, was fined Rs. 400 or rigorous imprisonment for four months, for failure to sell surplus paddy to the agent authorised by the Government.

During the same fortnight, other departmental punishments, such as warnings, fines, forfeiture and enhancement of security deposits, suspension or cancellation of retail and wholesale licences, etc., were also awarded in 151 cases to persons who were dealing in foodgrains.

Rationing Extended

The Government have ordered that the Madras Rationing (Preparatory Measures) Order, 1947, the Madras Rationing Enquiry Order, 1947, and the Madras Rationing

Order, 1947, be extended to a portion of Samandava and the entire Pallithangal village in Arni, North Arcot District, with effect from March 4, 1952.

Demand and Supply

These and other reasons have combined to widen the gulf between the supply of and the demand for coconut products in the country. The short-fall in our production of coconut is as much as 25 to 30 per cent of our requirements. The world position of oils and fats is also far from satisfactory and there is no prospect either of large imports of coconut oil becoming available in the foreseeable future.

The problem of problems set before us is therefore how best to rehabilitate the industry and bridge the gulf between production and demand so that the industry may be placed on its own legs and be freed from the nightmare of foreign competition. The question of stepping up production may be answered by increasing the yield

Japanese Paddle-operated Threshing Machine

The Indian Agricultural Research Institute, New Delhi, recently imported a few Japanese agricultural implements to explore the possibility of their use in this country. One such machine, viz., the paddle-operated threshing machine, has since been tried and considered advantageous under Indian conditions.

The Government of India have now suggested to the State Governments that, if interested, they may get such threshing machines manufactured through local fabricators for sale to cultivators.

Japan began production of paddle-operated threshing machines on a large scale in 1914. Due to the boom and labour shortage during World War I, these machines were welcomed by the farming community and soon became very popular.

The machines are simple time-saving appliances for threshing paddy. They are light in weight, simple in construction, easy to manufacture and convenient to operate. There are no delicate parts that can get damaged nor are there any fine adjustments to make. Not difficult to handle, they can be easily carried from place to place. They are manufactured in two different sizes suitable for being worked by one or two men, and thus with the minimum of labour maximum efficiency is secured and it becomes possible to divert bullock-power to ploughing the land and doing other important field work.

It has been calculated that by using this machine, about Rs. 2-12-0 can be saved on 25 maunds of grain threshed. The machine is also less strenuous to operate than the present practice of hand-threshing.

The machine may be built at a total cost of Rs. 95, but the cost may be reduced by 10 to 15 per cent if mass-produced.

from the present gardens and by bringing more area under coconut. From the short-term point of view, the yield may be stepped up by adopting scientific methods of cultivation and giving the existing trees proper care and by timely control of the pests and diseases affecting them. Investigations have shown that by regular inter-cultivation and manuring the yield of the tree can be increased by fifty per cent.

The production and distribution of green manure seeds to produce green manure for meeting the deficiency in organic matter in the soil would also help to increase the yield. Replanting or under-planting in bearing gardens when the trees are about 60 years old is also necessary to check the decline in production in the garden. From the long-range point of view the output of coconuts can be increased by bringing new areas under cultivation. It is true that most of the land suitable for coconuts in the existing coconut growing tracts has already been brought under the crop. The area may, however, be extended by cultivating coconuts on virgin land at the foot of the Western Ghats, on the embankments of the irrigation canals and either sides of the railways, on suitable lands on and on the banks of rivers. States like West Bengal and Assam and the Andamans also afford a good deal of scope for coconut cultivation. The production can also be augmented by planting selected quality seedlings which when they grow into trees would yield about 50 per cent more than seedlings of uncertain quality. In any case, the most resourceful method of stepping up the production immediately is to intensify the cultivation and make the trees grow two coconuts where one grew before, by proper scientific cultivation.

Our efforts to increase production can yield satisfactory results only with the co-operation of the thousands of small coconut growers. As a result of the present favourable prices of coconut and the intensive propaganda the Indian Central Coconut Committee are carrying on, we may reasonably hope that the long-looked for rehabilitation of the coconut industry in India, to which considerable damage was done during the thirties of the century, may be witnessed in the near future. This may help not only to ward off the evil effects of dumping foreign copra and coconut oil but also restore the country to the status she enjoyed before World War I, as an important exporter of coconut products.

Use of Oil Engines to Tide Over Power Shortage

Owing to cuts in the supply of electric power, many owners of factories, workshops and work places have applied for permission and licence for the installation and the use of oil engines to tide over the power shortage. The Government have carefully examined the matter and consider that in places where the cuts in the supply of electric power operate, permission and licence may be granted by local bodies and their executive authorities to the owners of factories, workshops, and workplaces for the installation and working of oil engines to tide over the period of power cuts, provided that the factories, etc., are situated in non-residential areas.

Crop Reports

Pepper

The area under pepper in 1951-52 in the districts of Malabar, South Kanara and the Nilgiris is estimated at 102,500 acres (88,000 acres in Malabar District, 14,400 acres in South Kanara District and 100 acres in the Nilgiris District). Compared with the final area of 105,500 acres (91,000 acres in Malabar District, 14,400 acres in South Kanara District and 100 acres in the Nilgiris District) the present estimate shows a decrease of 2.8 per cent. Compared with the average area of 99,600 acres (88,300 acres in Malabar District, 11,200 acres in South Kanara District, 100 acres in the Nilgiris District) for the five years ending with 1950-51, the present estimate shows an increase of 2.9 per cent.

The condition of the crop is reported to be below the normal in the districts of Malabar, South Kanara and the Nilgiris. The Seasonal Factor is estimated at 80 per cent of the normal for the district of Malabar, 70 per cent of the normal for South Kanara District and 95 per cent of the normal for the Nilgiris District as against 95 per cent of the normal for Malabar, and 100 per cent of normal for the districts of South Kanara and the Nilgiris for the previous year. On this basis, the yield is estimated at 6,800 tons (5,940 tons in Malabar District, 850 tons in South Kanara District and 10 tons in the Nilgiris District). Compared with the yield of 8,520 tons estimated for the previous year (7,290 tons in Malabar District, 1,220 tons in South Kanara District, 10 tons in the district of Nilgiris), the present estimate shows a decrease of 20.2 per cent. Compared with the average yield of 8,280 tons (7,290 tons in Malabar District, 980 tons in South Kanara District, 10 tons in the Nilgiris District) for the five years ending with 1950-51, the current year's estimate reveals a decrease of 17.9 per cent.

The wholesale price of pepper per Imperial maund of 82-2/7 lb. of 3,200 tolas as reported from important market centres on 8th March 1952, was Rs. 331 in Cochin, Rs. 315-15-0 in Mangalore, Rs. 301-14-0 in Kozhikode, and Rs. 299-5-0 in Tellicherry. Compared with the prices published in the corresponding period of last year, i.e., those which prevailed on 10th March 1951 these prices reveal a decrease of 31 per cent in Mangalore and Kozhikode, 29 per cent in Cochin and 20 per cent in Tellicherry.

Groundnut

Summer Crop: Area and Yield.—The area under the summer crop of groundnut in parts of the Madras State during the five months January to May 1952 is estimated at 82,500 acres. Compared with the estimated area of 86,200 acres for the corresponding period of last year and an average area of 84,800 acres calculated for the previous five years, the current estimate shows a decrease of 4.3 per cent and 2.7 per cent respectively. An increase in area is estimated in the district of Tiruchirappalli and a decrease in the districts of Cuddapah, Nellore, Chingleput, South Arcot, Chittoor, North Arcot, Tanjore, Madurai and Ramanathapuram. The estimated area was the same as that of last year in the district of Anantapur. The decrease in area this year is largely due to inadequate rains at the time of sowings.

The yield per acre is expected to be normal in the district of Ramanathapuram and below the normal in the other districts of the State. The crop is reported to have been affected by pests in parts of Tanjore District and by inadequate rains in the districts of Chittoor and Tanjore. The total yield is estimated at 59,300 tons (unshelled nuts) as against 63,700 tons (unshelled nuts) estimated for the corresponding period of last year showing a decrease of 6.9 per cent. Compared with the average yield of 68,600 tons (unshelled nuts) calculated for the past five years, the current estimate shows a decrease of 13.6 per cent.

Early Crop.—The area under the early crop of groundnut up to 25th July 1952 in the districts of Salem and Coimbatore is estimated at 140,000 acres. Compared with the area of 143,000 acres estimated for the corresponding period of last year, and an average area of 142,200 calculated for the past five years, it shows a decrease of 2.1 per cent and 1.5 per cent respectively. The decrease in area this year is largely due to want of rains at the time of sowings.

The yield per acre is expected to be below the normal in Salem and Coimbatore Districts. The total yield in these districts is estimated at 57,600 tons (unshelled nuts). Compared with estimated production of 53,900 tons (unshelled nuts) for the corresponding period of last year and an average yield of 76,300 tons (unshelled nuts) calculated for the previous five years, the current estimate is an increase of 6.9 per cent and a decrease of 24.5 per cent respectively.

The wholesale price of groundnut (machine shelled) per maund of 82-2/7 lb. or 3,200 tolas as reported from important market centres on the 2nd August 1952 was Rs. 24-13-0 in Vizianagaram, Rs. 24-3-0 in Guntur, Rs. 23 in Cuddapah, Rs. 22-5-0 in Nandyal and Bellary, Rs. 21-14-0 in Salem, Rs. 21-11-0 in Adoni, Rs. 21-2-0 in Vellore, Rs. 20-15-0 in Cuddalore and Rs. 20-13-0 in Erode. Compared with the prices which prevailed on 4th August 1951, these prices show a decrease of 35.7 per cent in Cuddalore, 35.1 per cent in Bellary, 32.8 per cent in Salem, 32.2 per cent in Erode, 28.5 per cent in Vellore, 26.3 per cent in Cuddapah, 26.2 per cent in Nandyal, 24.4 per cent in Adoni, 22.8 per cent in Vizianagaram and 21.2 per cent in Guntur.

Gingelly

The area under gingelly up to 25th July 1952 is estimated at 272,200 acres. Compared with the area of 287,000 acres estimated for the corresponding period of last year and an average area of 279,300 acres calculated for the past five years, it shows a decrease of 5.4 per cent and 2.5 per cent respectively. The decrease in area this year is due mainly to want of adequate rains at the time of sowings.

An increase in area is estimated in the districts of Bellary, Anantapur, Nellore, Chittoor and South Kanara, and a decrease in the other districts of the State except in Visakhapatnam, Kurnool, Tanjore and Malabar Districts where the area was the same as that of last year. The decrease in area is marked in the district of Coimbatore (5,700 acres).

Procurement Prices of Paddy Increased

In response to the representations made by this Government, the Government of India have now permitted the increase with immediate effect of the procurement prices of paddy in this State up to a maximum of Re. 1 per maund over and above the increase of eight annas per maund of paddy which took effect from 2nd December 1951. They have, however, directed that the increase should be effective only up to the end of May 1952, and that thereafter the procurement prices should be reduced to the existing level. The Government have carefully considered the two points that arise out of this decision of the Government of India, viz.

(1) What should be the quantum of increase within the ceiling of Re. 1 permitted by the Government of India ; (2) From which date the increase is to be given effect to.

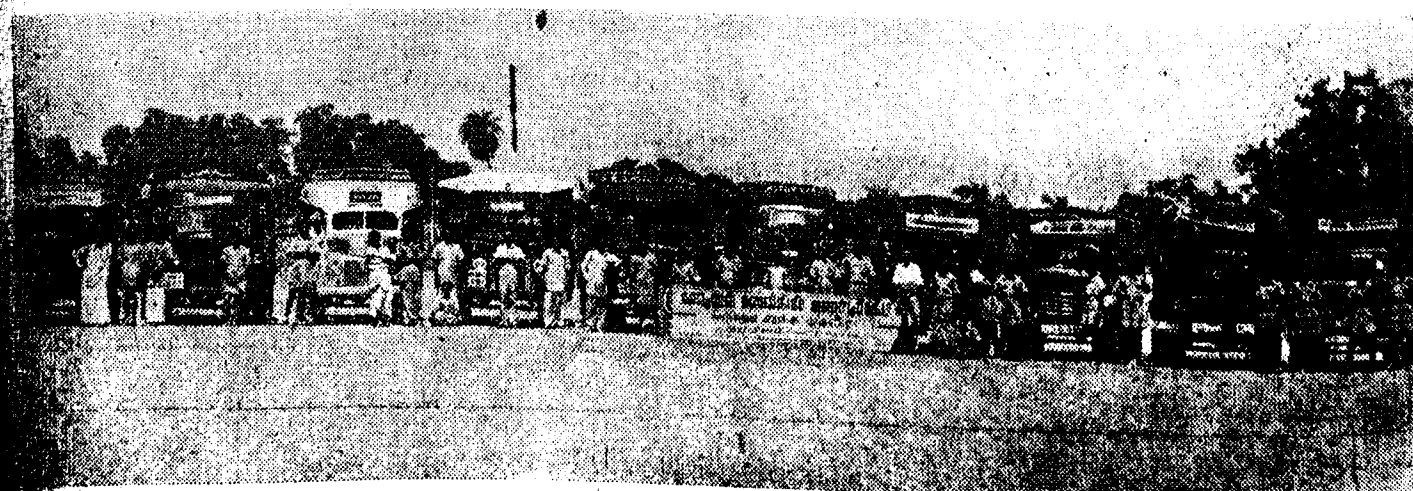
Considering the fact that the procurement price in the State is low as compared with other States, the Government have decided that the quantum of increase should be the maximum permitted by the Government of India, viz. Re. 1 per maund of paddy.

As regards the date from which the increase should be given effect to, they have considered that it will not be reasonable to deny the benefit of the increase to the producers who have already delivered their surplus out of their long-term crop and have therefore decided that it should take effect from the 1st January 1952.

This increase in procurement price will be applicable only to those districts in which Intensive Procurement is now in force, viz., East Godavari, West Godavari, Krishna, Guntur, Nellore, Tanjore, Malabar and the Nilgiris. As the increase will be in force only up to the end of May 1952, producers are advised to take advantage of the increased price and deliver their entire surplus to the procurement agents before the end of May next.

Owing to the increase in procurement price referred to above, the question arose whether the price charged to the consumers should be correspondingly increased. After examining all aspects of the question, the Government have decided not to pass on this increase to the consumers for the present but to continue to sell rice at the existing price levels based upon the existing procurement prices.

The Government of India have also decided to discontinue with effect from 1st March 1952, the supply of a certain quantity of wheat and rice at subsidised rates in order to enable this State to maintain specially low level of retail prices for these two foodgrains in the four industrial towns of Madras, Madurai, Coimbatore and Visakhapatnam. Consequently, this Government have decided to discontinue the sale at specially low prices of wheat and rice in these four towns with effect from the 2nd of March 1952. Thus the discrimination in treatment between these four industrial towns and the areas adjoining will now be eliminated and equality of price-levels will be maintained in those towns and in areas outside them.



NATIONAL SAVINGS: Photo taken on the occasion of the decorated vehicle parade organised by the National Savings Department at Vellore, Arcot District, on 13th February 1952, in connection with the celebration of the Savings Fortnight in Madras State. About 20 vehicles participated in the parade.

OUR NEW GOVERNOR

H. E. Sri Prakasa assumed office as Governor of Madras on March 12, 1952.

Our new Governor is seen with H. H. the Maharaja of Bhavnagar (left).

Centre left: The State drive and (centre right) meeting prominent personalities.



H. E. Sri Prakasa reviews a Guard of Honour (left) and the Oath of Office (below).

The yield per acre is expected to be normal in the districts of Visakhapatnam, Bellary, South Arcot, Salem, Ramanathapuram and South Kanara and below the normal in the other districts of State except in the districts of East Godavari, Guntur, Kurnool, Chittoor, North Arcot, Tiruchirappalli, Tanjore and Madurai, where the sowings have just been completed and it is too early to report on yield in these districts.

The wholesale price of gingelly seed per maund of 82-2/7 lb. (3,200 tolas) as reported from important market centres on 2nd August 1952, was Rs. 33-14-0 in Tuticorin,

Rs. 33-10-0 in Salem, Rs. 33-7-0 in Cuddalore, Rs. 32-15-0 in Tiruchirappalli, Rs. 32-3-0 in Eluru, Rs. 31-12-0 in Rajahmundry, Rs. 28-2-0 in Kakinada, Rs. 26-2-0 in Visakhapatnam and Rs. 23-1-0 in Vizianagram. Compared with the prices which prevailed on 4th August 1951, these prices show an increase of 11.2 per cent in Tiruchirappalli and 5.2 per cent in Tuticorin and a decrease of 30.6 per cent in Visakhapatnam and 26.5 per cent in Vizianagram, 25.2 per cent in Kakinada, 22.8 per cent in Rajahmundry, 8.4 per cent in Cuddalore and 7.2 per cent in Eluru.

Experimental Research on Artesian Wells

The Government have sanctioned a proposal to conduct experimental research in regard to the conservation of underground water in the artesian basins of South Arcot, East Godavari and West Godavari Districts for using this natural resource to irrigate as many acres of lands as possible, minimising wastage of water. The Government have already sanctioned two schemes for the sinking of 121 artesian wells at a total cost of Rs. 9,46,000 in the contiguous areas of Vriddhachalam, Cuddalore and Chidambaram Taluks of South Arcot District, where strong artesian springs are known to exist at a reasonable depth. The first scheme for the sinking of 20 wells in South Arcot has been practically completed, while the second one for the sinking of 101 wells is nearing completion. Another proposal for the sinking of as many as 124 artesian wells in East Godavari and West Godavari Districts where also an artesian basin has been located, is under the consideration by Government.

In addition to these Government wells, there are over 40 private artesian wells in South Arcot District and about 100 artesian wells in the East and West Godavari Districts. The Director of Industries and Commerce has reported that in the artesian basins of South Arcot as well as East Godavari and West Godavari, the flow from artesian wells is not constant and that one of the major problems facing the well drilling engineer is that of maintaining well-yields as close to their original level as possible. At present a completed well is not disturbed, till it actually fails. Water is allowed to flow throughout the year whether it is required for irrigation or not, and even during the rainy season, with the result that much of the underground water is wasted.

Steel pipes used for lining the borewells are gradually eaten up in some cases and in some other cases fine sand that enters the tube along with the artesian spring gradually lifts up the bottom of the tube with the result that the rise and flow of water stops. Further, due to defects in the lining pipes, some quantity of the artesian water escapes into intermediate water formations, and this is a wastage that should be stopped.

Work to be Undertaken

According to the scheme sanctioned recently by the Government, the Industries Department will undertake the following items of work :—

(i) Taking soundings of existing artesian wells regularly at intervals of a fortnight or a month.

(ii) Measuring discharges of artesian wells once a month.

(iii) Agitating and cleaning the wells, the bottoms of which show signs of rising.

(iv) Connecting the surface levels of sites of artesian wells with reference to the mean sea level.

(v) Fixing stop valves to some wells and regulating the flow of water.

(vi) Sinking six wells to determine the optimum distance at which artesian wells should be spaced to avoid mutual interference.

(vii) Chemical treatment of casing pipes to prevent corrosion of artesian water ; and

(viii) Determining the acreage of different crops that can be raised from artesian springs.

The Industries Department also proposes to find out the rate of flow of water in particular areas by varying the actual depth up to which the artesian bores may be taken.

The Government have agreed that experimental work proposed to be done is necessary in order to evaluate the actual potentialities of artesian wells and have sanctioned an expenditure of Rs. 40,500 (rupees forty thousand and five hundred) for expenditure on six experimental wells at Rs. 6,000 each (two for South Arcot District, two for each of West and East Godavari Districts) and the employment of staff for a period of six months.

Subsidies to Rural Medical Practitioners

The Government have sanctioned the payment of subsidies to the Rural Medical Practitioners and Maternity Assistants in the Rural Dispensaries of Indigenous Medicine in the following places. The subsidy will be payable with effect from April 1, 1952, or with effect from the employment of the staff, as the case may be—

Pandalapaka and Kazuluru, East Godavari District; Sindupatti and Elumalai, Madurai District; Chinnacherukur, Chinnacherukur Panchayat, Nellore District; Kollur, Guthigar and Shirtheady, South Kanara District.

More Research Institutes to be Opened

Three more national research institutes will be formally opened before the current budget year finishes. These are the Central Building Research Institute, Roorkee; the Central Electro-Chemical Research Institute, Karaikudi, and the Central Leather Research Institute, Madras. Foundation stones of these institutes were laid some time back, the respective dates being February 10, 1951; July 25, 1948, and April 24, 1948. And, as has been the practice in the case of the other national research institutes, work has been taken on hand even before the completion of the buildings. But research work will attain full momentum when the provision of the facilities needed for research is complete and the institutes are ready for their formal opening.

Building Research

The development of science, technology and industry have brought in their wake revolutionary changes in building materials and the design and construction of structures suited to the diverse requirements of modern civilised life. Traditional materials are being improved and newer materials evolved. Apart from the provision of protection and shelter against the inclemencies of the weather, and the vagaries of nature, buildings have to be designed and constructed to meet a variety of other purposes. Modern man also requires more comfort on which his efficiency depends. The tempo of constructional work is thus rapidly increasing; the speed of construction, and economic and social factors are becoming more and more important. Our housing requirements are of colossal dimensions. Also, the cost of the demand on labour materials are increasing. Speedier and economical methods of construction have, therefore, become an urgent necessity. Even a small per cent reduction in the cost and increase in the speed of construction will result in enormous savings and improvement in the living conditions of the people.

The Central Building Research Institute is concerned with these vital problems and its functions include examination of building materials in use, examination of new materials used in the building, for example, cement, plaster, bricks, etc. With this end in view, the nucleus unit of the Institute has undertaken research projects intended to use indigenous material in production of better houses at low costs, the main object being to produce cheap houses for villages. As a result of the experiments, a hut with a roof of *katcha* mud tiles, a floor of cement stabilised soils and plasters from sun-dried brick walls was prepared. This model hut has been exposed to weather for more than one year and has stood out well.

Attempts are being made to evolve methods of soil stabilisation with cheap and easily obtainable materials such as hydrolysates of horns and hoofs, glue, cowdung, etc. Lime sludge, a waste product from sugar factories, is also being tried in admixture with small preparations of sodium silicate; the results may be said to be encouraging. Investigations on the possibility of replacing cement partially or completely by other materials obtainable at a lower cost as stabilisers are also proceeding. A systematic study of conditions of firing and of raw materials used in brick making in various parts of the country has been undertaken with a view to investigate economics of inferior

quality bricks usually produced in the brick kilns. Other lines of investigations in hand include puzzolinas from surkhi and lime foamed concrete, exfoliation of vermiculite, comfort studies of houses, etc.

Electro-Chemical Research

Electro-chemical industries are of fundamental importance to the industrial development of the country. A beginning in these has only been made in India during the war years and some industries have been developed; but there is an unlimited scope for the expansion of existing industries and starting of new ones. With the development of various hydro-electric projects and availability of abundant supplies of power, the field will soon be set for the establishment of many new lines whose manufacture in India is feasible but has not yet been started.

The main function of the Central Electro-Chemical Research Institute is to carry on investigations with a view to increasing the productive capacity and efficiency of these industries and foster the development of new industries, utilising Indian raw materials. Organic and inorganic substances, electro-deposition, electro-winning and refining, passivity and corrosion, electro-metallurgy, electrolysis of fused salts, electro-thermal processes and other electrically activated chemicals will be intensively studied. Provision will be made to assure effective co-ordination between the work of the Institute and other national laboratories where their activities cover similar fields.

Leather Research

The art of making leather is as old as man. Whether Adam and Eve were dressed or not in skins of leopards as depicted in works of art, there is sufficient evidence available to show that men and women wore leather garments as far back as the palaeolithic period (20,000 B.C.). The Indian leather industry has also a historic tradition; there is reference to this industry in the Rigveda.

Recent estimates of India's animal population place the figure at nearly 16 crores. Because of this animal wealth, India is one of the world's largest producers of hides and skins. The country's export trade in leather and leather manufactures is as follows :—

Raw hides and skins	Rs. 9.35 crores.
Tanned and semi-tanned hides and skins.	Rs. 19.98 crores.
Leather manufacture including footwear.	Rs. 21.08 crores.
Total	Rs. 50.41 crores.

The organised Indian tanning industry has a net annual outturn of nearly Rs. 8.53 crores. In addition to this, tanning is also carried on as a cottage industry but data on its exact volume is not available. The manufacture of exact volume is not available. The manufacture of footwears, indigenous and western type, has been estimated at nearly 6,000,000 pairs per annum. Nearly 500 tons of leather belting are manufactured every year.

The Indian leather industry is still characterised by the two chief attributes of its past tradition; it has essentially

Sri K. M. Munshi Tours Scarcity Areas in Rayalaseema

The Hon'ble Sri K. M. Munshi, accompanied by Hon'ble Sri H. Sitarama Reddi, Minister for Land Revenue, and Hon'ble Sri J. L. P. Roche Victoria, Minister for Food, conducted a whirlwind tour of the famine affected areas of Chittoor, Cuddapah, Kurnool and Anantapur Districts on March 9 and 10. Numerous villages were visited by the Ministers and the situation was studied at first hand through direct talks with ryots, agricultural labourers and all others affected by the scarcity conditions. In several instances, directions were given on the spot by Sri H. Sitarama Reddi, Minister for Land Revenue, to the officials, on some of the pressing needs of the localities mentioned in their memorandum.

Chittoor District

The party first visited the Chandragiri and Puttur Taluks of the Chittoor District. At Kanganpadi village, the villagers stated that with the successive failure of monsoon for the last two or three years, they had lost their crops, and pleaded for repairs to supply channels and bunding of *gunas*. They also stated that there was water only in five or six out of the 50 wells in the area and that villagers were sharing what was available. They suggested the need for deepening wells.

Discussing the question of repairing tanks, the Hon'ble Minister asked the villagers whether they, particularly the well-to-do among them, were prepared to contribute 25 per cent of their labour resources for the land army. He told them that they should all learn self-help and that there must be a general desire on the part of the people to build up their village or district. He said such a campaign was necessary for creating a minor irrigation network in the absence of big rivers. He urged the people that in areas like theirs, a long-range view of problems should be

taken and schemes carried through and for this the co-operation of people was essential. The villagers agreed to give their co-operation in all the relief schemes that would be undertaken by the Government.

A fair-price shop in Renigunta was next visited. The villagers in the locality represented their grievances—the wells had dried up, cattle had migrated or were sold for want of fodder. They also pleaded for liberal grants of subsistence allowance and for the repair of spring channels. Here again the Hon'ble Minister requested the rich people of the village to contribute their share of labour in irrigation works. In respect of the demand for revenue remission, Sri H. Sitarama Reddi said that revenue collection had been suspended and assured them that the question of remission would be considered later.

The Kadirangalam tank in Puttur Taluk was visited next. The tank was dry. This had already been taken up for improvement under a food production scheme. Before the party left Renigunta for Cuddapah a joint memorandum was submitted by local legislators and prominent non-officials, urging the Government to afford relief to the 45 lakhs of the famine stricken people of Rayalaseema. They suggested a 15-point programme for development and requested the Government of India to give financial aid to the State Government for carrying out their new Five-Crore Famine Relief Scheme.

Cuddapah District

Hundreds of villagers greeted the Ministers at Muddanur in Cuddapah where they alighted. A memorandum presented by the Rayachoti Taluk Famine Relief Committee stated that their taluk was the worst affected and suggested the construction of a dam near Veligallu on the

SRI K. M. MUNSHI TOURS RAYALASEEMA

Sri K. M. Munshi, Union Minister for Food, and Sri H. Sitarama Reddi, Minister for Land Revenue, recently toured scarcity areas in Rayalaseema. The Ministers heard representations, inspected gruel centres and saw some of the road works started to relieve rural unemployment.

FOOD CONFERENCE: Sri K. M. Munshi, Union Minister for Food, confers with Ministers and officials of the Madras Government, on the problems of food scarcity in Rayalaseema.



Order of Priority Refixed for Assignment of Land

The Government have re-fixed as follows the order of priority in regard to the assignment of lands:—

(a) Landless poor persons (this includes Harijans and backward classes); (b) Political sufferers, who are eligible for land grant under the latest instructions, and ex-servicemen of World War II (this includes Indian National Army personnel) who do not possess more than five acres of wet or ten acres of dry land.

remained a decentralised cottage industry in spite of the few big organised tanneries, and it has continued to be a craft based more on empirical knowledge than on modern scientific methods.

Hides and skins to be converted into leather have to go through the following general finishing. These include a number of detailed operations making the whole process highly complicated. Each operation alters the skin physically as well as chemically; chemical, bacterial and enzymic reactions, influenced by temperature, concentration, acidity or alkalinity, age of the liquors and period of treatment play great part in these operations. The chemistry of leather manufacture is so complex that in order to understand it one has to possess a good knowledge of chemistry, physics, bacteriology and physiology.

The short-term programme of work at the Central Leather Research Institute, Madras, includes research on curing of hides and skins with Didwana salt; adaptive research on tanning processes to improve the qualities of upper shoe leathers such as box and willow sides, glazed kid, industrial leather for picking bands, sole leather, belting leather, industrial leather for roller skins, chamois leather and light fancy leathers. The long-term programme of research includes investigations to find a suitable substitute for wattle bark, research on manufacture of tanning extracts from Indian vegetable tanned stuffs, tanning properties of the salts of zirconium, cerium and other rare earths, synthetic resin based pigment finishes, histology of raw hides and skins and bacteriological research on various operations involved in leather manufacture under the tropical conditions obtaining in India.

With the opening of these three institutes, the scheme of establishing eleven national laboratories will stand completed and a period of consolidation will set in. The tempo of research will gather momentum and the contributions of science to the industrial progress of the country will assume more significant proportions. At the same time, plans will be drawn up for further expansion of the field of utility of science and its applications including, where necessary, the establishment of specialised institutions in new fields. A Central Salt Research Station at Bhavnagar has already been decided upon and an electronics and radio engineering institute at Pilani is contemplated. These will constitute a part of the second phase in the application of science to the promotion of national welfare.

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South Arcot Lignite

By Dr. C. V. S. RATNAM, PH.D., Member, Experts Committee, Lignite Investigation

Part III.—Establishment of Iron and Steel Industry in the Madras State

It is well known that the Madras State has very large resources of high grade iron ores. The districts of Cuddapah, Kurnool, Tiruchirappalli, Salem and Arcot and Sandur State have large resources of hematite and magnetite ores, two varieties of iron ore, and the resources in the latter three districts alone are said to be of the order of 500 million tons or more. The Geological Survey of India feels that these deposits are large enough to need thorough investigation. The current production of pig iron in the Indian Union (population about 350 million) is around ten lakhs tons. It is also stated that the current Indian requirement for this material is around five million tons. It would be worthwhile to note in this connection the production of iron and steel in the most industrially advanced countries of today. The United States of America with a population of about 150 million (6.5 per cent of world population) and producing nearly 50 per cent of its goods, has an annual current output of nearly 100 million tons of iron and steel. The United Kingdom produces around 16 million tons and the U.S.S.R. about 25 million tons.

In spite of the large proved iron ore resources in Madras State, and the need for producing more iron and steel for the growing requirements of our country, no large-scale iron and steel industry exists at present in our State. This is mainly due to the lack of cooking coals in South India. Cooking coal is available only in the Bihar and Bengal coal-fields and the long distance and transportation difficulties have prevented the greater utilization of this coal in South India. As a matter of fact, existing annual demand of about 3,000,000 tons of coal in South India is now being met by imports from the North.

The discovery of large deposits of lignite, a member of the coal family, in South Arcot District in Madras State brings a new factor into the economy of South India. The deposits extending over a 100 square mile area are estimated to be around 2,000 million tons. If successfully developed and exploited, these lignite deposits will not only cater to all fuel needs, present and probable, but also pave the way for the establishment of an iron and steel industry in the Madras State.

Coke for Blast Furnace

It is the experience of the most industrially advanced countries in the world, that the blast furnace is the most economical way of producing large quantities of pig iron when iron ores and coking coal are available in close proximity or at economical prices. Some parts of the world like South India, Venezuela in South America, the north-west region in the U.S.A. do not have this advantage. The modern blast furnace requires coke for making pig iron from iron ores. South India and many other regions of the world do not have coking coal for making coke, but they do have lignite, a coal which does not give suitable coke for blast furnace use, when it is processed in traditional coke oven.

Researches have been directed in many countries on the utilization of non-coking coals like lignite for producing iron and steel, and the results can very favourably be utilised for the establishment of an iron and steel industry in Madras State. Processes using non-coking coals for reducing iron ores to metallic iron are termed as "direct reduction" processes. Two plants based on these processes are now working successfully in Sweden. The Swedish "disc type" iron has been in good demand wherever high grade steels are manufactured. During the last war, sponge iron plants (plants producing iron by the direct reduction processes) were in commission in the U.S.A., Japan and Germany.

A brief description of the two most successful direct reduction processes now operating in Sweden is given below:—

(1) "Disc-Type" Process.—Here the non-coking coal like lignite is placed in direct contact with iron ores and the whole material is heated to suitable temperature. The ore gets reduced to iron; this is in the form of a disc as it comes out of the process and hence the name.

(2) *Wiberg Process*.—Here the reduction of iron ores is achieved by the action of reducing gases, carbon monoxide and hydrogen, on the iron ores which are mainly oxides. The carbonaceous material (lignite is excellent for this purpose), is gasified to give carbon monoxide and hydrogen. These gases in turn react with the iron ores and produce sponge iron useful for making steel.

These processes were successful in Sweden because:

- (1) The raw materials were available;
- (2) No coking coal was available;
- (3) Power was cheap.

These direct reduction processes are said to be economical on a small scale, say about 50 tons of sponge iron per day.

Possibilities of Processes

The possibilities of these processes in South India are obvious:

- (1) Iron ores are available in plenty.
- (2) The successful development of lignite mines in South Arcot will result in the abundant supply of the reducing carbonaceous material.
- (3) This will also give us enough fuel for producing cheap electricity.

A modification of direct reduction of iron ores by lignite has been suggested by Mr. Weber of Germany. In this process lignite and iron ores with a suitable binder, if necessary, are briquetted. These ore and lignite briquets are then carbonized. The carbonization of briquets yields two products:

- (1) Carbonized briquets in which about 90 per cent of the iron ores are reduced to metallising iron.
- (2) Low temperature tar from which valuable products from petrol to various fine chemicals could be obtained.

The carbonized briquets are later treated in an electrical furnace to give molten pig iron and coal gas which can be used as fuel in the process. Such a process may have possibilities in our State.

(To be continued)

Papagni river beyond Galivedu, besides other relief measures. In the evening, the party went on a tour of villages in Pulivendla Taluk. At Nallapalli, a large number of women and children who were being fed at the gruel centre, pleaded for an increase in the gruel supplied. The party next inspected a relief works road connecting Mallala with Levanoor under execution. About 1,500 workers were being employed on the road works.

At Pulivendla, where a large number of villagers had gathered at the Travellers' Bungalow, a number of petitions were presented. They pleaded for taking up the Gandikota Project as quickly as possible.

Kurnool District

Villages in Kurnool District were next visited. On the way to Owk from Tadpatri, the party stopped for a few minutes at Belum, where representations from three affected villages in Banganapalli Sub-taluk were received. At Owk, the Hon'ble Ministers attended a Conference of District Officers, legislators and prominent non-officials. The villagers represented that the Timmaraja Tank had to be cleared of silt and the supply channel now in disrepair should be put in order. Requests were also made for giving the Krishna-Pennar Scheme the highest priority and also for taking up the Duddanala and Giddalur Reservoir Schemes. At Singannapalli also representations were made for providing more relief works.

At Tadpatri, a deputation on behalf of the Tadpatri Taluk Ryots' Association, met the Hon'ble Minister. Replying to the memorandum, the Hon'ble Sri K. M. Munshi urged the villagers to contribute 25 per cent of voluntary labour, stating that it was the only way towards solving problems on a permanent scale.

Representations were also made by local legislators that as a long-range measure, the Central Government should give financial help to the tune of Rs. 10 crores spread over a number of years to improve irrigation and to industrialise the district, preferably by starting cottage industries on the Japanese model.

PRESS CONFERENCE: The Union Food Minister, Sri K. M. Munshi, held a Press Conference after his tour of scarcely areas in Rayalaseema.



Later, the party visited a number of villages in Anantapur District. Villagers everywhere pleaded for taking up irrigation works and drinking-water supply schemes.

The need for a reorientation in the attitude of the people of Rayalaseema towards the solution of chronic problems facing them was stressed by Sri K. M. Munshi, in his tour of famine affected areas. Wherever he went, the Hon'ble Minister asked the people to organise themselves into land armies, take up the minor irrigation schemes in their own hands and bring about a new atmosphere of self-help in the villages. He particularly requested the well-to-do people to contribute one day's labour in the week or one or two hours every day in the execution of schemes in their respective villages.

Chingleput District

The Hon'ble Sri K. M. Munshi also visited Chingleput on completion of his tour where representations were made to him by the agriculturists of the district and various other organisations. They pleaded for taking up irrigation schemes and other relief works. The Hon'ble Minister assured them that so far as the Central Government were concerned, they would spare no pains to see that no serious calamity overtook the district or for that matter any other district in the State. Later in the evening, the Hon'ble Minister conferred with the Ministers of the Madras Government and officials at the Secretariat.

Press Conference Held

At a Press Conference the same evening, the Hon'ble Sri K. M. Munshi said that there was no doubt that considerable difficulties existed in the districts visited by him. He said they had to be overcome immediately, if further deterioration was to be prevented.

The Hon'ble Sri K. M. Munshi said: "The first and immediate danger is of the wells running dry of drinking water. Unless immediate steps are taken this might prove to be a serious menace. The second danger is lack of work for landless labourers. This requires immediate opening of relief works in the affected areas where no such

relief works have been opened so far. I was also distressed to find that some of the orange gardens are withering away for want of water. If this process is not arrested the labour of a few years will be destroyed in a few weeks.

"All these require immediate and energetic action. I am glad to say that in some of the affected parts, steps have already been taken to meet the difficult situation. The Madras Government have also decided to take immediate action. We have to meet the situation which will continue till July next. The Central Government will do its utmost to help the State and the Madras Government which is fully alive to the danger will, I am sure, strain every nerve to meet the situation. Every step would be taken and every effort made to see that not a single person dies of starvation."

The Hon'ble Minister also appealed to the public and the Press to give to the Government their utmost co-operation and not to indulge in panicky statements or ungenerous criticism of officials.

Sri H. Sitarama Reddi, Minister for Land Revenue, then gave the Pressmen details about the various new relief works decided upon by the Government. He said wherever more gruel centres were needed, the Government would promptly open them.

Details of Relief Works

Giving details about the relief works undertaken, Sri Sitarama Reddi said that the provision for gruel centres had been increased from the initial amount of Rs. 11, 40,900 to Rs. 50 lakhs. There were at present 174 centres in Chittoor, 209 in Cuddapah, 53 in Kurnool and 28 each in Anantapur, North Arcot and Chingleput Districts. Gruel centres would be opened in 64 more places in Anantapur District. The Minister said that the number of people availing of relief at these centres daily was 36,450 in Chittoor, 55,737 in Cuddapah, 12,932 in Kurnool, 3,291 in Anantapur, 3,683 in North Arcot and 2,600 in Chingleput.

Regarding revenue remission, he said: "A representation was made by people in Rajampet that revenue remission should be given in respect of orange groves which had been affected by the drought. Under existing orders, these would not be eligible for remission. The Government now propose to give remission in respect of affected orange groves and relax the rules in deserving cases. Secondly, dry lands irrigated by wells are not now eligible for remission if even a portion of the lands is cultivated with a wet crop. The Government are relaxing the rule so as to give relief, taking into account the constructive total loss."

Revenue Remission in Guntur and South Arcot

The Government have sanctioned the grant of remission for fasli 1361, on the scales indicated below, of wet assessment in the entire non-deltaic areas in the district of Guntur and of dry assessment in 56 villages of Vinukonda, Palnad and Narasaraopet Taluks, Guntur District, which have been affected by adverse seasonal conditions.

Wet lands (non-deltaic areas only).—Full remission for wet lands with an outturn of four annas and below; and no remission for wet lands with outturn above four annas.

Dry lands food crops (cereals and pulses).—Full remission for food crops with an outturn of four annas and below; half remission for food crops with an outturn above four annas and below eight annas.

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.

All wet fields on which, owing to inadequacy of water, a successfully dry crop has been raised, will be eligible for the remission of the difference between the wet and dry assessments. Wet lands left waste, owing to lack of supply in irrigation sources, are eligible for full remission, except for mamul wastes, in reckoning which, however, the three previous faslis would be excluded. Current wastes on dry lands, i.e., lands which are not mamul wastes, will also be eligible for remission.

The concessions in the matter of remission of land revenue will be applied to these estates, which have been taken over by the Government and which are in the affected areas.

The Government have also directed that the collection of loan instalments in all the affected villages in Narasaraopet and Vinukonda Taluks should be postponed to fasli 1362 both in the ryotwari areas, as well as in the affected estates, taken over by the Government and that the collection of loan instalments in the affected villages of Vinukonda Taluk, due in fasli 1360, the collection of which was postponed till fasli 1361, should also be postponed till fasli 1362.

Wet remission has been sanctioned for fasli 1361, as indicated below, in the 1,004 villages in the taluks of Tirukoilur, Chidambaram, Vriddachalam, Cuddalore, Villupuram, Kallakurichi, Tindivanam and Gingee of South Arcot District, which have been affected by adverse seasonal conditions.

Full remission for wet lands with an outturn of four annas and below; no remission for wet lands with an outturn of above four annas. All wet fields, on which, owing to inadequacy of water, a successful dry crop has been raised, will be eligible for the remission of the difference between the wet and dry assessment.

The Government have sanctioned the remission of dry assessment and water rate in respect of lands cultivated with wet crops under the Toludur project area, on the same scales as for lands classified as wet.

The Krishna Anicut Tragedy

The Superintending Engineer, Vijayavada Circle, and the Executive Engineer inspected on September 8, 1952, the Krishna Anicut, as some damage to the Anicut was reported, at about 430 feet from the Sitanagaram end; the plough used for lifting the shutters could not proceed beyond the third set of shutters from this end. After inspecting the spot, they proposed to form a coffer dam by a scheme of ring bunding, in order to deal with the damage to the Anicut. Immediate attention was considered necessary, as the damage affected the supply of water to the delta ryots.

The Superintending Engineer, accompanied by the Executive Engineer, the Assistant Engineer, the Anicut Superintendent and others, proceeded to direct the operations in connexion with this ring-bunding on the next day, the 9th, personally. The details of the Superintending Engineer's scheme of ring-bunding are not clear, but it appears that the attempt was to form a ring bund with sand bags and also sink some old punts loaded with sand bags in some portions of the ring bund. The Departmental steamer "Havelock" was anchored upstream, and a light punt was anchored in the river bed and lashed securely with ropes to the steamer at the upstream and to the shutter plough and to one of the shutters at the lower end. The "J" Departmental patrol launch was by the side and near the lower end of the punt and was the means of access to the punts for the officers to and from the shore. It is gathered that Sri Vepa Krishnamurthi, the Superintending Engineer, and Sri D. Krishnamachari, the Executive Engineer, were in this light punt observing the river flow and directing operations.

Almost after dusk the Superintending Engineer appears to have directed a sand bag punt towed by a private steamer to dump some sand bags into the river. What happened when this punt approached the light punt is not clear. Everything seems to have occurred in a flash and has to be reconstructed from the poor evidence available. The mooring ropes of the light punt on which the Engineers were standing appears to have snapped and the punt seems to have tilted heavily to one side. The engineers were either thrown out; or probably they tried to jump into the "J" launch which was nearby, but were washed away by the stream. All the four vessels, the light punt, the sand loaded punt, the private steamer and the "J" launch, went over the Anicut through the gap through which water was flowing. The Assistant Engineer who was on the sand punt, in jumping into the private launch, sustained a fall and broke his spine.

In this catastrophe seven people consisting of the Superintending Engineer, the Executive Engineer, Sri Prasada Rao, the brother-in-law of the Superintending Engineer, the Anicut Superintendent and three other workers were missing. The Assistant Engineer who broke his spine succumbed to the injury soon after he was rushed to the hospital. The occupants of the private launch were not affected, even though much damage was sustained, but some of those in the "J" launch were thrown out into the river, and apart from those reported missing, five persons who were on the ill-fated punt and the "J" launch were rescued immediately after the accident.

The Chief Engineer, Public Works Department, and the Collectors of Krishna and Guntur were on the scene

immediately they got intimation of the accident, and search and rescue operations were undertaken forthwith. The bodies of all the persons except that of one of the workers have been recovered, and the funeral of the Assistant Engineer and the cremation of the others were attended by all the local Government officials and were conducted with full State honours. The search has been intensified and continued for the body of the last missing person. The Chief Engineer is now exploring the possibility of repairing the damage to the Anicut.

Cotton Co4 Certification Scheme

Cotton variety Cambodia Co4, which includes Rajapalayam Uganda and Madras Uganda 1, is exempted from price control as per notifications issued by the Textile Commissioner, Bombay. A certification scheme is in operation in the Madras State to enable the ryots and the merchants to get the benefit of this exemption. As per conditions of the Textile Commissioner's notification (i) the seeds used for sowing should have been approved and distributed by the Department of Agriculture, Madras, (ii) the crop eligible for certification should have been rogued in the field by removing off-types and suspected plants; (iii) the minimum percentage of purity of plants in the field and the kapas and lint in the ginnery should be 95 and the staple of ginned produce should be one inch or more; and (iv) the ginning of the cotton to be certified should have been done under the supervision of the Department of Agriculture in gins specially licensed for the purpose.

The cotton crops eligible for certification should have been grown either as winter crops in the districts of Coimbatore, Salem, Tiruchirappalli, Madurai, Ramanathapuram and Tirunelveli during 1951-52 season or as a summer crop in the districts of South Arcot, Ramanathapuram, Madurai and Tirunelveli during 1952 season. Those who had grown Co4 crop with seeds supplied by the Department of Agriculture should have registered their field crop. If for any reason crops raised from the seeds supplied by the Department had not been registered, the produce from such crop will be eligible for certification from kapas stage, provided it satisfies the minimum purity of 95 per cent for kapas and lint, possesses a staple length of one inch or more, and enhanced certification fees of Rs. 10 per bale of lint of 392 lb. is paid. Even in case of crops raised from departmental seeds and registered, there is no guarantee for the issue of a certificate unless the above conditions of purity and staple length are satisfied.

Joint Services Wing Examinations

An examination for admission to the Joint Services Wing of the National Defence Academy for the 10th course, commencing in July 1953, will be held by the Union Public Service Commission, at Allahabad, Bombay, Calcutta, Delhi, Jullundur, Madras, Nagpur and Patna sometime in January 1953. Application forms and connected papers can be obtained from Headquarters, Sub-area, Madras.

Employees' State Insurance Scheme

Every person who has to earn a livelihood for himself or his family is exposed to certain risks which interrupt his income. These risks include sickness, invalidity, old age, employment injury, maternity, unemployment and death. Some of these contingencies, particularly sickness, injury and maternity, come as a double curse, viz., there is loss of income on the one hand and increase in expenditure on the other. Some people may have a little saving to fall back upon to meet these contingencies; but seldom does this saving prove adequate, and generally one has to resort to borrowings at exorbitant rates of interest.

There are various ways of combating these risks, e.g., joint family system, private charities and social assistance. In modern conditions, when prices are high and wages not high enough to support other persons, the best is collective effort of all members of society to insure against these risks, and this is known as Social Insurance in its various aspects such as health insurance, old age insurance, unemployment insurance, etc.

Is a vast country like India with its complex problems, all of them cannot be tackled simultaneously. A beginning had to be made somewhere. With this object in view, the Employees' State Insurance Act was passed by the Union Parliament in April 1948, to provide for certain benefits to employees in case of sickness, maternity and employment injury.

With the inauguration of the scheme at Delhi and Kanpur on the 24th of February 1952 by the Prime Minister, the Employees' State Insurance Corporation has commenced to administer in these two places the benefit provisions of the scheme. The scheme is expected to be extended in its full operation in the principal zones of the country before the end of 1954. Simultaneously from the abovementioned date, viz., the 24th February 1952, the provisions relating to Employers' Special Contribution payable by employers in the country have been brought into force in the whole of India except in the State of Jammu and Kashmir.

Scope.—The Act applies to all factories using power, employing 20 or more persons and engaged in a manufacturing process. "Seasonal" factories as defined in the Employees' State Insurance Act, 1948, and mines subject to the Indian Mines Act and Railway running sheds are excluded from the scope of the Act. In any

factory all employees whether permanent, temporary or casual, manual, clerical or supervisory, other than those drawing a remuneration exceeding Rs. 400 per month, come within the purview of the scheme. Persons, however, in the Armed Forces do not come within the scope of the Act.

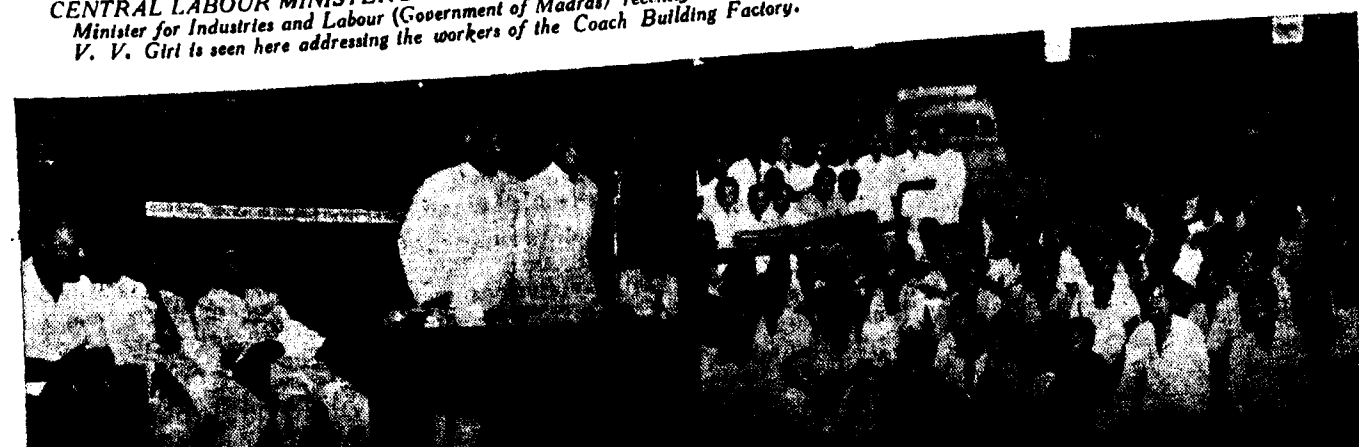
Administration.—To administer the provisions of the Act, the Employees' State Insurance Corporation has been set up under the Act with effect from October 1948. The Corporation which is a statutory and an autonomous body comprising representatives of employers, employees, the Central and State Governments, the medical profession and Parliament, functions with its head office in New Delhi. It is a quasi-Government organization under the control of the Ministry of Labour, Government of India. The Corporation has also set up five Regional offices in the country, one each in Madras, Bombay, Calcutta, Delhi and Kanpur. The address of the Regional office in Madras is: No. 162, Royapet High Road, Mylapore, Madras-4. The Regional offices organise the collection of the Employers' Special Contribution and also undertake the spadework necessary before the benefit provisions of the Act could be brought into force in their respect areas.

The Corporation has a Standing Committee representing the same interests as constitute the Corporation with this difference, viz., that the total number of members are much smaller. There is also a Medical Benefit Council to advise on medical benefits. The employees, are well represented on all the three bodies. For Regional and local offices also, there will be Boards or Committees on which the employees and employers will have their representatives. It will thus be seen that the employees will have a full opportunity to express their views on the administration of the scheme in all its aspects.

BENEFITS PROVIDED UNDER THE SCHEME.—The Act entitles insured persons to the following benefits in areas where the benefit provisions of the Act (viz., Chapter V, *ibid*) are enforced:

(a) **Medical Benefit.**—Every insured person is entitled to claim free medical treatment at the State Insurance Dispensary to which he would be allotted. The doctor will also visit him at his residence if he is not fit to come to the dispensary. In serious cases hospital care will also be available.

CENTRAL LABOUR MINISTER'S VISIT: Sri V. V. Giri, Minister for Labour (Government of India) and Dr. U. Krishna Rao, Minister for Industries and Labour (Government of Madras) recently visited the Government Coach Building Factory at Chromepet. Sri V. V. Giri is seen here addressing the workers of the Coach Building Factory.



Elections: How a Big Job was Tackled

By SRI S. VENKATESWARAN, I.C.S., Chief Electoral Officer

I do not suppose that in the serious minded, plain living and high-thinking Madras Secretariat, there have been any appreciable number of such occasions.* How can we expect to discover precedents for this evening's function, seeing that what have just gone through, were the first general elections held on the basis of adult franchise. This is essentially a social gathering got up by the Public (Elections) Department for the purpose of expressing our sense of great relief and even our gratification at what has been accomplished. If this were all, you could have been spared any speech from me, but we will be failing in our duty if we did not give formal expression to our heartfelt gratitude to those without whose support, encouragement and active assistance, we could not have come out of the ordeal as satisfactorily as we have done. I first thought of letting you off with an informal extempore speech but having no pretensions to extempore oratory, I decided that it would be wise not to risk the looseness of expression and omissions and even commissions in an extempore performance by one unpractised in the art of speaking in public. I have therefore jotted down practically all that I want to say this evening.

At the outset, I would recall the assurance given by our Governor in our Legislature that every effort would be made by the Government to ensure free and fair elections in this State. This was reiterated on more than one occasion by our Hon'ble Chief Minister, notably at the Collectors' Conference and in his message to the Services. That pledge has been honoured fully. I have no mental reservations in saying this or anything else I am going to say to-day. We recognized that it was vital to the implementation of our Constitution that our elections should be held according to the best standards of free and democratic elections, and for achieving this object, it was fundamental that the official machinery charged with the responsibility of conducting the elections should be left free to do its duty without fear or favour, without any considerations, not to speak of any apprehension, as to the attitude of the party in power or any other party.

Democratic Tradition

As the chief executive officer responsible for the planning of the recent elections on the polling side, I acknowledge with deep gratitude, on behalf of myself and of all those who have worked with me here at what I can appropriately call my G.H.Q., and the Collectors and other officers in the districts, the fact that this sound democratic tradition has been set up and scrupulously followed in our State, and the credit for it must go to our Chief Minister and Mr. Gopala Reddi. All of us in the official machinery did every time what we thought was the right thing to do under the law and on the facts as ascertained by us, and there was no question of any interference with the exercise of our free judgment in these matters. This is not a small thing. Nothing is more difficult to achieve under a system

* From the speech made by Sri S. Venkateswaran, I.C.S., Chief Electoral Officer, on the occasion of a party given by the Public (Elections) Department to Sri B. Gopal Reddi, on February 20, 1952.

of Party Government, and it will be said to the everlasting credit of our Chief Minister and his colleagues that they set up this sound democratic tradition in our State.

I was every time deeply moved by the unwavering and absolute trust they showed in me and in the official machinery working with me throughout the State. There was throughout every encouragement and strong support to me to do what was the right thing to do under all circumstances. We were throughout strongly supported in all that we decided and did. We really cannot be too grateful for all this trust and encouragement and support. If this tradition in our State is kept up, we shall have done well in the democratic way. It required the highest courage and rectitude to maintain it when the elections were not going well for the party in power, and all the greater must therefore be our gratitude and tribute to our Government.

All our elections went on peacefully and in an orderly manner, except for some unfortunate and incredibly silly and unruly behaviour of some persons in a negligible number of polling booths in two districts. No praise can, therefore, be too high for our voters who exercised their franchise in a quiet and orderly manner which has compelled the admiration of even the highly developed democratic nations of the West and America.

Police Did A Good Job

Our election arrangements may be classified under two broad categories: the law and order arrangements which had to be made by the Police, and the polling arrangements which had to be made by the Collectors in the mofussil and by the Commissioner of the Corporation of Madras in Madras City. Another fact about which we can be legitimately proud in connection with the recent elections is the manner in which our Police conducted themselves. We are grateful to the Inspector-General of Police, the Deputy Inspectors-General of Police, the District Superintendents of Police and all other ranks of the Police for securing this result.

Having visited a number of districts during the elections, I am not surprised that the complaints against the Police have been quite negligible in number. Wherever I went, I was impressed by the patience and courtesy of the Police and the intelligent interest they took in securing orderly elections. Many of them had to do duty for a number of weeks in succession, but the strain did not affect their patience or their courteous treatment of the public. They had in many places to rough it out for their night halts in the small polling stations themselves, but they put up with the inconveniences cheerfully, and I personally found them very helpful and taking an intelligent interest in the whole proceedings. In more than one place the person who smartly took me round and explained the arrangements was a constable.

"Peaceful Invasion"

Mr. Narasimham, our Commissioner here, may remember that when we visited a temporary polling booth on the first polling day in the City, we were

Portraits of National Leaders in Local Boards

The Government have permitted District Boards, Panchayats and Municipal Councils, including the Corporation of Madras, to incur expenditure from their funds, without sanction by higher authorities, up to a limit of Rs. 50 per portrait, on the purchase and installation in their premises of the portraits of Mahatma Gandhi, Sardar Patel, Sri C. Rajagopalachari, the President and ex-Presidents of India, the Prime Minister and ex-Prime Ministers of India.

If any local body desires to spend more than Rs. 50 per portrait, the prior sanction of the competent authority should be obtained. The local bodies should purchase only printed copies of the portraits of the personages mentioned above, if they are intended for their schools and institutions, other than their main office buildings.

According to the orders dated December 27, 1950, portraits of other leaders may be installed in the buildings of local bodies but not at the expense of local bodies.

It may be recalled that, according to the previous orders, the Government had permitted Local Boards and Municipal Councils, including the Corporation of Madras, to incur expenditure from their funds on the purchase and installation in their premises of the portraits of Mahatma Gandhi and the President of the Indian Republic and of no others.

discussing as to where the Assistant Presiding Officers should be seated, where the candidates and the polling agents should be seated, etc., a young Constable who had done election duty in South Arcot District gave us some idea of what was proposed to be done, and this facilitated our discussion.

Mr. Sanjeevi has every reason to be proud of the fact that his officers and men have done their job well. What had to be organised by him was a peaceful invasion of each district in turn by a large Police force, and it had to be planned and executed with all the care and precision required for a military campaign. His officers have told me that the elections provided an excellent opportunity for them for mobilisation of their forces on a large scale and for policemen of different districts to work together and that it was therefore a most valuable experience for the Department. I trust, however, that such police arrangements will continue to be necessary only in connection with the future general elections and not for any other disquieting reasons.

Polling Arrangements

On the polling side, the arrangements required were, if anything, more difficult and complicated. We had to implement, under the present conditions in our State, the latest modern refinements in regard to democratic elections,

with complications peculiar to our country but unavoidable in the face of the fact that the bulk of our electorate is illiterate. I refer to complications like one ballot box for every candidate, symbols and indelible ink. It was obviously necessary to ensure a uniform interpretation and enforcement of the law in all districts and this was the task of myself and the Public (Elections) Department, but our planning would have been good only on paper, if there was not an adequate and competent staff to execute the plans and implement all the complicated instructions that had to be issued from time to time and almost from day to day.

Thanks to the elaborate ryotwari administrative machinery of the Revenue Department, and the co-operation of all other Departments of the State and Central Governments, the execution was, generally speaking, quite up to the mark. This is not to claim that everything was perfect everywhere, but, generally speaking the arrangements for the elections were carefully and satisfactorily carried out. This State will no doubt improve upon this record at future elections. We are grateful for the generous appreciation that has appeared in our newspapers and even expressed in our Parliament. I must thank and congratulate all our Collectors, the Commissioner, Corporation of Madras, and all the Returning Officers, for this great achievement.

Achievement in Madras City

I do not think there has been any comparable administrative effort in our State. This public appreciation could not have been secured but for the fact that our Government placed at the disposal of the official machinery all their resources in men, material and money. Nothing was stinted: neither by way of staff nor by way of funds. When the final bill is presented, our Finance Minister may feel somewhat depressed, but elections on this large scale and of this character cannot be conducted at less cost, though we may be able, in the light of our experience, to introduce some economies in future.

In Madras City, the public had a right to expect the arrangements to be made in an ideal fashion and this was actually achieved. Mr. Narasimham can be proud of this. He could of course easily command many facilities and amenities almost unthinkable in many places in the mofussil, but material and money could not themselves lead to such good results as he has achieved. The credit for the achievement must go to him personally for his able direction and to hard work for several weeks put in by him and his Revenue Officers and the other subordinate officers of the Corporation. We are grateful to the Corporation of Madras for placing all their resources in men and material at our disposal for conducting these elections in the City.

Tributes to Officers and Staff

What had to be done by the Chief Electoral Officer could not have been done at all unless there was a competent and hardworking staff of officers, Superintendents and clerks to share his burden at what I have called this G.H.Q., and it gives me the greatest pleasure to pay my tribute to my officers and staff in the Public (Elections) Department. I am used to special duties and to the hard work that they entail. I had survived our labours for the Andhra Province and compared with what we had to do in connexion with the recent elections, my Census work

(b) *Sickness Benefit*.—A qualified insured person, who has to abstain from work on account of sickness, will get a cash benefit equal to about half his daily wage per day for a maximum period of 56 days in any period of 365 days.

(c) *Maternity Benefit*.—A qualified insured woman will be entitled, at the time of her confinement, to get free medical treatment and also, so long as she does not work for remuneration, to claim maternity benefit at about half her average daily wage, or 12 annas a day, whichever is greater. The benefit is payable for 12 weeks of which not more than 6 weeks may precede the expected date of confinement.

(d) *Disablement Benefit*.—When an insured employee suffers an employment injury in the course of his work, he will get free medical treatment and also a cash disablement benefit roughly equal to half his wages for the period for which he is certified as unable to attend to work. For total permanent disablement, roughly half the wages will be paid as pension for life. For partial permanent disablement, a proportion thereof depending upon the nature of the accident, will be granted as life pension.

(e) *Dependents' Benefit*.—In the event of death of an insured person as a result of an employment injury, a pension roughly equal to half the average wages will be available to the widow and/or children provided that the widow's pension will not exceed three-tenths of the wage and each child's one-fifth.

SPECIAL FEATURE.—A special feature of this scheme is that wherever a substantial number of insured persons has been found to be residing, a separate dispensary or panel of doctors is being set up near by, so that, as far as possible, an insured person can be allotted to a dispensary or the panel doctor nearest to his residence. For certain outlying areas, mobile dispensaries are being provided.

EMPLOYERS' SPECIAL CONTRIBUTION.—With effect from the 24th February 1952, "Employers" are to contribute at the rate of $\frac{1}{2}$ per cent of the wage roll of their "Employees". The employers in places where the benefit provisions apply, e.g., Delhi and Kanpur, at present will pay Employers' Special Contribution of $\frac{1}{4}$ per cent of the wage roll of the employees. The comparative lower percentage of the contribution in places other than Delhi and Kanpur is due to the fact that the employers will continue to meet their liabilities under the Workmen's Compensation Act, 1923, and the Maternity Benefit Act until the benefit provisions of the E.S.I. Act are brought into force in such places. This contribution, called the Employer's Special Contribution, is payable in respect of each quarter ending on the 31st of March, 30th of June, 30th of September and 31st of December. The contributions have to be paid within thirty days of the end of the quarter in respect of which such contribution is payable. In addition to this, every employer has to submit to the Regional office within 45 days of the close of the quarter a return in a form (Form Sc-2) specifically provided therefor by the Corporation. These contributions rounded off to the rupee should be paid into any branch of the Imperial Bank of India.

All "Employers" in the Madras State are under obligation to pay the Employer's Special Contribution as laid down in the preceding paragraph. For this purpose the Madras Regional Office of the Employees' State Insurance

Corporation is the proper authority in respect of employers situated in the Madras State and also in the Hyderabad, Mysore, Travancore-Cochin and Coorg States. The benefit provisions of the scheme are expected to commence in one or two principal places in the Madras State with effect from some time in 1953. Until such date, the employers situated in Madras should continue to pay the $\frac{1}{2}$ per cent as Employer's Special Contribution as specified in the preceding paragraph. No contribution is payable by the "employees" during such period; neither are the employees entitled to any benefits under the scheme. Until the full scheme is brought into force in any area, the employers in that area would have to continue their existing arrangements as regards their liabilities under both the Workmen's Compensation Act and the Maternity Benefit Act. When once the full scheme is implemented in an area, the employers and employees in that area would be placed on a par with the employers and employees in Kanpur and Delhi.

EXPENSES OF THE SCHEME.—The expenses of the scheme will be met mainly from contributions from employers and grants from the Central Government and the State Governments. However, in order to entitle the employees to get the benefits as a matter of right and not as charity, a small contribution is payable in places where the benefit provisions of the Act are brought into force, by all employees except those with very low wages. The employee's contribution is expected in all to meet less than one-third of the cost of benefits.

A SOCIAL SECURITY SCHEME.—Comprehensive social security schemes have been running in other countries successfully for a long time. This scheme is the first step towards social security in India. The small contribution the employees are asked to pay will entitle them to substantial benefits under the scheme as a matter of right. It is expected that in all respects the benefits will be considerably superior to what the majority of the employees have been getting so far. Even though the benefits may look modest today, the point the employees have to remember is that the scheme is **THEIRS** and that all the contributions—not only theirs but also those of the employers and the Central and State Governments—can be utilised only for providing benefits to them. There is no doubt that the scheme will be extended to provide medical care for their families rather sooner than later. As time passes and the scheme runs efficiently, similar schemes to cover other contingencies, viz., unemployment, old age and survivors' benefits would also surely follow, if this venture of social insurance succeeds.

Illicit Emigration to Ceylon

During the period from January to July 1952, there has been a series of raids, conducted by the officers of the Emigration Department, Government of India, to prevent illicit emigration to Ceylon by country crafts at various places. The places covered by the raids include Rameswaram, Dhanushkodi, Mandapam, Ramanathapuram, Pamban, Tondi, Tirupalakudi, Tuticorin, Nazareth, Tirunelveli, Madurai, Nagapattinam and Tharuvaikulam.

A total number of 668 illicit emigrants have been apprehended. Fifty-seven touts were also caught at railway stations and usual haunts of illicit emigrants. Of the 53 illicit emigrants caught in July 1952, 51 persons were prosecuted and fined. The cases against the others are pending.

Control Orders in Force on 25-9-1952

FOOD AND AGRICULTURE DEPARTMENT

MOVEMENT OF PADDY AND RICE WITHIN THE STATE ZONAL CONTROL ORDER.

G.O. Ms. No. 1068, Food and Agriculture, dated 1st July 1952.

In view of the revised Food policy a new Control Order has been issued regarding the movement of Paddy and Rice within the State. According to Order I of Notification I, the State is divided into six zones and the movement of paddy or rice or their products from one zone to another zone by mechanical means is prohibited except under a permit issued by the Collector of the districts concerned. Free movement of paddy or rice or their products within the zone is allowed. According to Order II of Notification I belt area restrictions already existing in the districts of South Arcot, Tanjore, Ramanathapuram and Anantapur on the movement of paddy or rice or their products are continued.

According to Notification II only landholders will be allowed to transport paddy or rice from the produce of their lands from one zone to another zone for their personal consumption. This new Zonal Control Order cancels the notifications issued in G.O. Ms. No. 550, Food, dated 18th June 1948 and G.O. Ms. No. 478, Food, dated 27th May 1948.

The Zonal Control Order issued in G.O. Ms. No. 1068, Food and Agriculture, dated 1st July 1952, has been amended due to the inclusion of Hosdurg Sub-taluk of South Kanara district in the sixth zone comprising Malabar and the Nilgiris. (G.O. Ms. No. 1216, Food and Agriculture, dated 26th July 1952.)

By G.O. Ms. No. 1346, Food and Agriculture, dated 20th August 1952, the Zonal Control Order has been amended to prohibit the movement of paddy, rice and their products, even by non-mechanical means of conveyances from zone to another zone within the State except headloads by peasantry up to one maund for personal or family use.

PLYING OF MOTOR VEHICLES AT NIGHT

G.O. Ms. No. 1306, Food and Agriculture, dated 9th August 1952: In supersession of the Order issued in G.O. Ms. No. 393, Food, dated 3rd April 1947, the Government have issued an Order prohibiting the plying of motor vehicles carrying paddy, rice, millets and their products, excluding products of foodgrains which are used as cattle foods, namely, rice bran, wheat bran, bran of husks and millets and maize, between the hours of 7 p.m. and 6 a.m. on any road or land situated in a district which is notified by the Collector in the District Gazette.

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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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 price varies between 12 annas to 15 annas per imperial maund. The Collectors of the districts have been empowered by the Central Government to fix the wholesale and retail prices of salt for each consuming area within their respective jurisdictions, subject to any directions issued by the State Government. 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 $6\frac{1}{2}$ 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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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

This Order extends to the whole of the State of Madras. At present the Order has been made effective only in the districts of Guntur, Krishna, East Godavari and West Godavari and according to this no person can cultivate the rainfed crop of chillies in these districts 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, 1949, 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 manufacturer.

An amendment issued on December 29, 1950, gives the enhanced rates per annum of licence fees for the different classes of licences. The question of revising these rates is under the consideration of the Government.

Another amendment, dated December 29, 1950, explains that: (1) in cases where a mixing or miller's licence has been obtained, no other licence under the Order is necessary; (2) mixing or miller's licence will have to be taken

was almost a holiday. The volume of work that had to be done and the pace at which it had to be done, especially in the last one month before the elections, and while the elections were in progress, were terrifying, and this work involved long hours, day in and day out, and we had to strain ourselves, like thousands in other departments, even beyond the limits of physical endurance.

Though I have been on Election duty since 1948 and preparing blueprints from then, the decisions that had to be taken by Parliament and by the authorities in Delhi could not all be taken till September last, with the result that even the statutory picture of what had to be done was complete only towards the end of September and for these colossal elections, the arrangements had to be put through in just three months. It was no smooth sailing for us. Apart from ordinary administrative snags, there were serious difficulties over ballot boxes and their movements and transport bottlenecks. Late last year, just a few weeks before the elections were to begin, we found that we had to write off one of the firms from whom we had ordered steel ballot boxes and a large additional order had therefore to be placed with the other firm, i.e., Hyderabad Allwyn Metal Works, Limited, Hyderabad, for covering this deficit.

Serious Problem Tackled

While on this point, I must express our gratitude to this Hyderabad firm for coming to our rescue in this matter and for helping us so valiently to adhere to the schedule for the elections in the various constituencies. We had a most anxious time, and the entire credit for tackling this serious problem and for providing the delivery of the ballot boxes everywhere in time is due to our Deputy Secretary C. S. Ramachandran. I cannot adequately express my gratitude to him for tackling this and other serious difficulties in connexion with the recent elections and for all the invaluable assistance that he gave me. He had to be in complete charge during my absence on tour and do everything in a way which I could not have improved upon. It was quite a common thing for us during these anxious weeks to spend many sleepless nights over the various serious difficulties that seemed to come up from day to day and each had to be tackled immediately. Each of us had to do his best, and often, we did not have even the time to tell each other what we had been doing.

Our two Assistant Secretaries (Jagannathan and Hanumantha Rao) gave us most valuable assistance throughout, and put up cheerfully with unbearable strain day in and day out. I must also express my gratitude to the excellent team work of the Superintendents, clerks, stenographers and typists. The number of circulars, telegrams and fair copies that had to be issued daily was incredible, and they had to work for long hours everyday and even on all holidays. This was the lot of all of us till the second week of this month. My officers, Superintendents and clerks must be glad to meet, at a pleasant function like this, the man who almost worked them to death, and see for themselves his human qualities.

Ballot Box Bottleneck

I must not forget to mention our librarian Mr. Jagannathachari who helped Mr. Ramachandran to deliver the goods in regard to ballot boxes. Strange are the ways of God! Our Librarian had to get ballot boxes for us! Today, the Rajahmundry Parliamentary constituency

would let us down and some 13,000 ballot boxes would get locked up there owing to the need for a fresh poll in one or two booths, and almost next day or so, the Ongole Parliamentary constituency would let us down similarly. To make up the consequential shortages, the steel ballot boxes had to be literally produced day by day, and transported from there. We are grateful to Mr. Jagannathachari for the splendid manner in which he helped the Hyderabad firm keep up their daily production and transport of the steel boxes.

We are also grateful to Mr. G. T. Sastri, our Station Director, All-India Radio, Madras, and his officers and staff for their splendid co-operation in connexion with the recent elections right from the beginning. Our thanks are also due to Mr. Parthasarathi, our Director of Information and Publicity, and his officers and staff for their assistance right through.

Co-operation of the Press

I must also express our gratitude to the Press for their enthusiastic co-operation in giving publicity to the arrangements and to the orders issued in connexion with the elections. I am particularly grateful to them for taking care to see that nothing inaccurate or misleading was put out in their newspapers.

I must also express our gratitude to the Superintendent, Government Press and to the Superintendent of Stationery for the hard work they had to put in for several weeks to comply with our large demands for symbols, forms, stationery, etc., at short notice. In the Government Press also, the lights were burning throughout the nights for several weeks on end.

Last but not least, I must express our gratitude to the Chief Election Commissioner, Mr. Sukumar Sen, and his able Secretary Mr. P. S. Subramanian, for the prompt manner in which they gave us the orders of the Election Commission which we had to take from time to time. I am indebted to Mr. Sen for the strong and steady support he gave me throughout and for the trust he had in our judgment and recommendations.

Finally, I must thank our guests for so kindly responding to our invitation.

Museum Exhibits in Record Office to be loaned to the Government Museum

The Government have ordered that the Museum Exhibits, which are now in the Madras Record Office, be given on permanent loan to the Government Museum, Madras, so as to make the Historical Section of the Museum more attractive.

The Museum Exhibits cover the following main items: Charters, Treaties and Agreements; Regimental Flags and Dress; Documents in Indian Languages; Miscellaneous Documents; Maps and Plans; Photos and Pictures; Seals (Wax impressions) and Miscellaneous Articles.

Siddha Dispensary at Voimodu

The Government have approved the conversion of the subsidized Rural Siddha Hospital at Voimodu in Tanjore district into a regular Siddha Dispensary with the necessary staff under the management of the Government.

Electricity for Villages

During the week ending 16th February 1952, the Government have sanctioned 20 schemes relating to the extension of supply of electricity, at an estimated cost of Rs. 70.979 lakhs, for agricultural and industrial and other purposes in the State. The following are the details of the schemes:—

Madras System.—Extension of supply of electricity to 517 house service connections, 204 street lights, 16 industrial and other loads and 22 agricultural pumpsets at an estimated cost of Rs. 4,30,200 at Nemili, Kirapakkam and Tirukkalkundram villages; to 51 agricultural services, eight industrial loads, 100 domestic services and 112 street lights at an estimated cost of Rs. 3,16,050 at Ponneri, Vembakkam, Tiruvengadapuram and Aladu villages in Ponneri Taluk, Chingleput District.

Mettur Electricity System.—Extension of supply of electricity to four agricultural pumpsets, five industrial loads and nine house service connections at an estimated cost of Rs. 42,500 at Yercaud village in Salem Taluk, Salem District; to 15 agricultural pumpsets at an estimated cost of Rs. 31,900 at Molugampundi village in Arni Taluk, North Arcot District; to 44 agricultural pumpsets and one industrial load at an estimated cost of Rs. 1,04,700 at Vanguru village in Wallajah Taluk, North Arcot District; to 11 agricultural pumpsets at an estimated cost of Rs. 36,700 at Arugavur village in Cheyyar Taluk, North Arcot District.

Supply from the Mettur Electricity System has been sanctioned for agricultural, industrial, domestic and street-lighting purposes at an estimated cost of Rs. 9.31 lakhs to be spread over ten years at Pallipattu and Karvetinagar in Chittoor District; for agricultural, industrial and other purposes at an estimated cost of Rs. 16.768 lakhs, to be spread over ten years, at Pudupalayam, Anavarabad, Valayambattur, Koyambattu, Melpulidiyur, Melpallipattu, Paramanandal and Puduchengam villages in North Arcot District; for 491 house service connections, 15 industrial loads, 200 street lights and one cinema load at an estimated cost of Rs. 2.54 lakhs at Sendamangalam village in Namakkal Taluk, Salem District; for agricultural, industrial and domestic purposes at an estimated cost of Rs. 9.612 lakhs, to be spread over ten years, at Sathur, Malar, Ladavaram, Kazhayanur and Timiri villages in North Arcot District; for 121 agricultural pumpsets at an estimated cost of Rs. 2,79,100 at Senji, Sattarai, Kovankolathur, Pinivakkam and Manavalur

villages, Tiruvallur Taluk, Chingleput District; and for 44 agricultural pumpsets, eight industrial loads and 250 house service connections at an estimated cost of Rs. 2.46 lakhs at Unjalur and Kolathupalayam villages in Erode Taluk, Coimbatore District.

Papanasam Electricity System.—Extension of supply of electricity to 22 agricultural pumpsets and 82 house services at an estimated cost of Rs. 62,300 at Melambur village in Ambasamudram Taluk, Tirunelveli District, has been sanctioned.

Pykara System.—The Government have sanctioned the extension of supply of electricity to 16 agricultural pumpsets at an estimated cost of Rs. 41,000 at Krishnapuram, hamlet of Karumathampatti village, Palladam Taluk, Coimbatore District.

Andhra Power System.—Sanction has been accorded for the extension of supply of electricity to 21 agricultural pumpsets and one industrial load at an estimated cost of Rs. 70,000 at Ungutur village, Tadepalligudem Taluk, West Godavari District.

Government have sanctioned a major proposal for the extension of supply of electricity for agricultural, industrial and domestic purposes at an estimated cost of Rs. 5,26,700 at Yellamanchili and other surrounding villages in Visakhapatnam District.

Sanction has also been accorded for the extension of supply of electricity to eight agricultural pumpsets, one industrial load and ten domestic services at an estimated cost of Rs. 39,200 at Adivaram village, Visakhapatnam Taluk, Visakhapatnam District.

Rayalaseema Power System.—The Government have sanctioned the extension of supply of electricity to 90 domestic services and 60 street lights at an estimated cost of Rs. 52,900 at the Patha Cuddapah Panchayat area, Cuddapah District.

Sanction has been accorded to the extension of supply of electricity for agricultural, industrial and other purposes at an estimated cost of Rs. 4,18,600 at Mattihalli and Harpanahalli villages in Harpanahalli Taluk, Bellary District.

Sanction has also been accorded to the extension of supply of electricity for agricultural, industrial and other purposes at an estimated cost of Rs. 5,79,500 at Konakondla, Vajrakarur and Uravakonda villages in Anantapur District.

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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 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."

According to an amendment issued on January 5, 1952, the approved form of licence issued under this Order will provide in future suitable columns for incorporating the following details at the time of the renewal of licences:—

1. Year for which licence is renewed;
2. Date of renewal;
3. Fee;
4. Chalan number and name of treasury;
5. Penalty, if any;
6. Chalan number, date and name of treasury;
7. Signature of licensing authority; and
8. Remarks.

The three classes of licences issued under this Order will, in future, be issued in three distinct colours as shown:

Class of licence.	Colour.
1. Oil Mills	Green.
2. Dealers in manure	Red.
3. Firms engaged in manure mixing trade.	White.

G.O. Ms. No. 1013, Food and Agriculture, dated June 23, 1952: Certain amendments issued specify the principles and conditions on which the licensing authority can either refuse to grant a licence under the above Order or cancel one which has already been issued.

By an amendment issued in G.O. Ms. No. 1361, dated 22nd August 1952, for explanation on (1) under Clause 4, the following is substituted: "In cases where a mixing or millers' licence has been obtained, no dealers' licence is necessary for the particular place of business."

THE MADRAS MANURE MIXTURE QUALITY AND PRICE CONTROL ORDER, 1950

According to this Order only firms of standing dealing in manure and approved by the Government of Madras on the recommendations of the Fertiliser Advisory Committee through the Director of Agriculture shall manufacture and market manure mixtures. The firms dealing in manure shall legibly mark on the manure bags the following particulars:—

- (a) The registered brand and name of the manure mixture;
- (b) The organic and inorganic, total P₂O₅, W.S. P₂O₅, K₂O contents of the manure mixture denoted by the letters N, P (T), P (S) and K, respectively.
- (c) The registered name of the firm.
- (d) The crop or crops for which the manure mixture is suitable; and in the case of a general mixture for all crops the expression "All Crops".

- (e) The gross contents by weight in pounds.

The manure mixture will have to be sold at the prices approved by the Joint Director of Agriculture. The fertiliser mixture shall be put up in the market in sealed bags, to obviate the contents being tampered with without breaking the seal. The firms dealing in manure shall not alter the ingredients, or the guaranteed analysis, or the price of the manure mixture, except with the previous approval of the Joint Director of Agriculture.

THE MADRAS OILCAKE (MOVEMENT CONTROL) ORDER, 1951

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.

MADRAS FOODGRAINS CONTROL ORDER, 1947

This Order exercises control on the purchase, sale and storage beyond certain limit (i.e., 10 maunds in the case of purchase, sale and storage for sale and 15 maunds in the case of storage for purposes other than those of sale) 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, maize (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 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 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 such anti-social activities. Harijans, co-operative societies, hand-pounding concerns, ex-abbakari contractors, ex-servicemen's associations, etc., are exempted in deserving cases from the conditions regarding the previous business standing.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

MADRAS FOODGRAINS (MOVEMENT CONTROL) ORDER, 1947

(G.O. Ms. No. 720, Food, dated 14th June 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,

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THE MADRAS FLOUR (USE IN MAKING PASTE OR STARCH) PROHIBITION ORDER, 1947

This Order prohibits the use of flour for making paste or starch except under a permit issued by the City Rationing Officer, Madras, District Supply Officer, etc., or an authorization given by the Government.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

ORDER RELATING TO THE RESTRICTIONS ON THE OUTPUT OF BRAN WHEN MILLING WHEAT.

(G.O. Ms. No. 940, Food, dated 22nd August 1947.)

According to this Order, all flour mills situated within the State of Madras shall, when milling wheat, restrict the output of bran to five per cent of the whole wheat.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

DEVELOPMENT DEPARTMENT

THE COTTON CONTROL ORDER, 1950

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

THE MADRAS DRUGS (CONTROL) ACT, 1949

In order to ensure that essential drugs continue to be sold at reasonable prices even after devaluation, the Madras Drugs Control Act, 1949, was passed by the Government. The Act provides for the control of the sale, supply and distribution of drugs in the Madras 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 producer 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.

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

Madras. A week's ration at the prescribed scale forming part of the luggage of bona fide travellers and grains intended for bona fide sowing purposes granted under a certificate issued by an Officer of the Madras Agricultural Department not below the rank of District Agricultural Officer and foodgrains transported under Military Credit Notes are exempted from the operation of the Order.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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.

The Order has been amended exempting Defence Services personnel who go on leave to carry rations under the certificates issued by the Military authorities up to the quantities specified therein.

The Madras Foodgrains (Movement Control) Order, 1947, has been amended in G.O. Ms. No. 1292, Food and Agriculture, dated August 6, 1952, due to the removal of the ban on the inter-State movement of Pearl barley powder and indigenous barley without husk. The Movement Control Order has also been amended in G.O. Ms. No. 1323, Food and Agriculture, dated August 13, 1952, as the ban on the inter-State movement of semolina and self-raising flour imported from foreign countries has been lifted and the price restrictions removed.

MADRAS FOODGRAINS PROCUREMENT ORDER, 1947

Under the Madras Foodgrains Procurement Order, 1947, the foodgrains transported illegally without a permit will hereafter be seized and confiscated together with the containers and coverings thereof and the animals, vehicles, vessels or other conveyances used in carrying the said foodgrains (G.O. Ms. No. 2258, Food and Agriculture, dated 24th November 1951).

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

This Order imposes certain restrictions on the pledging of the procured stocks of paddy and rice with banks by the procuring agents in the State.

THE MADRAS SUGAR DEALERS' LICENSING ORDER, 1951

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.

SUGAR PRICE CONTROL

The Collectors have been empowered to fix the wholesale and retail prices of sugar.

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.

The XV Indian Olympics

The flame of the Olympic torch, which has served as a beacon for the sportsmen of the world to capture the spirit of the ancient Greek athletes throughout the world—flared after a lapse of 20 years in Madras City, when the 15th Indian Olympic Games was inaugurated in the Corporation Stadium, Madras. Our State played host to the cream of India's sportsmen and sportswomen. Keen zest was attached to the National Olympics due to the fact that these games were the preliminary trials for the selection of India's contingent to the World Olympiad at Helsinki, Finland, to be held in a few months.

The inauguration of this Festival of Sports was marked by gorgeous pageantry, and a mammoth crowd saw H.E. the Governor of Madras declare open the 15th Indian Olympics, on the evening of February 21, 1952.

The competitors had arrived earlier and were all accommodated in the specially built Bhavnagar Village, consisting of two camps, the Chere Camp and the Mohite Camp. Nearly 500 athletes and officials stayed here during the four days of the National Games.

H.E. the Governor arrived in State and standing in the open car, the Head of the State went round the Stadium and acknowledged with folded palms the cheers of the spectators. The State teams then marched into the arena, anti-clockwise, to the accompaniment to the martial music of the brightly uniformed Services Bands and the City Police Band.

The contingents marched in the following order: Services, Bengal, Bihar, Bombay, Chandernagore, Delhi, Gujarat, Hyderabad, Kolhapur, Madhya Pradesh, Mysore, Orissa, Pepsu, East Punjab, Rajputana, Travancore-Cochin, Uttar Pradesh, Andhra and Madras. As each State contingent marched past the Governor's Box, the Captain who was carrying his State's Olympic flag, dipped it in salute. After marching round the Stadium the teams and the bands lined up in the centre of the arena in columns facing the Governor's Box.

His Excellency then inaugurated the National Olympics with these words: "I declare open the 15th Indian Olympic Games." This was heralded by a fanfare of trumpets and the Olympic flag was solemnly hoisted. Guns fired a salute of 15 salves representing the number of Games held. Hundreds of pigeons symbolic of peace were released from the eastern stand.

This was the signal for the veteran athlete Joe Murphy who represented India in the 400 and 800 metres events at the World Olympics in Amsterdam in 1928, to enter the arena holding aloft the Olympic torch. He was the last of the 13 runners who carried the torch in relay from the Y.M.C.A. College of Physical Education, Saidapet. Joe Murphy ran round the Stadium anti-clockwise, mounted the flag-decked steps opposite the Governor's Box and lighted the flame which was kept burning throughout the Games. The Captain of the Madras Contingent, L. T. Boosey, approached the Tribune of Honour and mounted the rostrum. The captains of other teams carrying their flags stood in the semi-circle round the Tribune. In a solemn voice Boosey then pronounced the Olympic Oath: "We swear that we will take part in the 15th Indian Olympic Games in fair competition, respecting the regulations which govern them and with desire to participate

in the true spirit of sportsmanship for the honour of our country and for the glory of sport." The competitors bowed their heads as a mark of acceptance. The national anthem was then played and they returned to their special enclosure.

The next event on the programme was an exhibition football match in which the Mysore State XI defeated Hyderabad Police by two goals to one. Before the match, both teams were presented to His Excellency the Governor.

The results of the finals in the various events gone through in the four days of the games are given below:—

TRACK AND FIELD—Men's Finals

100 Metres.

1. Lavy Pinto (Bombay). 11s.
 2. Gabriel (Services).
 3. Balwant Singh (Services).
- (Lavy Pinto clocked 10-7s. in the heats).

World Record: 10-2s. Jesse Owens (U.S.A.), 1936; Harold Davis (U.S.A.), 1941; L. La Beach (Panama), 1948; and N. H. Ewell (U.S.A.), 1948.

Olympic Record: 10-2s. Jesse Owens (U.S.A.), 1936.

Indian (National) Record: 10-7s. Lavy Pinto (in the heats), 1952.

Indian (All-comers) Record: 10-5s. R. E. Kitto (Ceylon), 1946.

200 Metres.

1. J. Crasto (Bombay). 22-2s.
2. Gabriel (Services).
3. Balwant Singh (Services).

(Lavy Pinto after having set up a new record of 21-9s. in the second heat, did not participate in the final owing to a pulled muscle).

World Record: 20-2s. M. E. Patton (U.S.A.), 1949.

Olympic Record: 20-7s. Jesse Owens (U.S.A.), 1936.

Indian (National) Record: 21-9s. Lavy Pinto (in the heats), 1952.

400 Metres.

1. Ivan Jacob (Madras). 49-8s.
2. Balwant Singh (Pepsu).
3. Jagdev Singh (Pepsu).

World Record: 45-8s. V. Rhoden (Jamaica), 1950.

Olympic Record: 46-2s. W. Carr (U.S.A.), 1932; A. S. Wint (Jamaica), 1948.

Indian (National) Record: 49-8s. F. Gantzer (Bengal), 1938; Ivan Jacob (Madras), 1952.

Indian (All-comers) Record: 49-5s. M. M. P. Pereira (Ceylon), 1946.

800 Metres.

1. Sohan Singh (Services). 1m. 57-1s.
2. Gulwant Singh (Services).
3. Ranjit Singh (Pepsu).

World Record: 1m. 46-6s. R. Harbig (Germany), 1939.

OLYMPIC SWIMMING

Pictures show exciting moments from the Swimming, Diving and Waterpolo events in the XV Indian Olympic Games. At left is Dolly Nazir, outstanding woman swimmer from Bombay.



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.

Whereas section 6-B (1) of the Madras Buildings (Lease and Rent Control) Act, 1949, as amended by Act VIII of 1951, provides for the deposit of rent when the address of the landlord or local agent is not known and when the ownership is under dispute, there is no provision in the Act to deposit the rents of buildings in cases where the addresses of the landlords are known but they refuse willfully to receive the rent. Under section 6-A (4) of the Act, the tenant is bound to continue to remit the rent to the landlord by money order after deducting the money order commission. But if the rent so remitted by money order is consistently refused by the landlord and the money is thus returned to the tenant, it will accumulate in the hands of the tenant with the possible risk of his not being able to pay the amount in lump sum when demanded by the landlord. The Government who are the statutory tenants of the building are liable for payment of rent to the landlord. It is, therefore, in the interest of the Government to see that the refused rent which is returned to the tenant is caused to be deposited by him so as to be available for payment to the landlord whenever he demands it. Therefore the amounts returned to the tenant on the refusal of the money orders should be caused to be deposited by the tenant to the credit of the Government in the Reserve Bank or the Treasury under "Revenue Deposits."

By G.O. No. 1600, dated 16th June 1952, the following amendments have been issued to the Act:—

1. In sub-rule (3) of Rule 6 for the words "at 8 annas" the words "at Re. 1 and annas 7" are substituted.
2. In sub rule (2) of rule 22, for the words "a fee of annas eight" the words "a fee of rupee one and annas seven" are substituted.

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 including age bar will be considered.

By an amendment issued in G.O. No. 146, Public (General) Department, dated January 24, 1952, the following note is added:

Note.—The Reserve Bank or the treasury will not receive the deposit unless the Controller or the appellate authority, as the case may be, or any person authorised by such Controller or appellate authority in this behalf, certifies on the chalan accompanying the deposit that the deposit may be received.

PUBLIC WORKS DEPARTMENT

CEMENT CONTROL ORDER, 1949

This Order controls the sale of cement.

By an amendment issued on 3rd April 1951, licensed cement factories are authorised 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.

Amendments issued to the Cement Control Order on 30th May 1951 provide that:

the price of all Portland cement produced in India, exclusive of the cost of containers, if any, shall not exceed Rs. 71 per ton in full wagon loads f.o.r. destination;

the actual cost of gunny bags, subject to a maximum of Rs. 26 per ton of cement, if supplies wholly in new gunnies, may be charged, in addition to the price of the cement specified above;

the price leviable for the cost of packing for supplies in paper bags or old gunny bags, which may be settled between the purchaser and the supplier, shall not exceed Rs. 26 per ton of cement.

An amendment issued on 1st November 1951 provides further that an insurance fee of Re. 0-10-0 (annas ten) per ton may be collected by the supplier when the cement is despatched in open wagons with the concurrence of the purchaser.

Harijan Welfare School

Sanction has been accorded to the opening of a Harijan Welfare School at Palliagaram village in Madurantakam Taluk in Chingleput District during the current year. As usual, midday meals will be supplied to the students belonging to eligible communities, studying in the schools.

Handboring Sets and Power Drills

The Government have directed that soon after an application for the allotment of hand-boring set or a power-drill is registered, a copy of the list should be provided by the Industries Department to the party, so that he can clearly anticipate when his turn of priority comes.

This action has been taken, in order to obviate any criticism in respect of the order of priority of applications registered in the districts, for the allotment of hand-boring sets and power drills.

More Honorary Medical Officers

The Government have sanctioned the creation of three additional posts of Honorary Medical Officers and 21 additional posts of Honorary Assistant Medical Officers in the various Government medical institutions in the Madras City and in the mofussil.

REPORT ON AN ENQUIRY INTO THE ECONOMICS OF PRODUCTION OF MILK IN MADRAS CITY

By Dr. B. Natarajan, Economic Adviser to the Government of Madras

Price, annas eight

Pages 52

In 1949 an investigation was undertaken to examine the problems of the milkman's profession and to study the economics of milk production in Madras City. For the purposes of the enquiry the City was divided into five zones—Rayapuram, Perambur, Egmore, Triplicane and Mylapore—and random samples were listed for questioning. Despite difficulties encountered in the course of the survey, the investigating staff recorded significant facts, from which useful conclusions were drawn.

The *Report* details previous studies on the subject, scope and method of enquiry, cost of production and income from sale of milk, the Bombay Plan, the Five-Year Plan and the Madras Plans. In brief, the problem in Madras centres round these points: (i) uneconomic production, (ii) inadequate production and (iii) appallingly low production. A general policy for improvement is outlined: (a) Supply of cattle-feed at economic rates; (b) improved facilities for the salvage of dry cows; (c) better breeding of animals; (d) free medical facilities for milch cattle and (e) grants or interest-free loans to remove unhygienic conditions in cattle-yards. The proposals

also urge the organization of milkmen and the constitution of a Milk Marketing Board.

Six charts and 13 appendices enhance the documentary value of this very useful publication.

Books received: Report for 1951-52 of the Ramakrishna Mission Vidyalaya, Perianaickenpalayam, Coimbatore District. —S.

INDIAN AGRICULTURAL WAGES STATISTICS

Agricultural labourers constitute about one-third of the rural population in India, but very little reliable data had so far been available in respect of their wages and living conditions.

A new publication, entitled *Indian Agricultural Wages Statistics, 1950*, recently brought out by the Directorate of Economics and Statistics of the Ministry of Food and Agriculture, is intended to fill this gap. For the purpose of these statistics, agricultural workers have been classified into (1) skilled labour, (2) field labour, (3) other agricultural labour and (4) herdsmen. The wages of men, women and children have been given separately. Besides the amount of maximum and minimum wages given State-wise, the months of the year during which they prevailed in the case of each type of labour have been indicated.

The publication will have a special interest for those engaged in a study of socio-economic problems of agricultural labour.

WOMEN'S WELFARE JOURNAL

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THE GOVERNMENT OF MADRAS

A Monthly Journal of Social Welfare

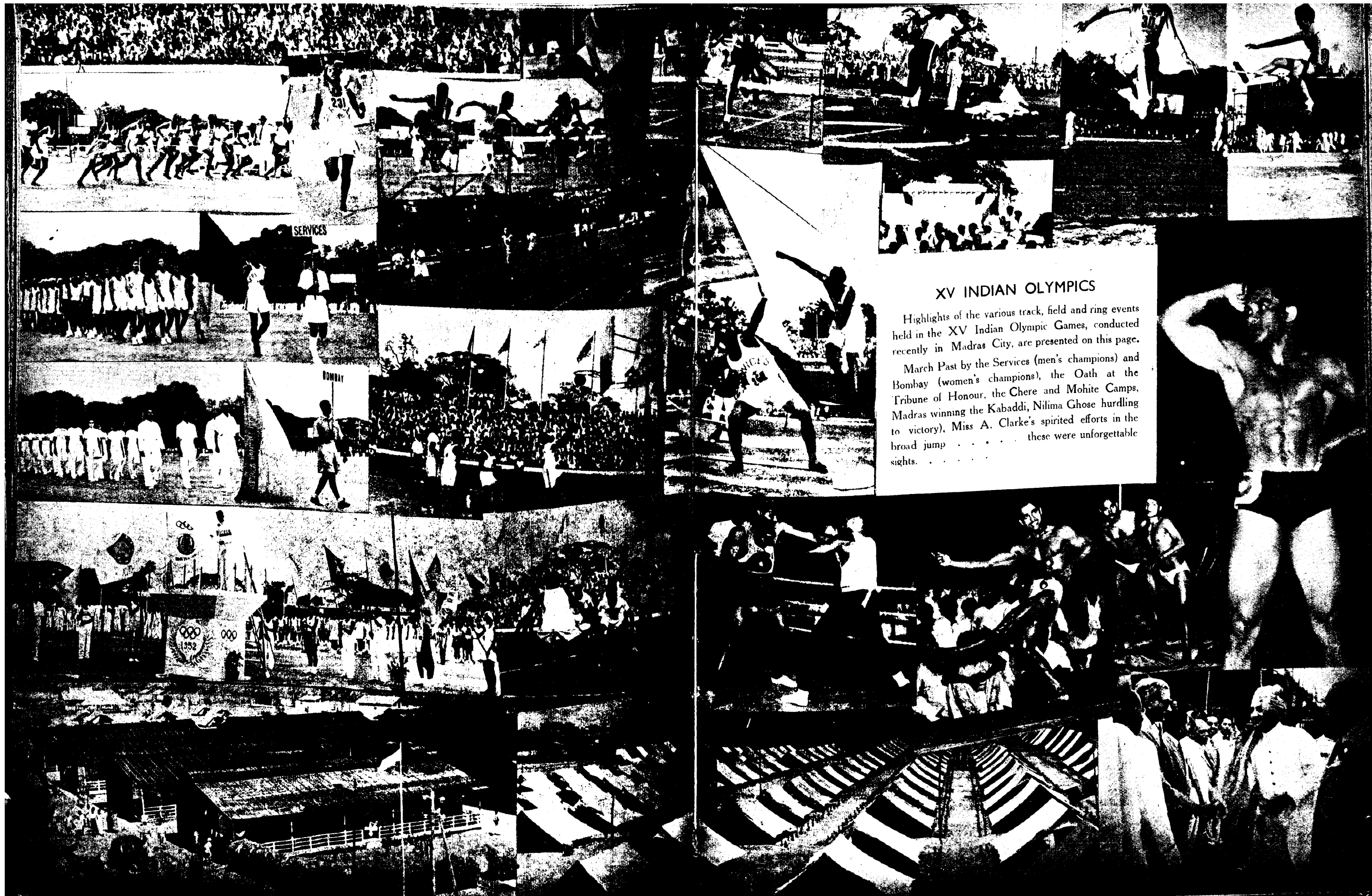
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XV INDIAN OLYMPICS

Highlights of the various track, field and ring events held in the XV Indian Olympic Games, conducted recently in Madras City, are presented on this page.

March Past by the Services (men's champions) and Bombay (women's champions), the Oath at the Tribune of Honour, the Chere and Mohite Camps, Madras winning the Kabaddi, Nilima Ghose hurdling to victory, Miss A. Clarke's spirited efforts in the broad jump these were unforgettable sights.

BOOKS

48

ERADICATING INFECTIONS OF BOOKWORM

The Indian Bookworm Beetle, *Gastrallus Indicus Reitter*, bores into books, cardboards and palm-leaf records and as such, does considerable damage to libraries and other places where records are stored.

A new booklet entitled 'Control of the Indian Bookworm Beetle, *Gastrallus Indicus Reitter* (Coleoptera: Anobidae) by M. L. Roonwal and P. N. Chatterjee, published as *Indian Forest Records* (New Series)--Entomology--Vol. 8, No. 6 (price as. 12 or 1 sh.) gives a method for eradicating the infection of this insect in libraries.

The method consists in exposing the infected material to dry heat in an electric oven at 60 degrees centigrade for four hours. Generally, the temperature and duration of exposure should vary with the thickness of the book or paper bundle. In the Indian plains, the heat of the sun can also be utilised for the purpose, provided the right temperatures are ensured.

Chemical Examiner's Department

The following are the salient features of the administration of the Chemical Examiner's Department in 1951:—

Human poisoning—The total number of human poisoning cases examined during the year under notice was 956 with 4,417 articles, as against 801 cases with 3,777 articles in 1950. Poison was detected in 414 cases. Among the poisons, opium heads the list with 61 cases, while alcohol was responsible for 52 cases, oleandar for 43 cases, nitrite for 37 cases, copper for 31 cases and datura for 27 cases.

A few cases of human poisoning are given below:

A girl, aged about 18 years, is stated to have taken some acid, mistaking it for "Omam Water" (*Aqua Ptychotis*) from a bottle in an almirah, for a complaint of pain in the abdomen. She was taken to a hospital in a state of restlessness with the whole of the mouth cavity, lips and inner aspect of the fingers of the left hand burnt. Sulphuric acid was detected in the viscera of the girl.

A male, aged about 55 years, ate some tiffin given by a woman along with four children, two of whom were his grandchildren. The woman also took the tiffin. All the six people started vomiting and purging. They were brought to a hospital, where the man died and the others recovered. Arsenic was detected in the viscera of the deceased.

A boy, aged about 13 years, took tiffin at home at 7-30 a.m. on a particular day and was playing in the street. At about 9 a.m. a co-worker in a dyeing factory asked the boy to go with him to the factory. While sweeping the floor in the factory, the boy vomited, felt nervous and fell down. He was taken to a hospital but he died before reaching the hospital. The viscera of the boy was sent for examination and nitrite was detected in the stomach and contents and in the intestines and contents.

MADRAS INFORMATION

As a regular routine measure, the almirahs and shelves in libraries should be regularly cleaned and charged with a liberal quantity of naphthalene balls, at least once a year, preferably in the early spring. This preventive measure will greatly reduce the incidence of attack by the beetle.

INDIAN COFFEE STATISTICS

The Directorate of Economics and Statistics in the Ministry of Food and Agriculture have brought out the twenty-fifth issue of the *Indian Coffee Statistics* relating to the coffee years 1948-49 and 1949-50.

The publication brings together statistical information about the area under coffee cultivation, number of plantations and persons employed, imports and exports and wholesale prices. A number of useful charts illustrating production and consumption of coffee in the country have been included.

Animal poisoning—Sixty cases of animal poisoning were received during the year with 266 articles, as against 39 cases with 188 articles in 1950. Poison was detected in 34 cases. The poisons detected were arsenic, zinc phosphide or phosphine, oleander and opium.

Stain cases—A total of 1,169 cases were examined, as against 974 in 1950. The total number of articles examined was 6,281. In 1,042 cases examined for blood, blood was detected in 990.

Miscellaneous Medico-Legal cases—There were 243 cases with 1,172 articles under this heading, as against 250 cases with 999 articles in the year 1950.

General analyses—Fifty-one articles were examined under this heading during the year under report as against 156 articles in 1950. These comprised 39 articles for the Madras Government, one article for the Government of India and 11 articles for private parties.

Sale of Compost Manure to Agriculturists : No Sales Tax on Local Bodies

The Government have directed that sales by the Corporation of Madras, municipalities and other local bodies to agriculturists and Agricultural Co-operative Societies, of compost manure, manufactured by them, be exempted from liability to sales tax for the period beginning from the commencement of sales in each case and ending on March 31, 1953.

This action has been taken on representations by the Corporation of Madras and other local bodies in the State.



4. A number of employment seekers represented their hardships in securing jobs to the Governor, who gave them a patient and sympathetic hearing.

THE GOVERNOR VISITS EMPLOYMENT EXCHANGE

Shri. Sri Prakasa, Governor of Madras State, recently visited the Regional Employment Exchange, to make a personal study of how this institution serves to provide work for unemployed men and women.

1. The Governor discusses problems of appointment with an employer who has come to the Employment Exchange to recruit workers for his concern.

2. The Governor makes detailed enquiries of a trainee about his training, career and family background at the Industrial Training Institute.

3. At the Women's Section, the Governor meets women applicants.

CULTURE

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MADRAS INFORMATION

Olympic Record : 1m. 49.2s. M. Whitfield (U.S.A.), 1948.

Indian (National) Record : 1m. 56.8s. Hazura Singh (Patiala), 1938.

1,500 Metres.

1. Sadhu Singh (Services). 4 m. 6.8s.
2. Jabbar Singh (Services).
3. P. Lanka (Orissa).

World Record : 3m. 43s. Gunder Haegg (Sweden), 1944, and L. Strand (Sweden), 1947.

Olympic Record : 3m. 47.8s. J. Lovelock (New Zealand), 1936.

Indian (National) Record : 4m. 4.2s. Chand Singh (Patiala), 1944.

3,000 Metres Steeplechase.

1. Gulzara Singh (Pepsu). 9m. 31.4s.
2. Daluram (Services).
3. Weet Singh (Services).

World Record : 9m. 3.8s. V. Iso Hollo (Finland), 1936.

Olympic Record : 9m. 3.8s. V. Iso Hollo (Finland), 1936.

Indian (National) Record : 9m. 31.4s. Gulzara Singh (Pepsu), 1952.

5,000 Metres.

1. Daluram (Services). 15m. 46.8s.
2. Akkrey (Madhya Bharat).
3. Munuswami (Services).

World Record : 13m. 58.2s. Gunder Haegg (Sweden), 1942.

Olympic Record : 14m. 17.6s. G. Reiff (Belgium), 1948.

Indian (National) Record : 15m. 9.4s. Ronaq Singh (Punjab), 1936.

10,000 Metres.

1. Dhanna Singh (Services). 33m. 55.4/5s.
2. Gurbachan Singh (Pepsu).
3. Ronaq Singh (Pepsu).

World Record : 29m. 2.6s. E. Zatopek (Czechoslovakia), 1950.

Olympic Record : 29m. 59.6s. E. Zatopek (Czechoslovakia), 1948.

Indian (National) Record : 32m. 2.6s. Ronaq Singh (Punjab), 1936.

10,000 Metres Walk.

1. Harnaik Singh (Services). 55m. 19s.
2. Nagaraj (Mysore).
3. Lingappa (Mysore).

World Record : 42m. 39.6s. V. Hardmo (Sweden), 1945.

Olympic Record : 45m. 4s. (made in heat) J. F. Mikaelsson (Sweden), 1948.

Indian (National) Record : 52m. 29s. Ronaq Singh (Patiala), 1949.

50 Kilometres Walk.

1. H. Bose (Bengal). 5 h. 28m. 7.4s.
2. B. Das (Bengal).
3. Lal Singh (Pepsu).

World Record : 4h. 34m. 03.0s. P. Sievert (Germany), 1924.

Olympic Record : 4h. 30m. 41.4s. H. Whitlock (Great Britain), 1936.

Indian (National) Record : 5h. 15m. 8.4s. Bakhtawar Singh (Patiala), 1944.

Marathon.

1. Surat Singh (Delhi). 2h. 54m. 29s.
2. Thangappan Nair (Travancore-Cochin).
3. Joseph (Travancore-Cochin).

World Record : 2h. 26 m. 54.6s. P. Nurmi (Finland), 1932.

Olympic Record : 2h. 39m. 19.2s. K. Son (Japan), 1936.

Indian (National) Record : 2h. 42m. 33.6s. Chota Singh (Patiala), 1948.

110 Metres Hurdles.

1. Ajmeer Singh (Services). 15.8s.
2. Hiralal (Services).
3. Cleur (Madras).

World Record : 13.6s. R. A. Attlessey (U.S.A.), 1950.

Olympic Record : 13.9s. W. F. Porter (U.S.A.), 1948.

Indian (National) Record : 15.2s. V. Vickers (Bombay), 1946.

400 Metres Hurdles.

1. Preetham Singh (Services). 57.4s.
2. Teja Singh (Services).
3. Muthappa (Mysore).

World Record : 50.6s. Glen Hardin (U.S.A.), 1934.

Olympic Record : 51.1s. R. B. Cochran (U.S.A.), 1948.

Indian (National) Record : 56.2s. Preetham Singh (Patiala), 1944.

Indian (All-comers) Record : 54.9s. D. White (Ceylon), 1946.

400 Metres Relay.

1. Services. 43s.
2. Bombay.
3. Madras.

World Record : 39.8s. (U.S.A.), 1936.

Olympic Record : 39.8s. (U.S.A.), 1936.

Indian (National) Record : 43.0s. Punjab, 1936.

Indian (All-comers) Record : 42.5s. (Ceylon), 1946.

1,600 Metres Relay.

1. Services. 3m. 25s.
2. Pepsu. 3m. 26.9s.
3. Madras.

World Record : 3m. 08.2s. (U.S.A.), 1932.

Olympic Record : 3m. 8.2s. (U.S.A.), 1932.

Indian (National) Record : 3m. 27.4s. (Punjab), 1942.

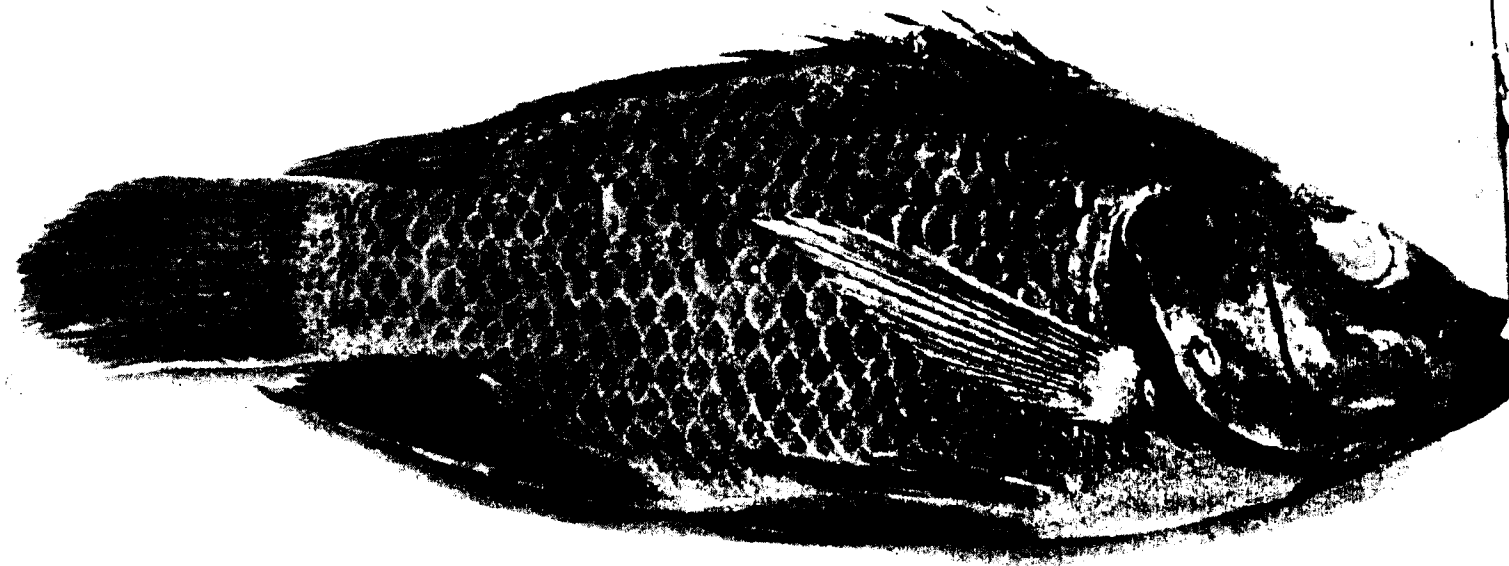
Indian (All-comers) Record : 3m. 23.4s. (Ceylon), 1946.

PASSING-OUT PARADE

The 128 Light Ack-Ack Artillery Unit of the Territorial Army at Arkonam held a passing-out parade.

Registered No. M-4767.

A NEW VARIETY OF FISH FOR MADRAS



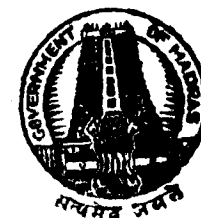
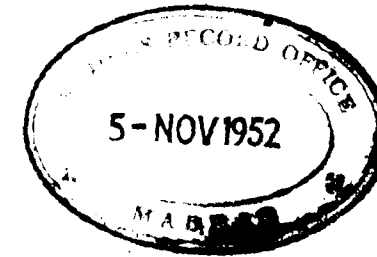
The Fisheries Department of the Government of Madras has imported from Ceylon a new variety of fish for cultural purposes in the State. This new variety, known as the TILAPIA MOSSAMBICA PETERS and famed for its prolific breeding and rapid growth, can be reared in salt and fresh waters. Tilapia found in American lakes, was introduced in Indonesia by the Japanese during the occupation of that country by Japan. Ceylon imported the variety and reared it.

In return the Fisheries Department of Madras State will be sending in due course CATLA, a variety of fish found in large numbers in the rivers of Godavari, Krishna and Cauvery, to Ceylon.



MADRAS

Information



NOVEMBER 1952

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CULTURE

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MADRAS INFORMATION

High Jump.

1. Mehenga Singh (Pepsu). 6 ft. 2½ in.
2. Pallikal (Services).
3. Sankaran (Madras).

World Record : 6 ft. 11½ in. Lester Steers (U.S.A.), 1941.

Olympic Record : 6 ft. 8 in. C. Johnson (U.S.A.), 1936.

Indian (National) Record : 6 ft. 3½ in. Mehenga Singh (Patiala), 1951.

Broad Jump.

1. Inderjit Singh (Pepsu). 21 ft. 11½ in.
2. Sankaran (Madras).
3. Shadilal (Services).

World Record : 26 ft. 8½ in. Jesse Owens (U.S.A.), 1935.

Olympic Record : 26 ft. 5½ in. Jesse Owens (U.S.A.), 1936.

Indian (National) Record : 22 ft. 10½ in. Niranjan Singh (Punjab), 1934.

Hop, Step and Jump.

1. L. T. Boosey (Madras). 46 ft. 10 in.
2. Kebur Singh (Services).
3. Kasim (Services).

World Record : 52 ft. 5½ in. N. Tajima (Japan), 1936; A. F. da Silva (Brazil), 1950.

Olympic Record : 52 ft. 6 in. N. Tajima (Japan), 1936.

Indian (National) Record : 50 ft. 2 in. H. Rebello (Mysore), 1948.

Pole Vault.

1. S. K. Chakravarthi (Bengal). 11 ft. 3 in.
2. P. Vasavan (Travancore-Cochin).
3. Kurshid Ahmed (U.P.).

World Record : 15 ft. 7½ in. C. Warmerdam (U.S.A.), 1942.

Olympic Record : 14 ft. 3½ in. E. Meadows (U.S.A.), 1936.

Indian (National) Record : 12 ft. 2½ in. M. Hussain (U.P.), 1948.

Throwing the Javelin.

1. Malaviya (U.P.). 184 ft. 10 in.
2. D. Smith (M.P.).
3. Hajura Singh (Services).

World Record : 258 ft. 2¾ in. Yrjo Nikkanen (Finland), 1938.

Olympic Record : 238 ft. 6¼ in. M. Jarvinen (Finland).

Indian (National) Record : 185 ft. 4½ in. Parsa Singh (Patiala).

Throwing the Discus.

1. Makhan Singh (Services). 132 ft. 7½ in.
2. Balkar Singh (Services).
3. Somnath (Pepsu).

World Record : 186 ft. 11 in. F. Gordon (U.S.A.), 1940.

Olympic Record : 173 ft. 2 in. A. Consolini (Italy), 1948.

Indian (National) Record : 132 ft. 7½ in. Makhan Singh (Services), 1952.

Putting the Weight.

1. Pradhuman Singh (Services). 43 ft. 10 in.
2. Madan Lal (Punjab).
3. Mohinder Singh (Services).

World Record : 58 ft. 10½ in. J. Fuchs (U.S.A.), 1950.

Olympic Record : 26 ft. 2 in. W. Thompson (U.S.A.), 1948.

Indian (National) Record : 45 ft. 2 in. Zahoor Ahmed (Patiala), 1940.

Throwing the Hammer.

1. Malkhan Singh (Services). 139 ft. 1 in.
2. Kishan Singh (Pepsu).
3. Somnath (Pepsu).

World Record : 196 ft. 5½ in. I. Nemeth (Hungary), 1950.

Olympic Record : 185 ft. 4½ in. K. Hein (Germany), 1936.

Indian (National) Record : 153 ft. 8 in. Somnath (Patiala), 1946.

Weight-Lifting.

Bantam weight : K. V. Thirumalai (Madras), 165 lb. (press); 160 lb. (snatch) and 220 lb. (clean and jerk)—Total, 545 lb.

Featherweight : D. P. Mony (Madras), 190 lb. (press), 220 lb. (snatch) and 250 lb. (clean and jerk)—Total, 660 lb.

Lightweight : S. G. Sethuraman (Madras)—Total 670 lb.

Middleweight : Gurudev Singh (Delhi)—Total, 615 lb. Gurudev Singh with 149 lb. was the lightest man and was therefore declared winner, although both S. R. Sathasivam (Madras) and S. B. Irani (Bombay) lifted the same total weight (615 lb.).

Light-heavyweight : Sankar Santra (Bengal)—Total, 645 lb.

Heavyweight : D. Rajagopal (Madras), 250 lb. (press), 240 lb. (snatch) and 290 lb. (clean and jerk)—Total, 780 lb.

Track and Field : Women's Finals.

100 Metres.

1. Mary D'Souza (Bombay). 12.7s.
2. Olga D'Sena (Bengal).
3. Veronica Game (Mysore).

World Record : 11.5s. Helen Stephens (U.S.A.), 1936; F. E. Blankers-Koen (Netherlands), 1948.

Olympic Record : 11.4s. H. H. Stephens (U.S.A.), 1936.

Indian (National) Record : 12.4s. D. Beek (Bengal), 1948.

CULTURE

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MADRAS INFORMATION

200 Metres.

1. Mary D'Souza (Bombay). 26.1s.
2. Olga D'Sena (Bengal).
3. Veronica Game (Mysore).

World Record : 23.6s. Stella Walasiewicz (Poland), 1935.

Olympic Record : 24.4s. F. E. Blankers-Koen (Holland), 1948.

Indian (National) Record : 26.1s. Mary D'Souza (Bombay), 1952.

80 Metres Hurdles.

1. Nilima Ghose (Bengal). 13.1s.
2. Violet Peters (Bombay).
3. Marjorie T. Soares (Mysore).

World Record : 11.0s. F. E. Blankers-Koen (Netherlands), 1948.

Olympic Record : 11.2s. F. E. Blankers-Koen (Netherlands), 1948; M. Gardner (Great Britain), 1948.

Indian (National) Record : 13.1s. Nilima Ghose (Bengal) both in heat and in final clocked the same timing, 1952.

400 Metres Relay.

1. Bengal. 52.2s.
2. Bombay.
3. Mysore.

World Record : 46.4s. (Germany), 1936.

Olympic Record : 46.4s. (Germany), 1936.

Indian (National) Record : 51.0s. (Bombay), 1951.

High Jump.

1. Marie Simoes (Bombay), 4 feet 7½ inches.
2. Joy Ward (Mysore).
3. Marjorie T. Soares (Mysore).

World Record : 5 feet 7¼ inches. F. E. Blankers-Koen (Netherlands), 1943.

Olympic Record : 5 feet 6½ inches. A. Coachman (U.S.A.), D. Tyler (Great Britain), 1948.

Indian (National) Record : 4 feet 11½ inches. Una Lyons (Punjab), 1940.

Broad Jump.

1. A. Clarke (U.P.). 15 feet 1 in.
2. Veronica Game (Mysore).
3. Christinne McInnes (Mysore).

World Record : 20 feet 6 inches. F. E. Blankers-Koen (Netherlands), 1943.

Olympic Record : 18 feet 8½ inches. V. Guarmata (Hungary), 1948.

Indian (National) Record : 16 feet 4½ inches. M. Soares (Mysore), 1948.

Throwing the Discus.

1. Proudfoot (Bombay). 86 feet 3 inches.
2. Bhagi Thadani (Bombay).
3. Joy Ward (Mysore).

World Record : 174 feet 8½ inches. N. Dumbadze (1948).

Olympic Record : 156 feet 3½ inches. G. Meurmayer (Germany), 1936.

Indian (National) Record : 92 feet 10½ inches. M. Gilbert (Bombay), 1942.

Putting the Weight.

1. Bhagi Thadani (Bombay). 29 feet 10½ inches.
2. Joy Ward (Mysore).
3. Rennie Thoranber (Bombay).

World Record : 49 feet 3½ inches. A. S. Andreeva (U.S.S.R.), 1950.

Indian (National) Record : 31 feet 10½ inches. M. D. Yates (U.P.), 1941.

Throwing the Javelin.

1. Veronica Game (Mysore). 74 feet 1½ inches.
2. Marie Simoes (Bombay).
3. Kathar Sha Begum (Madras).

World Record : 175 feet 2¾ inches. N. Smirnitskaja (U.S.S.R.), 1949.

Olympic Record : 149 feet 6 inches. W. Bauma (Austria), 1948.

Indian (National) Record : 99 feet ½ inch. S. Priestley (Mysore), 1936.

SWIMMING AND DIVING

Men's Finals

100 Metres Free Style : Sachin Nag (Bengal) 1, (1m. 5.9s.); B. Das (Bengal) 2, (1m. 8.5s.) and Isaac Mansoor (Bombay) 3, (1m. 8.6s.).

100 Metres Back Stroke : K. N. Shah (Bombay) 1, (1m. 15.3s.); B. S. Chandnani (Bombay) 2, (1m. 21.4s.) and Anandi Kar (Bengal) 3, (1m. 25.8s.).

1,500 Metres Free Style : Bimal Chandra (Bengal) 1, (23m. 20.8s.); S. Bajaj (Bombay) 2, (24 m. 7.6s.) and R. N. Bhide (Bombay) 3, (25 m. 1.6s.).

200 Metres Breast Stroke : P. Mallick (Bengal) 1, (3m. 14.6s.); L. H. Kotadia (Bombay) 2, (3m. 16.10s.) and B. Pandey (Bengal) 3, (3m. 19.2s.).

4 × 100 Metres Free Style Relay : Bombay (S. Bajaj, K. N. Shah, I. Mansoor and R. Mansoor) 1, (4m. 34.6s.); Bengal (Sachin Nag, Brojen Das, Santosh Bhattacharji and Robin De) 2, (4m. 36.2s.) and Madras (A. J. Wood, Vasant Kumar, Chellamuthu and Parameswaran Nair) 3.

200 Metres Free Style : Bimal Chandra (Bengal) 2m. 34s. (1), Santosh Bhattacharji (Bengal) 2m. 35s. (2) and K. Narasing Rao (Hyderabad) 2m. 47.7s. (3).

200 Metres Back Stroke : K. N. Shah (Bombay) 2m. 47.2s. (1), B. S. Chandnani (Bombay) 2m. 58.8s. (2) and Niranjan De (Bengal) 3m. 6s. (3).

400 Metres Free Style : Bimal Chandra (Bengal) 5m. 32.7s. (1), S. Bajaj (Bombay) 5m. 33.5s. (2), and Santosh Bhattacharji (Bengal) 6m. 2.9s. (3).

100 Metres Breast Stroke : Profulla Mallick (Bengal) 1m. 21s. (1), A. S. Bharucha (Bombay) 1m. 28.9s. (2) and Bhuvaneshwar Panday (Bengal) 1m. 29s. (3).

4 × 200 Metres Free Style : Bengal (Bimal Chandra, Robin De, Santosh Bhattacharji and Brojen Das) 11m. 2.6s. (1); Madras (A. J. Wood, Parameswaran Nair, Vasant Kumar and Chellamuthu) 12m. 51.9s. (2).

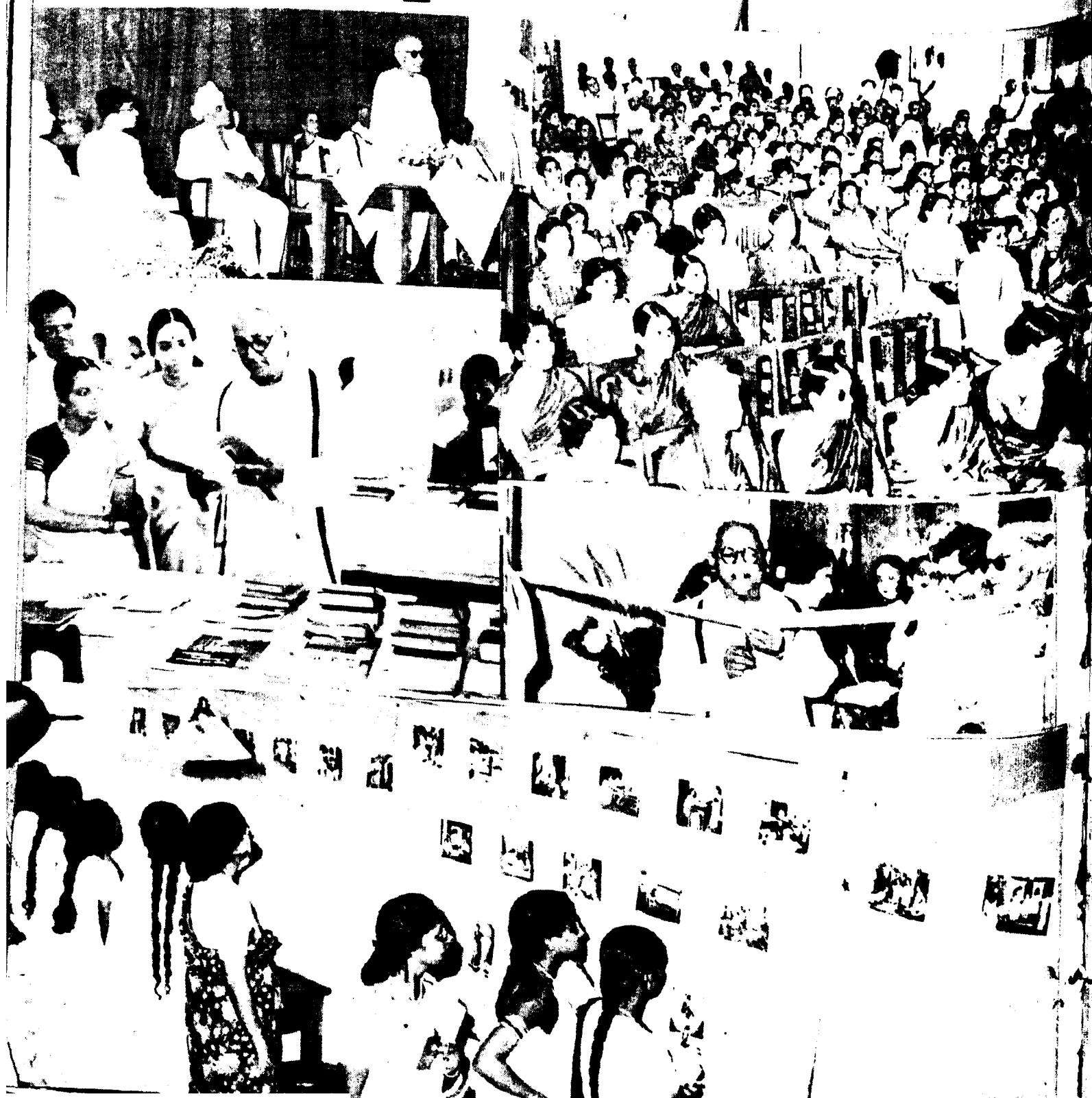
3 × 100 Metres Medley : Bengal (Sachin Nag, Profulla Mallick and Niranjan De) 1, 3m. 49.1s.; Bombay (Bajaj, Shah, and Mansoor) 2, 3m. 51.1s.



HOME SCIENCE EXHIBITION

The All-India Home Science Conference recently held at the Women's Christian College, Madras City, was inaugurated by Chief Minister Sri C. Rajagopalachari.

Pictures show scenes at the inaugural day, and the opening of the Exhibition organised on the occasion, by Dr. M. V. Krishna Rao, Minister for Education.



Madras Information

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"WE SEEK TO SERVE AND NOT TO COMPETE"

November 1952

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Kanti Shah and Bharucha) 2, 3m. 49-9s.; Madras (A. J. Wood, Raj Kumar and Vellayan) 3.

Springboard Diving: K. P. Thacker of Bombay (425-45 pts.) (1), T. T. Dund of Bombay (359-45 pts.) (2) and Ashu Dutt (Bengal) (350-2 pts.) (3).

Swimming Women's Finals

100 Metres Free Style: Dolly Nazir (Bombay) 1 (1m. 27-6s.), Arati Saha (Bengal) 2 (1m. 33-4s.) and Bharati Saha (Bengal) 3 (1m. 44s.).

400 Metres Free Style: Bharati Saha (Bengal) 1 (7m. 47s.) and V. Kolge (Bombay) 2 (7m. 48-5s.).

200 Metres Breast Stroke: Dolly Nazir 1 (3m. 29-7s.), Arati Saha 2 (3m. 35-6s.) and W. Hoggan (Bombay) 3 (3m. 38-8s.).

100 Metres Back Stroke: Dolly Nazir 1 (1m. 45-5s.) and D. Chitale (Bombay) 2 (1m. 47-2s.).

200 Metres Free Style: Dolly Nazir (Bombay) 3m. 26-4s. (1), V. Kolge (Bombay) 3m. 38-8s. (2) and Bharati Saha (Bengal) 3m. 39-1s. (3).

100 Metres Breast Stroke: Dolly Nazir 1m. 40-4s. (1), W. Hoggan (Bombay) 1m. 41-1s. (2) and Arati Saha (Bengal) 1m. 44-2s.

3 x 100 Metres Medley: Bombay (Dolly Nazir, W. Hoggan and D. Chitale) 1, 4m. 54-9s.; Madras (L. Arnold, A. Thomas and M. Menon) 2, 10m. 2-1s.

Waterpolo

Bombay (winners): J. Naigamwala, B. S. Chandnani, G. M. Sopher, A. S. Bharucha, M. N. Bhatia, Kanti Shah and I. Mansoor.

Bengal: B. Bysack, S. Chatterjee, K. Shaw, A. Das, D. Mitra, Sachin Nag and S. Saha.

Basketball

Madras (winners): G. S. Narayanaswami, G. Ramamurthi, P. Subramaniam, Madaswami, Edwin Moses, Bheeman and K. G. Alex.

Bengal: Ramnath, B. Chatterjee, D. Chatterjee, D. Das, A. Nandi, A. Das and J. Monteiro.

Referees: A. D. Parthasarathi and M. A. Kurup.

Volleyball

Mysore (winners): Vincent Moorkooth, Surjit Singh, C. Kumaran, P. O. Varkey, K. N. Chellappan Pillai and C. Raman.

Patiala: Gurubachan Singh, Surjit Singh, Gurubux Singh, Somnath, Narain Datt and Devkimandas.

Referee: Bhattacharjee; Umpire: T. P. Joseph.

Kabaddi

Madras (winners): P. Chenchiah (Captain), T. Avadhanulu, Ch. Narasimha Rao, Y. Satyanarayana, M. Sitarani, Y. Satyanarayana and Y. Radhakrishnan.

Bengal: P. Guha, M. Mukherjee, N. Chakravarti, Y. Samader, Sushil Das, R. Dhar and Nimal Roy.

Referee: B. S. Dhawan; Umpire: Gandhe.

Wrestling

Flyweight: B. C. Mithari (Kolhapur), winner; Niranjana Das (Bengal), runner-up.

Bantamweight: Jogeswara Singh (Bengal), winner; B. B. Bhagwat (Kolhapur), runner-up.

Featherweight: Nirmal Bose (Bengal), winner; V. D. Chandratreya (Delhi), runner-up.

Lightweight: Brindaban Ojha (Bengal), winner; K. D. Mangave (Kolhapur), runner-up.

Welterweight: Jadunandan Singh (Bengal), winner; A. L. Chongule (Kolhapur), runner-up.

Middleweight: Keshav Prasad Rai (Bengal), winner; Ramji Singh (Bengal), runner-up.

Light-heavyweight: S. Jadhav (Kolhapur), winner; Anandi Ghosh (Bengal), runner-up.

Heavyweight: Oudh Behari Singh (Bengal), winner; Sardip Singh (Punjab), runner-up.

Decathlon—Men

M. Kaunds (Bombay)	..	..	5,160-39 points.
Gurnam Singh (Pepsu)	..	..	4,815-16 "
A. P. Galch (U.P.)	..	..	4,801-65 "
Pala Singh (Services)	..	..	4,790-06 "
Dalal (Services)	..	..	4,477-13 "
U. S. Rao (Bombay)	..	..	4,386-69 "
Gopalan (Madras)	..	..	4,365-72 "
D'Cruz (Bengal)	..	..	4,210-94 "
Guha (Mysore)	..	..	3,938-06 "
Nagappan (Madras)	..	..	3,494-15 "
H. Randale (Kolhapur)	..	..	2,949-24 "

Bharat Sree

Parimal Kumar Roy of Bengal won the Bharat Sree (Mr. India) competition title in the best physique competition. The competitors were classified into four divisions according to height, and a winner was chosen from each. Finally all were judged together and Roy was chosen Bharat Sree.

Final Position.—Services retained the Men's Championship. Bombay won the Women's Team championship.

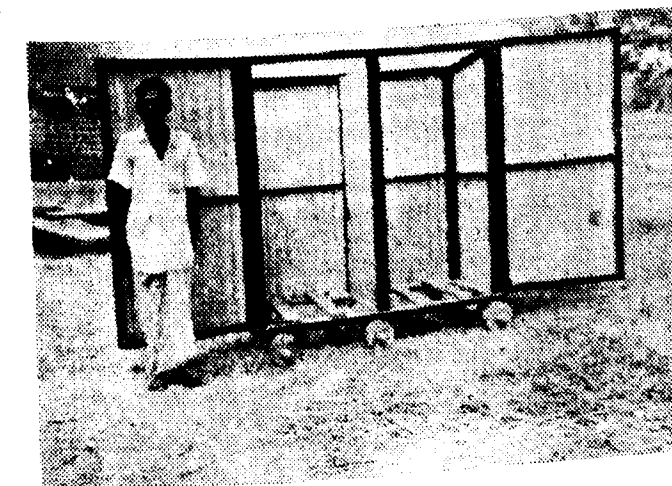
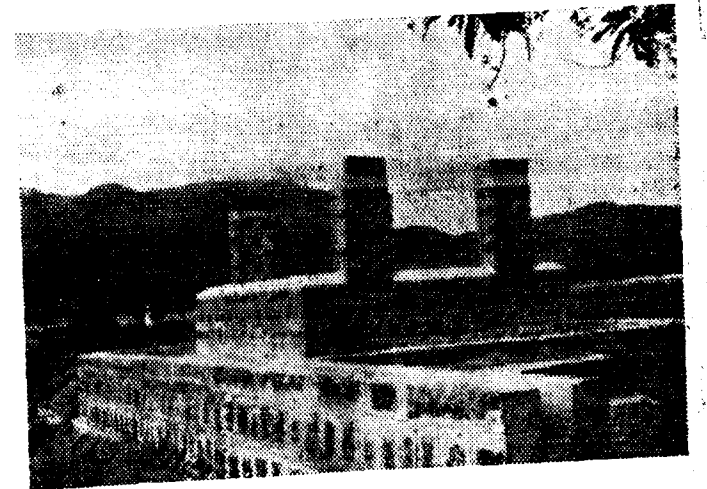
Men.

Services	..	..	108
Pepsu	..	..	33
Bombay	..	..	21
Madras	..	..	19
Bengal	..	..	13
Travancore-Cochin	..	..	7
Uttar Pradesh	..	..	7
Mysore	..	..	5
Delhi	..	..	5
Punjab	..	..	3
Madhya Bharat	..	..	3
Orissa	..	..	1
Bihar	..	..	0
Rajputana	..	..	0

Women.

Bombay	..	..	41
Mysore	..	..	22
Bengal	..	..	21
Uttar Pradesh	..	..	5
Madras	..	..	1
Orissa, Delhi and Madhya Pradesh.	..	..	0

RURAL WELFARE WORK IN TIRUMANGALAM FIRKA



Animal Husbandry: The Collector's Discretionary Grant helped to purchase this stud bull, for the Sandaiyur group. (Top left)

Water Supply: This well was constructed recently by the villagers of Kansapuram village with Government help. (Top right)

Sanitation: Movable two-seated latrines made of corrugated iron sheets and provided with six wheels are convenient for villages. They cost Rs. 80 each, but only Rs. 35 was paid for each from the Collector's Discretionary Grant, the balance being provided by the villagers. (Centre left)

Culture: Music and folk dances are indispensable adjuncts in the cultural aspect of rural reconstruction. Here girls from Pudupatti village join in a group dance. (Centre right)

Health: Sports and games are encouraged in the Rural Development Scheme areas. On Sarvodaya Day, the men of Pudupatti village enjoy the keen contest of tug-of-war. (Bottom left)

FOR
DAYLONG
FRESHNESS
AND
FRAGRANCE

A MADRAS GOVT PRODUCT



**Kerala
SANDALWOOD
SOAP**

PURE OIL BASE
KERALA SOAP INSTITUTE
KOZHIKODE

BISTA'S-KS-28

FLOWERS AND SMILES
THE PRIME MINISTER IN MADRAS CITY



In happy mood Sri J. Jayaprakash Narayan, Prime Minister, holds aloft the huge bouquet presented to him, like an umbrella, at the Corporation Stadium grounds on the evening of October 18, 1952. Enjoying the joke by his side is Dr. M. V. Krishna Rao, Minister for Education.

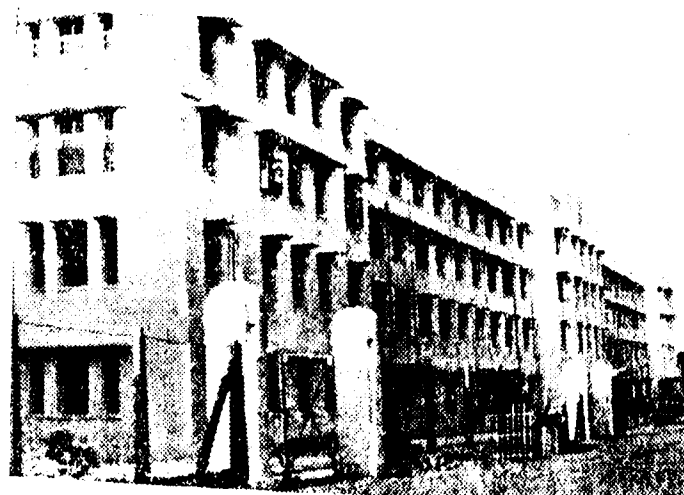
Nurses' Home Opened

Her Highness the Maharani of Bhavnagar formally declared open the Nurses' Home opposite the Madras Medical College grounds. A magnificent four-storeyed structure built at a cost of Rs. 27.70 lakhs, the building will have accommodation for 500 nurses. Declaring the Home open, the Maharani of Bhavnagar expressed the hope that more and more people would join the nursing service.

Speaking on the occasion, Dr. P. Arunachalam, Director of Medical Services, made a fervent appeal to young women, particularly the highly educated and upper classes, to take to the nursing profession.

"This magnificent and lavishly built Nurses' Home," Dr. Arunachalam said, "had been a long-felt need of the nursing personnel of the General Hospital. From the inception of this hospital, they had been accommodated on the top floor of the hospital premises, which lacked several amenities. We are very grateful to the Madras Government for taking up this scheme and completing it in spite of their financial difficulties and other commitments."

Referring to the nursing profession, Dr. Arunachalam said it was a very honourable and noble one. Nursing was an occupation as old as the story of man. In the beginning, it was the religious fervour that was responsible for the birth of nursing. Then the outbreak of wars gave a fillip to its development and now the development of medical science had given a great stimulus to it. In Madras State, prior to 1920, there was little or no skilled nursing in any of the hospitals. The missionary bodies who maintained service in their own institutions were



NURSES' HOME: The imposing facade of the Nurses' Home building recently opened by H.H. the Maharani of Bhavnagar

not in a position to train more. So Government took up the question of improving the nursing service and in 1920 on the recommendations of the Financial Regulations Committee decided to start training centres. Today they had 12 training centres and the output of trained nurses was about 250 a year.

Bhore Committee's Recommendations

The Bhore Committee, Dr. Arunachalam continued, had remarked that the service conditions of nurses in this country were deplorable. "With the gazettement of all grades of nursing superintendents and sister tutors, the raising of pay of the nursing personnel on a liberal scale, the construction of new nurses' homes in certain District Headquarters Hospitals and the leasing of rent-free quarters wherever nurses' homes are not available and with the provision of recreational facilities, the recommendations of the Bhore Committee in this regard have been implemented," he said. "Even prior to the findings of this Committee being published, Government had realised the need for improving the nursing service and conferred the gazetted ranks on all grades of nursing superintendents and sister tutors." The Bhore Committee had remarked, Dr. Arunachalam said, that there were only 7,000 trained nurses in India or one nurse per 43,000 of the population, whereas the target was one for every 500. So far as Madras was concerned, every effort was being made to close the gap as quickly as possible by increasing the strength of the nursing personnel in the hospitals and also the number of the trainees. During the last three years the nursing strength of the Department had been increased at the rate of about 100 a year; in 1948, it was 1,143 and in 1951 it was 1,462. The total number of nursing superintendents in 1940 was only 13 but today there were 33. Today they had 130 head nurses compared with 33 in 1940.

The number of pupil-nurses today was 750 while in 1940 it was only 312. A change had also been effected in the ratio between nurses and patients from 1:14 to 1:8 patients, while in teaching hospitals it had been fixed at

1:2.5 pupil-nurses in addition to one nurse for every 15 patients. Further, all taluk hospitals had been provided with nursing staff on the scales prescribed by the Government.

The response from the public between 1918 and 1922 to the nursing profession, Dr. Arunachalam said, was very meagre, but the improvements in service conditions and training through all these years had prompted a large number of young boys and girls, possessing higher educational qualifications than the minimum prescribed, to come forward to take up the profession. "Today we have more applications than we have seats in the training centres. There is nobody in the waiting list for appointment, as a large number of appointments have been sanctioned recently, necessitating the absorption of all the available trained nurses."

Future of Nursing in Madras

"The future of nursing in this State is very bright and hopeful. With the opening of new Medical Colleges at Madurai and Guntur, involving a corresponding expansion of the associated hospitals, with the upgrading of the Departments of Venereology at the General Hospital and the Maternity and Gynaecology Department at the Women and Children's Hospital, Egmore, and the opening of the special departments for chest surgery and neuro-surgery, there is bound to be employment of several additional nurses. It would also result in detailing some of the nursing personnel to undergo special training in these subjects. Do not let slip this golden opportunity. Do not hesitate or lag behind; dispel all fear or doubt on the alleged apprehension of having a bad living accommodation at the training centres. The highly educated and upper class families should cast aside any misgivings about lack of accommodation or lack of experienced teaching personnel and come forward to take up this profession," he said.

Continuing, Dr. Arunachalam said that male nursing in India was a new venture and Madras was the first to try it and it had come to stay permanently not only here but elsewhere. It was not with a sense of rivalry or competition that male nursing was introduced in Madras. Certain departments and institutions precluded the employment of women nurses. Therefore, male nursing was visualised as the only alternative by the former Health Minister, Dr. T. S. S. Rajan, in 1938. Dr. Arunachalam said he did realise that the amenities provided for male nurses were not so good as for women, but he would assure them that neither their good work nor their interests were lost sight of and by and by their lot was bound to improve.

The Building Scheme

Sri T. S. Venkataraman, Chief Engineer to the Government (Buildings), said that the Government had originally sanctioned a building scheme for Rs. 23,80,400. While the work was in progress, Government sanctioned another building scheme at a cost of Rs. 7.65 lakhs on the Stanley Hospital grounds. But it was later decided that the nurses Hospital should also be accommodated in this Nurses' Home. A new combined scheme at a cost of Rs. 27.70 lakhs providing for an additional third floor of light construction, was sanctioned by the Government. The building was easily one of the biggest in the State. Its floor space exceeding one lakh square feet, the doors and windows numbering more than a thousand, while the aggregate length of all the corridors in the building was

nearly three-fourth of a mile. It was hoped that Government would soon be in a position to permit fans to be fitted up. The only item of work yet to be taken up was quarters for 50 servants. It was designed to house 208 nurses, 72 pupil-nurses, 97 staff nurses, 102 night nurses, and 24 sisters. The total expenditure up-to-date was Rs. 22.60 lakhs.

Dr. R. V. Rajam, Dean, General Hospital, said that he had suggested that the pupil-nurses of the Lady Hope School of Nursing, living in the adjacent building, could also be accommodated here. This had resulted in making the residential portion of the Lady Hope School available as a hostel for the women medical students, who till now, had been living in a small rented building in Kilpauk in conditions far from satisfactory. The women medical students had recently shifted to their new hostel in the Lady Hope School. The employment of a Home Sister for the Home was an absolute necessity and representations had been made to the Government to sanction this appointment.

Servants' Quarters

Dr. Rajam said the proposal for the construction of quarters for the servants employed in the Home had to be abandoned first at the instance of the City Improvement Trust who held that the building would mar the structural beauty of the Home. It had been since decided to erect a building on the original site in a manner acceptable to the Trust authorities. The Dean also suggested the opening, in course of time, of an underground passage from the Nurses' Home to the General Hospital. Dr. Rajam added: "The construction and completion of the Nurses' Home is a major landmark in the cause of nursing education in the State, and the existence of the Home in immediate proximity of the Medical College, General Hospital and the Lady Students' Hostel gives the concept of a unified self-contained medical centre. It is hoped that with the new diversion of the General Hospital Road along the Ordinance Lines as contemplated by the Improvement Trust, the eastern part of the Hospital Road between the Medical College and Nurses' Home, up to Sir T. Muthuswami Iyer Road, will become the private road of the Medical Centre, not open to public traffic."

Training of Midwives

The Government have accepted, with thanks, the offer of the Cuddapah Municipality and the District Committee of the Madras Provincial Welfare Fund, Cuddapah Branch, to donate a sum of Rs. 1,509 each for the training of two midwifery pupils each at the Government Headquarters Hospital, Cuddapah, from December 1, 1951.

The offer of Sri P. Ramana Reddi, Landlord, Mantapampalle, Cuddapah District, to donate a sum of Rs. 754-8-0 for the training of one midwifery pupil at the same hospital from December 1, 1951, has also been accepted with thanks.

More Beds for Visakha Hospital

The Government have sanctioned the increase of the bed strength of the King George Hospital, Visakhapatnam, from 700 to 794.

Remission: North Arcot

The Government have sanctioned the grant of wet and dry remissions, on the scales indicated below, for fasli 1361, in the entire district of North Arcot, which has been affected by adverse seasonal conditions:—

Wet lands.—Full remission for wet lands with an outturn of four annas and below; no remission for wet lands with outturn of above four annas.

Dry lands: food crops (cereals and pulses).—Full remission for food crops with an outturn of four annas and below; half remission for food crops with an outturn of above four annas and below eight annas.

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.

The Government have directed that the loan instalments and arrears, which should be collected during the current fasli, be postponed by one year till fasli 1362 in the entire district of North Arcot.



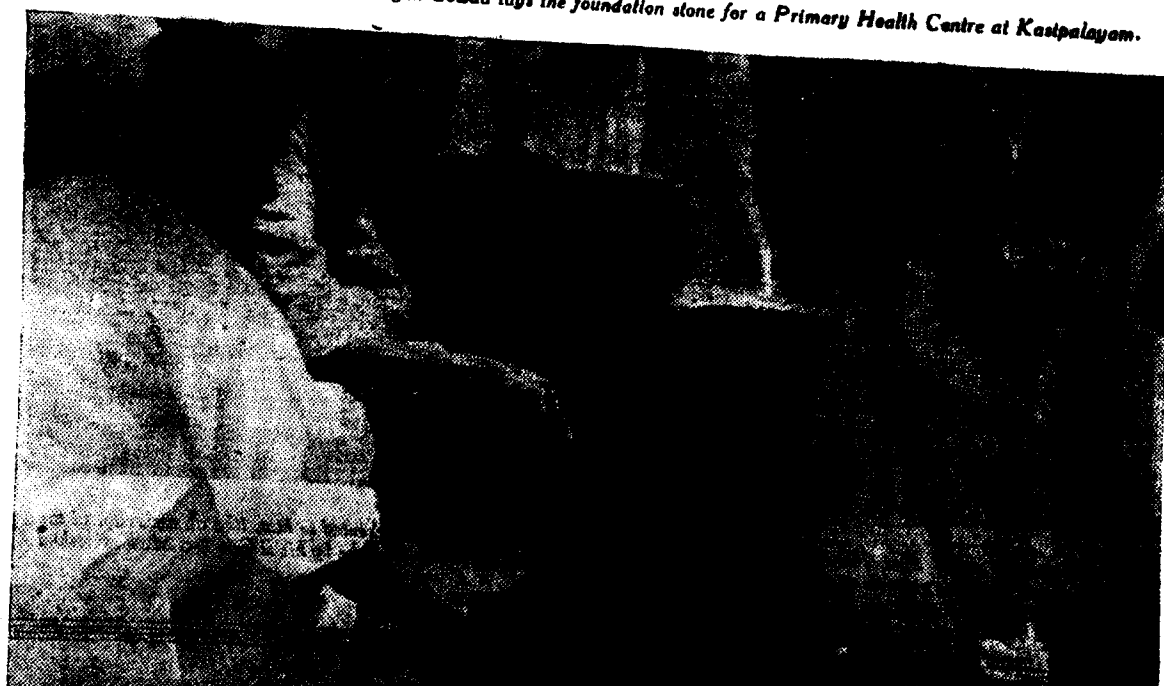
COMMUNITY PROJECTS INAUGURATED: The Community Project (The Lower Bhavani Project—Coimbatore and Tiruchtrappalli Districts) was inaugurated on October 2, 1952, by Dr. R. Nagan Gowda, Minister for Agriculture. Here the Minister is seen helping to build a new road, part of the day's programme.

GRAM-KALYAN



COMPOST: A deep pit is dug and waste will be converted to manure wealth.

HEALTH CENTRE: Dr. R. Nagan Gowda lays the foundation stone for a Primary Health Centre at Kasipalayam.



COMMUNITY PROJECTS

5

Welfare of Our Villages

By DR. RAJENDRA PRASAD, President of the Indian Union.

India lives very largely in villages and although during recent times the urban population has been increasing in rapid strides, it is still true that India lives mostly in villages. Anything done to bring about an all-round improvement of the villages and those who inhabit them should not only be welcomed, but given all possible encouragement by the State and by the people at large. Mahatma Gandhi therefore attached the greatest importance to the welfare of the villages. It is a happy idea to inaugurate the Community Development Programme on his birthday.

The terms, "Community Development" and "Community Project" are new, but the concept is very old. Basically, the concept is of many-sided development as distinguished from development relating to particular aspects. Experience in the working of the Grow More Food Programme as well as the programmes undertaken by various State Governments and private agencies functioning in the sphere of village uplift, has established that "all aspects of rural life are inter-related, and that no lasting results can be achieved if individual aspects of it are dealt with in isolation. This does not mean that particular problems should not be given prominence, but the plans for them should form parts of, and be integrated with, those for achieving the wider aims." This can be achieved only if the energies of the administrative machinery of the States and the best unofficial leadership and enthusiasm of the masses, are all enlisted in its favour and concerted action is taken for the all-around improvement of agriculture, education, health, sanitation, welfare of cattle, provision of employment, etc.

Under the inspiration given by Gandhiji, a large amount of selfless work has been done by his followers in various parts of the country, and other organisations and individuals have also done considerable work in that direction. The resources, however, both in money and technical personnel, available to these have been limited and the progress consequently has not been as rapid or extensive as one would have wished. The Indo-United States Technical Co-operation Agreement of January 1952 has, I am happy to say, opened up new possibilities of advance along these lines.

Food and Agriculture

I have always believed that the Indian peasant is no novice in agriculture and has practical experience which goes back to many generations. The remarkable adaptability with which the Bihar peasant, for example, has taken to the cultivation of new varieties of sugarcane to suit the requirements of sugar mills which have grown up during the last two decades, shows quite clearly that the charge that the Indian peasant is conservative and does not care to adopt improved methods cannot stand scrutiny. What

is necessary therefore is to demonstrate to him to his satisfaction that a new method or a new variety gives a larger yield or is otherwise profitable.

The most serious problem facing the country today is the one relating to insufficient production of food in the country. Even before the last Great War, India had been importing about 1½ millions tons of rice every year from Burma. The deficit has increased as a result of partition in consequence of which the surplus areas of West Punjab and Sind have gone over to Pakistan. The increase in annual demand for foodgrains on account of increase in population has also been appreciable. To augment internal supplies it has been necessary for Government to import large quantities of foodgrains, the imports in the year 1951 reaching the figure of 47 lakhs tons.

Irrigation Projects

Our Planning Commission, the Government and all thoughtful people have been anxiously considering ways and means of increasing the food production for the purpose of closing this gap between production and requirement. The big river valley projects, some of which are already taken in hand, and others which are under contemplation, will take time to be completed and are not expected to yield immediate results. For meeting the present deficit, we shall have to rely very largely on the minor irrigation projects, such as wells, tanks, tubewells, utilisation of water available from small rivers, rivulets and channels and repairing and putting up bunds and embankments for storing rain-water to be utilised when required. I am convinced there is a great deal of scope for these small projects and I have no doubt that if these are satisfactorily handled, we shall be able to close the existing gap in our food supply.

I am happy therefore to notice that in a community project area covering approximately 300 villages and 150,000 acres of cultivable land, nearly a third of the expenditure will be on minor irrigation works. If these are carried out through co-operative societies and the people living in these areas contribute in labour, which absorbs nearly 80 to 90 per cent of the expenditure on these small irrigation projects, the amount made available for this purpose will go a very much longer way than would otherwise be the case. I am hoping that this voluntary labour will be coming forth in an abundant measure to make these projects not only successful but also more extensive than if they are to be carried on only with the help of the money made available.

Scientific Research

Next to water, comes manure. This may be either chemical or organic or rather a combination of both. For chemical manure, provision has been made in the Fertiliser Agreement with T.C.A. for 100,000 tons of fertiliser being made available. This will be supplemented by supplies from the output of the Sindri Factory. But increasing attention will have to be paid to the optimum utilisation of compost and farmyard manure and other organic village manurial resources which have not been

Broadcast by Dr. Rajendra Prasad, President of India, on the Inauguration of the Community Development Programme at New Delhi on Thursday, the 2nd October 1952.

Amrit Nagar: Colony for T.B. Ex-Patients

Among the mighty battles that have to be fought to a finish by the powers that are in New India, one of the foremost and the fiercest is the battle against scourges like Tuberculosis. Tuberculosis is a killer that comes silently, stealthily—an enemy that overpowers even before the victim has a chance to recognise the shadow at the door. And when even one step is taken against this vicious enemy, it is a matter for rejoicing. It is in this context that the opening of 'Amrit Nagar,' the Colony for the Tuberculous (Ex-patients) at Tambaram, opposite to the Government T.B. Sanatorium, has to be viewed by all who have the all-round reconstruction of the country at heart.

The Colony, named after Rajkumari Amrit Kaur, India's Health Minister, was declared open on March 3 by Sir Archibald Nye, High Commissioner for the United Kingdom in India.

The scheme for constructing an ex-patients' Colony was first conceived by Dr. K. Vasudeva Rao. The idea was given concrete shape by Lady Nye. The Madras Provincial Welfare Fund agreed to allocate sufficient money for the colony. The progress in the initial stages was slow due to various unexpected difficulties. However, the scheme was pushed through and today the Colony consists of eight cottages to house 16 single members and a printing press building with two additional huts. Arrangements for sanitation, water-supply and electricity have also been made and the printing press and other machinery installed.

Rehabilitation

The problem of rehabilitation of patients is as important as cure of the disease. Very often it happened that the patients who were cured were sent out immediately from the Sanatoria. The prospects facing the ex-patients were usually grim. They were too weak to take up their original work, nor would they be willingly taken back in their original avocations. Usually, they were also not trained in any light occupation which would rehabilitate them economically, without hard manual labour. But economic necessity drove them inexorably to some work or other. This almost invariably led to a relapse or worse.

The Ex-patients' Colony is intended to avoid just this. The ex-patients are those whose disease had been arrested; they are taken care of in the Colony, at the same time given trained in some light occupations, which would eventually make them fit for absorption in social and economic life. The Colony is modeled on the Papworth Colonies in England where rehabilitation of the Tuberculous is being carried out extensively and successfully.

Pilot Scheme

Sri C. Perumalswami Reddiar, Minister for Industries and Health, took over the Colony on behalf of the Government of Madras. He expressed the hope that there would be close and continuous co-operation between the philanthropic public and the Government so that it would be possible to expand the activities of the Colony as occasion rose.

Dr. P. V. Cherian, President, inviting Sir Archibald Nye to declare the Colony open, requested him to convey the gratitude of the citizens of Madras to Lady Nye for all that she had done.



WORK FOR T.B. Ex-PATIENTS: Sir Archibald Nye, after opening the Amrit Nagar Colony for T.B. Ex-Patients, inspects a printing machine installed to provide light employment for convalescent patients

Sir Archibald Nye said that what has been accomplished was just the beginning. He said: "This is a mere start. It is roughly one-third of what we want to accomplish. This is a pilot scheme. We want to get three times the number of cottages that we have at the moment in order to complete this one particular Colony. And we want to be an example to other parts of this State and to encourage other people to do what we have done at Tambaram. Therefore, we want more money. This is a major thing. I would ask you not to relax in your efforts and not to leave things as they are and go away with the feeling that we are content. We cannot be content until many more buildings are put up and until the whole of this Colony is made self-sufficient and self-supporting which can certainly be done."

Gift of X-Ray Plant

The Government have accepted, with thanks, the offer of the Committee of the Skippo Roadside Hospital, Kodaikanal, to donate an X-ray plant, received from the New Zealand Corso Organisation, as a permanent gift to the Government Hospital, Kodaikanal. The Government have accepted the suggestion of the Committee that free treatment should be given to the poor people who are served by the Skippo Roadside Hospital van.

Hospital for Rampachodavaram

The Government have agreed to take over the Local Fund Hospital at Rampachodavaram in the Agency area in East Godavari District and have also sanctioned the provision of 12 beds for the hospital.

The Government have also agreed that the Government Dispensary at Maredimilli in East Godavari be closed and that the Itinerary Dispensary at Mudgole in Visakhapatnam District be transferred to Rampachodavaram.



AMRIT NAGAR

Sir Archibald Nye recently declared open the Amrit Nagar Colony for T.B. Ex-Patients at Tambaram.

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so far as fully exploited as they can be. Improved seeds and improved methods of cultivation with improved implements, will also have to be made available to the cultivator for increasing the yield.

In all these directions attempts will be made to utilise the results of scientific research. Hitherto each Department of the State has approached the villager through its own hierarchy and the weakest link in each is the last official who has to be in touch with the villager. In order to get over this basic difficulty, the Community Development Programme quite rightly lays a great deal of emphasis on the setting up of an organisation for intensive rural work similar in conception to the "extension" or "advisory" services in the United States of America and the United Kingdom and elsewhere. The basic idea is that at the project headquarters, there will be experts in agriculture and animal husbandry, co-operation, agricultural engineering, etc., and for a group of villages there would be a village level worker or Gram Sevak who will have a basic training in agricultural science and animal husbandry supplemented by intensive training in extension methods and practices. He will be the carrier of the message to the door of the villager and will thus form the pivot of the scheme of development in these areas. He will be a multi-purpose man and his work will not be conceived or executed along narrow departmental lines, but will be intended to inspire people and enlist their enthusiasm for a fuller life and for earning the wherewithal for it.

Agricultural Finance

No scheme of agricultural development can succeed unless adequate facilities are provided for agricultural

finance. These are of two kinds: (1) long and medium term, and (2) short term. For the long and medium term loans required for financing minor irrigation works or land reclamation, there is a provision in the community development budget although it is necessarily of a modest nature. For the short term loans, no provision has been made and here the success of all these efforts will depend on the growth of a healthy co-operative movement. The workers in the project areas therefore must aim at the early establishment of a multi-purpose co-operative society in every village or group of villages. In addition to providing for the short term credit needs of the people, the co-operative society will act as an educative agency of very great value and will also assist the villagers in supplementing the small amount of money which is now being made available for rural development. The co-operative credit societies which have been tried on an extensive scale in the country have not given as good results as one would have wished and it is therefore necessary to be careful and cautious in their handling and it is to be hoped that their multipurpose nature will make it possible for them to function in a more satisfactory manner and meet the various needs of village life.

A project area consists on an average of 200,000 people, which will mean approximately 50,000 employable adult male workers. Owing to seasonal conditions, work in agriculture is carried out only for a fraction of the year. Over four-fifths of the country where there are no irrigation facilities, this period is three to four months in the year. Even in areas where irrigation facilities exist, the working period is no more than six to eight months in the year. It will therefore be safe to assume that the 50,000 workers in the project area have, on an average, about half the year



ROAD WORK: The Agriculture Minister helps to build side drainage for the road

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idle time on their hands. This reveals the dimensions of unemployment and under-employment in the countryside and unless this time is fully utilised, the work of village uplift will remain incomplete. The nature of agricultural work is such that this spare time is not available in a continuous stream but is broken up in little bits and it can be utilised only if alternative occupation in the form of village and cottage industries can be provided which will not require continuous operation but could be interrupted and taken up again without imposing any serious dislocation or loss.

Programme of Full Development

My hope is that along with the work for agricultural improvement, this side of the problem will also be given due attention, so that the time which is now wasted perforce might be utilised. If even a quarter of this idle time could be harnessed for voluntary effort or self-help in programmes which are their own, the contribution which the village people would be making through their efforts will be able to provide an amount equal to the provision made in the Community Development Programme.

Full development of a community cannot be achieved without a strong educational base and without a satisfactory health programme. I am glad to find that in education, emphasis has been laid on the expansion of basic educational facilities. The health organisation of the project area will consist of primary health units and a mobile dispensary at the headquarters of the project

area and serving the area as a whole. It is to be hoped that it will be possible to expand these educational and health facilities as the economic condition of the people living in the project area improves as a result of these developmental activities and there is an all-round improvement in agriculture and village and cottage industries resulting in a general rise in the economic condition of the people.

The work ahead is difficult. A small beginning is being made. If we make a sincere effort, the small seed which we are sowing today will grow into a huge and mighty tree in course of time. I therefore appeal to all, whether directly connected with the execution of this programme or not, to make their contribution to this effort and make it a success. Those areas which have been selected for these projects should consider themselves fortunate, but they also should realise their responsibility because on their success depends the future expansion and extension of these projects. The Government help as also the aid generously given by the U.S.A. will undoubtedly go a great way, but there is no doubt that unless the people take up this work as their own and put their heart into it, with a determination to make it successful, the result cannot be satisfactory. It has therefore to be taken up in a spirit of service and with enthusiasm. Mahatma Gandhi used to look upon all work for the common benefit as *Yajna* and it is in this spirit of *Yajna* that the work has to be undertaken and accomplished. I can only hope and pray that the Government and the people will travel together hand in hand in this mighty effort.



SANITATION: Mass street cleaning is one of the items in the village betterment campaign of the Community Project

Police Medals for Gallantry and Merit

Awarded for Gallantry:

Sri Koka Subba Rao,

Sub-Inspector of Police.

On receipt of information that a group of notorious gangsters was putting up in two houses in Bapatla in Guntur District, a raid was organised by the Police on the night of 2nd November 1950. The Police party consisting of Sri K. Subba Rao, Sub-Inspector of Police, and one section of the Malabar Special Police under the leadership of Sri Ramanujachari, Inspector of Police, on reaching the spot, cordoned off the area. Sri Subba Rao tapped at the door of the suspected hide-out. On noticing the Police cordon the gangsters concealed themselves and fired at the Police party. The Police returned the fire. On account of darkness and smoke inside the hide-out the Police party could not sight the raiders properly. Sub-Inspector K. Subba Rao received three revolver shots in the hand. Though badly injured the Sub-Inspector with the aid of his Inspector and the rest of his men faced the situation boldly and shot down two opponents who were identified to be too notorious bad characters, long wanted by the Police. Unfortunately in this scuffle Sri Ramanujachari received a grievous injury, having been hit by a revolver bullet in his stomach which ultimately proved to be fatal.

In this encounter both Inspector Ramanujachari and Sub-Inspector Subba Rao displayed great courage, conspicuous gallantry and commendable devotion to duty.

Pasupuleti Thirupaliah,

Jamadar No. 26, Special Armed Police.

In the early hours of the 13th September 1948, a platoon of F. Company of the Special Armed Police under Sri P. Thirupaliah's command was ordered to go forward to

engage raiders who were intending to attack the villages across the border of Bellary District. On the afternoon of the 14th September 1948, the platoon fell back to one end of a railway bridge, where, in order to safeguard this strategic point, it took up a defensive position. Throughout the evening and night of the 14th September 1948, the Special Armed Police Company beat back repeated enemy attacks, coming under the heavy fire the whole time from a range of only 200 yards. All along Jamadar Thirupaliah kept together his platoon, consisting practically of raw recruits. He maintained their morale by encouraging them and manning the platoon Bren-gun himself. Though worn out by continuous exertions to which he had been subjected throughout the previous 48 hours, the Jamadar continued to handle the Bren-gun, worrying the enemy with repeated fire till 7 a.m. on the 15th September, when he fell grievously wounded in the thigh with a heavy calibre bullet from a sniper's rifle.

Keeping his platoon of raw recruits together by determined leadership in the face of great and continuous danger, and in setting them a personal example by himself manning the Bren-gun, Sri Thirupaliah, who himself had put in only about nine months' service in the force, displayed exceptional courage and gallantry.

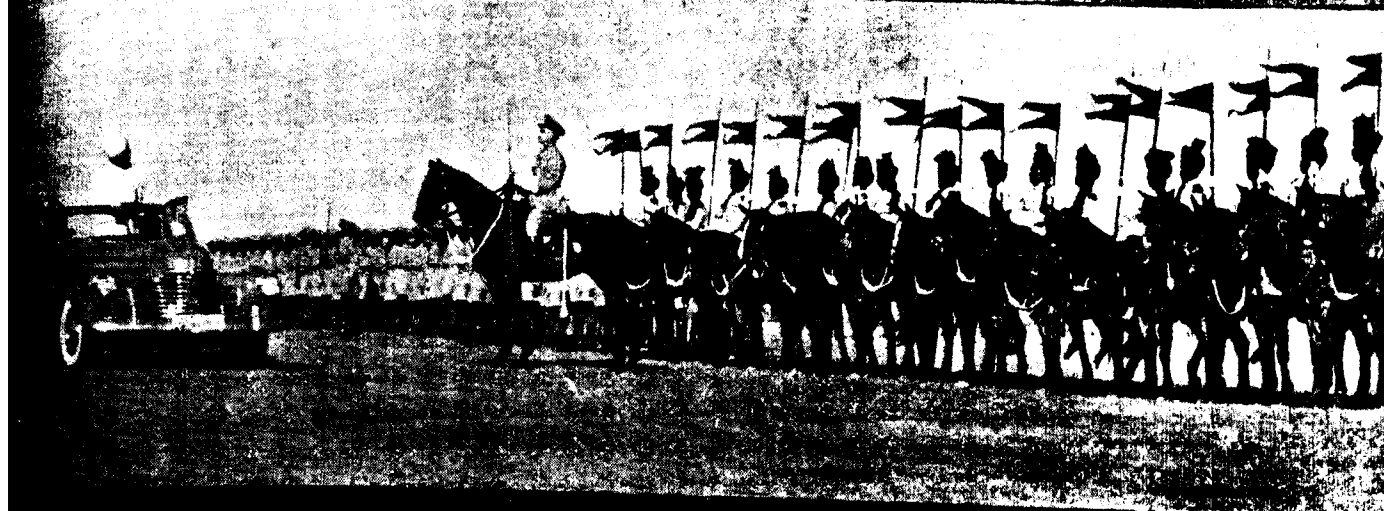
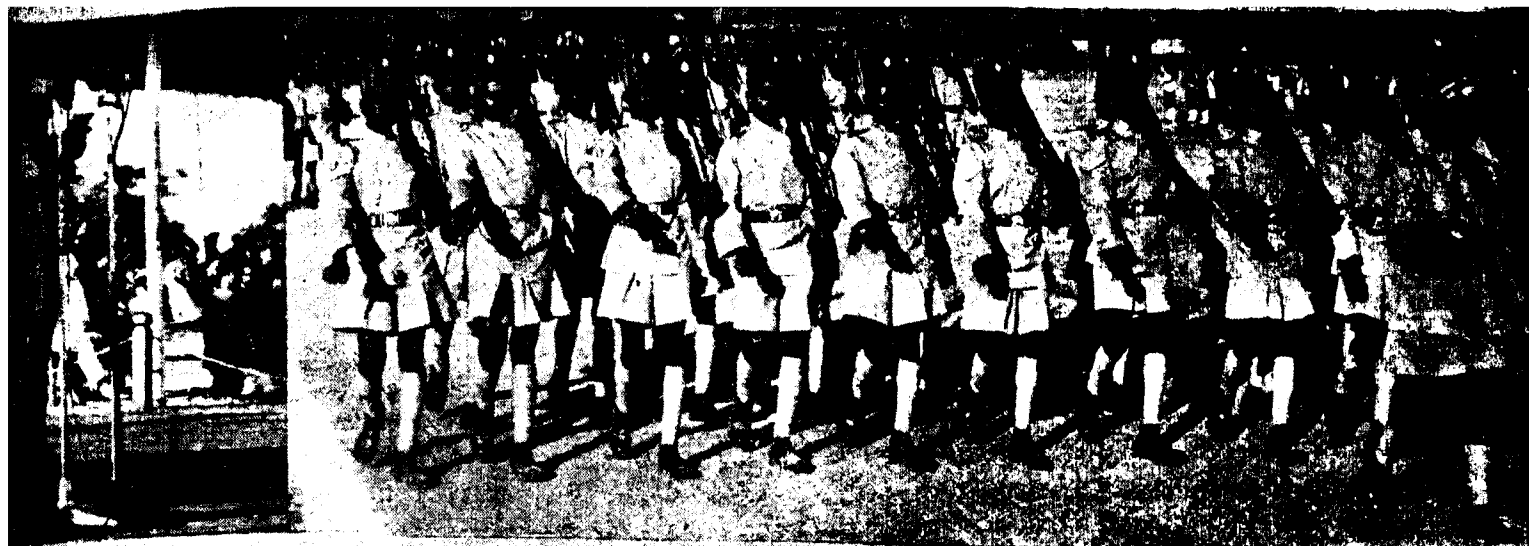
Kottarathil Balakrishnan Nayar,
Constable No. 2674, Malabar Special Police.

Renganatha Mudaliar Govindaraju,
Constable No. 260, Special Armed Police.

Subba Naicker Subbiah Naicker,
Constable No. 207, Special Armed Police.

Chinnakorukonda is a village between Peddavaram and Nemali villages in the Krishna District. A band of about 48 men were camped in tents near a small hillock in the village. Members of this gang had committed havoc in the neighbouring villages, extracting money,

AWARD OF POLICE MEDALS: H.E. the Maharaja of Bhavnagar pins a gallantry medal on one of the recipients



PRESENTATION OF POLICE MEDALS

H. E. the Maharaja of Bhavnagar presented the President's and Police Medals for Gallantry and Merit, at a ceremonial function.

Photos show the March Past and the Review and scenes from the Tattoo held at night by the Police forces.



Gram-Kalyan

By SRI C. RAJAGOPALACHARI, Chief Minister of Madras.

The concept of the Community Project is based on the faith that gram-kalyan can be brought about by the joint efforts of the public services and the people, if properly co-ordinated and directed.

During the next three years, there will be pilot plants of gram-kalyan in a number of places throughout the country. The essential principle of this plan is the gospel of work. All the people of the area must be persuaded to work in close and intelligent co-operation with the public servants and technical officers placed in that area. The Community Projects are pilot plants of the big idea of Bharat Gram-Kalyan. The scheme will be implemented in the selected places during three years. Thereafter it is expected that the work will stand on its own legs, and will be a model and an incentive to people in other areas, showing to them the true and only way to happiness, namely, work—manual work—the use of the body and the intelligence with which the universal mother, Nature, has endowed us. The gospel of work was taught by Sri Krishna in the Gita. It was the theme of all Gandhiji's teachings through spoken word and writing.

The Joy of Service

When work is done by a group of people for the good of all, the task becomes a joy in itself. The assured fruits of work in the shape of water or food or a transport facility or a sanitary amenity is one thing, but in the association of one another in a task, over and above the material result, there is a joy issuing out of it like the *amrit* that issued from the ocean when the Gods churned it. This joy can be felt only when men actually work together. Weavers weave each for himself; but when they all meet in the pavadi, the warping ground, and each works for all, there is a festive atmosphere and a joy which even outsiders can see at the place.

The first thing to be achieved in gram-kalyan is the production of food, good nourishing food and enough of it.

The Taittiriya Upanishad taught the gospel of food production long before the present age of deficit.

Annam bahu kurvita tadvatam.

Na kanchana vasatipratyachakshita tadvatam.

Tasmadyaya kayacha vidhaya bahvannam prapnuyat.

Make plenty of food. This is *vatam*, a sacred duty and a pledge. No one who comes as a guest should be sent away unfed. Therefore by every means available, *yaya kaya vidhaya* make and keep plenty of food.

But man wants not merely food for his body. His intelligence and his spirit require help and guidance for growth and happiness.

Programme of Improvement

The programme of gram-kalyan includes improved agriculture and reclamation of all available land and the utilisation of all local resources and the making of good feeder roads to make transport easy and speedy and to link up all the villages in the area more closely together. But it includes also education and sports and entertainments.

The Projects include the provision of facilities for the fuller education of working children and vocational and technical training to those who have no family craft to follow. Again, what is necessary for the betterment of the health of the area will be attended to, especially in the matter of good drinking water and the proper disposal and utilisation of human and animal waste. In Nature's wonderful workshop, as Marcus Aurelius wrote down in his *Meditations*—and the same thing was sung in the Upanishads in other words—all waste matter is reconverted by Nature into something fresh and useful. There is nothing that decays but is again ready to be remade into fresh living substance. Everything is good for something else and man's skill consists in utilising this great law of Nature and making his environment clean and tidy. Waste is wealth if man knows how to assist Nature, that is to assist himself.

Special attention will be given to what is woefully lacking now, viz., proper medical attention for those who need it. The development of cottage and small-scale industries to absorb all those who now over-burden the peasant families is an important part of gram-kalyan. Efforts will be made for bringing into being satisfactory housing conditions for all classes of people, suitable for their work and in accordance with their way of living. Sports and community entertainments of a healthy, simple but exhilarating nature will be organised for men and women and children. More joy comes out of an hour's good play than out of a purseful of money.

Six Centres in Madras

There are about sixty centres of this nature in India and in Madras six centres of gram-kalyan. Pilot schemes have been located in various parts. All officers of Government will help in the carrying out of plans and in the district there will be advisory committees of disinterested men who will take keen interest in the work for its own sake; each project area will be divided into three blocks for co-ordinated development, each block comprising 100 villages and a population of round about half a lakh.

Success will depend on the spirit in which the people will work and the officers guide and assist. It is not a gift from Government to people. It is a plan of work for all the people including the officers of Government and the members of the Legislature, a plan of work for happiness wherein there is no fear of failure or disappointment and wherein there is much joy, the like of which inspired men in olden days and which in recent times has almost been forgotten.

The revival of this joy in working together and for the community's sake is indeed revival of life. It is a project of revitalisation of the community. It is called by the prosaic name of Community Project but it is gram-kalyan—a festival of Lakshmi.

(A.I.R., Madras)

Community Projects Inaugurated on Gandhi Jayanthi

The Community Projects in Madras State were inaugurated on 2nd October 1952, Gandhi Jayanthi Day.

Project Areas: The areas selected for the implementation of the six rural-cum-urban Community Projects allotted to this State are:—

(1) K. C. Canal Area—Cuddapah and Kurnool Districts (parts of Cuddapah, Prodatpur, and Jammalamadugu in Cuddapah District and Kurnool, Sirvel, Nandyal, Nandikotkur and Koilkuntla in Kurnool District); (2) Lower Bhavani Project—Coimbatore and Tiruchirappalli Districts (Gobichettipalayam, Erode, Bhavani and Dharapuram in Coimbatore District and three villages in Karur in Tiruchirappalli District); (3) Malampuzha Project—Malabar District, Palghat Taluk; (4) East Godavari District—Kakinada, Ramachandrapuram, Peddapuram and Pithapuram Taluks; (5) Periyar Project—Madurai District (parts of Nilakottai, Madurai and Melur Taluks); (6) South Kanara District—Karkal, Mangalore and part of Coondapur Taluks.

Each Project area is to consist of about 300 villages with a population of 200,000 divided into three development blocks of roughly 100 villages each. The development of these blocks will be taken up one after the other within the first three years from commencement.

The above six Projects were selected with reference to irrigation facilities or assured rainfall so that the expenditure incurred will produce the maximum results in the matter of increased agricultural production in the shortest time possible.

Objects of the Projects: The main object of setting up the Projects is to increase food production in the areas chosen, in close co-operation with the local population and also to provide auxiliary facilities for community development under a single agency in the fields of cottage industry, sanitation, education, public health, medical services, etc.

Broad Features of the Scheme: The main lines of activity which will be undertaken in a Community Project, can be briefly divided into the following:

Agriculture and related matters, Communications, Education, Health, Supplementary employment, Housing, Training, Social Welfare.

Brief Description of the Work so far done: The Project Executive Officers in charge of the Projects and the Assistant Project Officers have already been appointed. Arrangements are being made to recruit technical personnel, village level workers and supervisors for running the Projects. In the case of village level workers and supervisors, the staff immediately required to start the work will be recruited from the existing personnel in the Agricultural Department. The establishment of the three training centres for giving adequate training to the personnel who will be specially recruited by advertisement for work in the Project is already under progress. The preliminary survey of all the villages included in the Project Area has been completed.

The following are the Project Executive Officers for the various areas:—

1. Sri M. Bapineedu—Samalkot, East Godavari District; 2. Sri N. S. Varadachari—Nandyal, K. C. Canal Area; 3. Sri N. Krishnaswami—Erode, Lower Bhavani Project; 4. Sri M. G. B. Jasubramaniam—Palghat, Malampuzha Project; 5. Sri G. Simhadri—Mangalore, South Kanara District; 6. Dr. (Mrs.) Soundaram Ramachandran—Madurai, Madurai District.

The Projects were inaugurated on October 2nd, 1952, Gandhi Jayanthi Day, by:—

Sri S. B. P. Pattabhirama Rao, Minister for Rural Welfare—Samalkot, East Godavari District; Sri N. Ranga Reddi, Minister for Public Works—Nandyal, K.C. Canal Area; Dr. R. Nagan Gowda, Minister for Agriculture—Erode, Lower Bhavani Project; Sri K. P. Kuttikrishnan Nair, Minister for Law—Palghat, Malampuzha Project; Sri V. C. Palaniswamy Gounder, Minister for Prohibition—Mangalore, South Kanara District; Sri K. Venkataswami Naidu, Minister for Religious Endowments—Madurai, Madurai District.

Transfer of Pensions from Dominions: Further Extension in Time

With regard to the procedure for transfer from the dominion of Pakistan to the dominion of India and vice versa of pensions of pensioners of the Central and State Governments of either dominion, the President has decided to extend, for a further period up to 31st March 1953, and subject to the existing conditions, the present arrangements for the payment of advances of pensions to displaced pensioners, pending the transfer of those pensions.

Advances will continue to be admissible during this period only to those pensioners who are already in receipt of such advances, and to the same extent.

Panchayat Members' Term Extended

The Government have further extended the term of office of members of Panchayats, constituted under the former Madras Local Boards Act, 1920, from October 1, 1952, to January 2, 1953. This action has been taken as preparations for holding elections to Panchayats will take some more time.

LAW AND ORDER

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ooting houses and beating up people. To tackle the gang at Chinnakorukonda successfully, the villages of Khajipuram and Kollur had first to be occupied, so that the gang could not get any help or reinforcement from these places. These villages were occupied on the 13th and 15th September 1948, respectively by detachments of the Malabar Special Police and Special Armed Police from Peddavaram and Nemali villages. An attack was launched on Chinnakorukonda by detachments on the morning of the 16th September 1948, under the command of the Inspector. The enemy took cover on the hillock and opened fire on the Police forces. As the enemy could not be dislodged from the hillside trenches, men were sent to attack the trenches with hand-grenades. This action resulted in the death of a member of the gang and injuries to three others. The enemy immediately left the trenches and moved up the hillock. While more hand grenades were thrown, the Inspector with six men attacked the enemy from the side with Bren-guns and rifles. The enemy could not hold the hillock any longer and tried to escape from behind the hillock under cover of fire. The gang soon realised that they were in a helpless position and 37 men including the leader surrendered. A number of arms and a good deal of ammunition and cash were seized from them.

The encounter was a long one lasting from 8 a.m. to 3-30 p.m. The constables who took a leading part in the attack were injured with gun shots. In this operation they showed courage and determination of a high order.

Andi Naicker Vellaswami Naicker,

(deceased), Constable No. 176, Tirunelveli District.

On the night of 22nd May 1950, at 8-30 p.m. one Pandia Thevar and his three friends were waiting for a bus at bus-stand in Tirunelveli Town. When they were about to board a bus, Mookan alias Marimuthu Pandaram, a notorious district criminal with several previous convictions, removed a purse containing Rs. 75 from the waist of Pandia Thevar. Pandia Thevar immediately caught hold of the accused and handed him over to Vellaswami Naicker, Constable No. 176 of Tirunelveli Town Station, who was on duty at the bus-stand. The constable took possession of the stolen property and tried to take the pickpocket to the Police station which is about two furlongs from the scene. As the accused resisted, the constable attempted to tie his hands, when the accused suddenly whipped out a knife from his waist, stabbed the constable on his neck and tried to escape. The constable, though seriously injured, continued to hold him firmly and there ensued a scuffle between them, and the accused inflicted four more injuries upon the shoulder, left arm, head and the left thigh of the constable. Another constable who happened to be at the bus-stand went to the rescue of the wounded constable but he was also attacked and received a stab injury about his left eyebrow. Three private persons who intervened were also injured by the accused who made good his escape. The accused was eventually arrested, charged, convicted and sentenced to death by the Sessions Judge, Tirunelveli.

Constable Vellaswami Naicker who was bleeding profusely was immediately taken to the hospital but unfortunately he succumbed to his injuries on the same night. The constable displayed exceptional courage in grappling with a desperate criminal who was armed with a deadly weapon, and laid down his life in the discharge of his duty.

Nagar Balasubramania Anantaraman,

Inspector of Police.

One Manavalan Pillai, a virulent outlaw of Madurai, who had gone underground 18 months previously, was found to be the author of several acts of violence and had gathered around him a "death squad." Sri Anantaraman, Detective Inspector, on the night of 19th November 1949, located the house in which Manavalan Pillai and his "Death Squad" were hiding. He immediately set out with an armed force and skilfully surrounded the house at about 23-20 hours and approached its eastern entrance. When the Inspector was about 15 feet from the entrance, he flashed his electric torch whereupon Manavalan, leader of the aforesaid "Death Squad," rushed out from the house and threw a country bomb at the Inspector with intent to kill him. The bomb missed the Inspector and struck an informant, causing an injury on his right forearm on explosion. Manavalan again raised his arm to throw another bomb at the Inspector when the latter whipped out his revolver and fired one round in self-defence and shot Manavalan through the chest and killed him. The Police party then rushed into the house and arrested six dangerous outlaws and recovered 28 live bombs from them.

The Inspector displayed conspicuous courage and presence of mind in rounding up at great personal risk a band of dangerous outlaws who were armed with deadly weapons.

Palanisamy Shanmuga Velayudham,

Sub-Inspector of Police.

One Manavalan Pillai, a virulent gangster dacoit of Madurai who had gone underground for about 18 months was responsible for all acts of violence and had gathered around him a "Death Squad."

Sri Anantaraman, Detective Inspector, located on 19th November 1949 night the house in which Manavalan and his "Death Squad" were hiding. He immediately set out to raid the house with Sri Shanmuga Velayudham and Sri Ponnambalam, Sub-Inspectors of Police, and four sections of the Special Armed Police under Jamadar Ramakrishnan. The house was surrounded by the Police party at about 23-20 hours despite the disadvantage of a very dark night. Sri Shanmuga Velayudham, Sub-Inspector of Police, approached the northern entrance of the house. When he was about 15 feet from the entrance, one of the violent members of the "Death Squad" suddenly rushed out and threw a bomb at the Sub-Inspector. Fortunately, the bomb missed its mark. He again raised his arm with intent to throw a second bomb at the Sub-Inspector when the latter promptly took out his revolver and fired one round in self-defence and shot the assailant dead. Thus came to an end the infamous career of a murderer and dacoit.

Sri Shanmuga Velayudham displayed great courage, coolness and conspicuous gallantry in handling a dangerous situation.

Bheema Audiseshaiyah,

Sub-Inspector of Police (Officiating).

On the night of 5th April 1950, a gang of desperadoes armed with sticks, spears, battle-axes and knives, etc., raided Gorantlavarpalem, Guntur District, and attacked

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the villagers whom they thought were helping the Police in subduing their activities. Sri Audiseshaiyah, Sub-Inspector of Police, who was camping at the village at that time, was also a target of attack, as he was responsible for the arrest of several desperadoes and seizure of a cyclostyle machine and objectionable literature previously. The leader of the raiders attacked the Sub-Inspector with a spear and injured him in the chest. The Sub-Inspector undaunted by the attack, opened fire with his revolver and killed the leader on the spot. As soon as their leader was shot down, the raiders ran away in different directions. The Sub-Inspector displayed exceptional courage and conspicuous gallantry in handling a dangerous situation and his action increased to a great extent the morale of the villagers.

Chirulama Muthaiah,

Constable No. 609, Special Armed Police.

On 2nd November 1950, a gang of armed raiders attacked Penuganchiprolu Police Station in Nandigama Taluk, Krishna District, and took away 15 muskets and ammunition from the police station. The next day Lance-Naik Narayana, who was in charge of the Special Armed Police armed post at Indugumalli, received information that some raiders were hiding in a redgram field near Malkapuram, a village at a distance of three miles from the post. He promptly hastened to the spot along with Constable Muthaiah and some constables and when the police party was at a distance of 50 yards the raiders fired at them and retreated. The Special Armed Police party retaliated and gave hot chase to the raiders but as darkness intervened further pursuit was abandoned. Constable Muthaiah saw in the meantime one of the raiders keeping watch with a .303 rifle and bayoneted him without giving him a chance to use his firearm. Eventually the Special Armed Police party recovered not only all the 15 muskets and ammunitions looted from the Penuganchiprolu Police Station but also a Sten-gun belonging to the leaders of the raiders. In this encounter, Constable Muthaiah exhibited conspicuous courage and coolness in advancing towards an armed raider and in bayonetting him at considerable personal risk.

Masilamany Manual,

Constable No. 989, Special Armed Police.

Machakanti Ramakrishna Rao of Kesirajugudem, Khammam Taluk, Warrangal District, Hyderabad State, was a deserter from the Indian Army and had left a trail of blood wherever he was operating. On 10th March 1949, two Sub-Inspectors belonging to the Intelligence staff organised raids for the capture of the notorious raider with the help of the Special Armed Police, Madras, stationed at Madira. The party reached the outskirts of the village Brahmanpalli and leaving their truck about a mile away marched on foot and cordoned off the village where the wanted raider was reported to have been hiding. Constable No. 989 Manual spotted three persons slipping into the shrubs nearby and immediately going there, found Ramakrishna Rao concealing himself in the bush. He at once grappled with the raider who tried to shoot the constable with a loaded revolver. With great pluck and courage the constable snatched the revolver from the raider and held him tight. Ramakrishna Rao made another effort to break away but the constable would not leave him until the other members of his party came to the rescue and took

Ramakrishna Rao into custody with his revolver and 19 cartridges.

The constable displayed great devotion to duty and gallantry of a high order in grappling with the desperate raider armed with a loaded revolver.

Kolandai Goundan Doraisami,

Constable No. 1301, Special Armed Police.

Doraiswami, Constable No. 1301, of the Special Armed Police, Madras was deputed by the District Superintendent of Police on border duty, along with other men to guard and patrol the area between Sivapuram in the West Godavari District and Krishnaraopalem in the Krishna District, which was considered a vulnerable point in view of the incursions made by raiders from across the border. He was stationed at Krishnaraopalem and was patrolling the area allotted to him. Krishnaraopalem was twice attacked by raiders, once on the morning of 18th August 1948, and again on the same night. On 25th August 1948, raiders about 100 in number made another onslaught on the village. On all these occasions the constable took his post at a moment's notice, gave fight to the raiders and beat them back in spite of the fact that it was pitch dark and the layout of the land was unfavourable to him. The trouble however, did not stop there. The raiders entrenched themselves in two places on the flanks of Krishnaraopalem, and made another concerted attack, on 7th September 1948. The constable was ready this time also to meet the attack and gave the raiders tough fight. The raiders, in spite of their large numbers, could not break through the defence set up by the constable, and hence retreated after wasting their ammunition.

This constable along with his comrades ably assisted his Subedar and Jamedar in launching on 15th September 1948, an attack on Kandukur, the biggest base for raiders in that area. In the fight that ensued Constable Doraiswami was severely wounded but continued to keep the enemy at bay. This constable set an example in indomitable valour to the rest of the men. He displayed conspicuous gallantry and skill both in defence and attack.

Sellappan Ramaswamy,

Constable No. 741, Special Armed Police.

Guruswami Jayarama Reddy,

Constable No. 1257, Special Armed Police.

On 16th September 1948, the District Superintendent of Police who was on special duty on the West Godavari border to protect the villagers there from the ravages of armed raiders from across the border, led an attack on Aswaraopet, where a big concentration of raiders was suspected to be operating. One platoon of the Special Armed Police with the supporting fire from a Bren-gun group was made use of for the attack. When the platoon deployed into sections, approached the village, the enemy began firing at the police party with modern weapons including mortars. Undaunted, the police party kept on the onslaught.

Constable Sellappan Ramaswami and Guruswami Jayarama Reddy were at the head of sections trying to penetrate into the village. The enemy who were entrenched in well-dug-out positions opened a barrage of fire against the advancing police party. Though the two constables sustained

Value of Home Science

By Dr. M. V. KRISHNA RAO, Minister for Education

I am thankful to the committee of the Second All-India Home Science Conference for this opportunity to me to associate myself with this Conference declaring open the Exhibition which has been organised in connexion with this Conference. I am told that this exhibition will include items such as arts and crafts, needlework, demonstrations of housing improvement and literature, textbooks on educational material for Home Science teachers and a collection of saris, among other exhibits.

What has been called Domestic Science (Home Science) in its form has been attempted to be taught in many parts of India for many years. But it was never felt that it was completely satisfactory in relation to the life of the people. On the one hand, and there was a paucity of teachers with the requisite outlook and equipment to make a research of the various aspects of home and family living as it has been inherited in our country. Now that courses of study in this subject are growing up in many of the Universities of the various States of India, it is appropriate that teachers who are interested and engaged in this branch of training of the young girlhood and womanhood of India should meet and consult each other in regard to how they should shape their approach to this subject. I am sure that this Conference will give teachers who are assembled here considerable help in the setting of standards for their teaching and in helping them to gather the material and resources for teaching. To this end I am glad to find that you have included in your Conference programme, talks on subjects that are not generally given sufficient prominence in the teaching of Home Science. I am particularly glad that you have thought of organising an exhibition intended to show the work that is being done now, for the benefit of the teachers and your students and the parents of your students.

Teaching of Domestic Sciences

In our own State of Madras the teaching of Domestic Science has long been provided for in the curriculum of studies in the girls' secondary schools—both in the middle and high school stages. Recently as a result of reorganising, this is taught as a practical homecraft in the middle school stage and as Home Science with some theoretical teaching added in the high school stage. Physiology, personal hygiene, decoration and arrangements, food dietetics, ailments and their treatment, home economy, mothercraft and nursing and home-nursing, needlecraft, textiles and laundry are sought to be incorporated in the instructions. Apart from this common curriculum this subject is offered as special optional also. The course in Household Arts is an optional subject at the Intermediate stage. We have had B.Sc. degree course in Home Science in the Queen Mary's College and the Women's Christian College.

From the speech by Dr. M. V. Krishna Rao, Minister for Education, in declaring open the Exhibition at the Second All India Home Science Conference held at the Women's Christian College, Madras City, on the 23rd September 1952.

Home Science is now provided as an optional in the B.T. Course.

In India we have had classic writings which gave accounts of household economics and the art and science of home-making. *Grihashashtra* has been accepted and glorified as our most important heritage both in regard to the ultimate spiritual objective of life as well as the conditions that are necessary for a balanced happy and healthy life in the family. Both the aspects of *Grihashashtra* life, as an art as well as a science, have been dealt with and have been incorporated in the day-to-day life of the average person in this country and were practised in a very large measure in the heyday of our national history. When we are now entering on a new era of great renaissance in all walks of life it is very necessary that our young girls and women should be given the opportunity to imbibe the highest traditions of our country and at the same time benefit by modern knowledge and science as applied to individual and family life. In formulating our teaching and in shaping the courses we have to bear in mind the present condition of our families and the community in general and in the rural parts, the resources we have, our great poverty and our habits of life. I am sure you are avoiding giving our students a false standard of material welfare out of keeping with their position and their environment at home and in the countryside.

Applying the Knowledge

In our domestic sphere I hope and trust that knowledge will be applied for getting the best advantage out of what is available in our country in a rational way rather than encouraging a tendency to depend even in the domestic sphere on the ever increasing number of modern gadgets which we are not producing in our country, but which we have to import from countries like America. This applies to all branches of instruction that we are giving in this subject. Our mothers and grandmothers inherited a very large amount of empirical knowledge which they were sure of and which enabled them to feed us properly and look after us in our illness and to bring us up. They had their own knowledge of the art of food which they were utilising. Some of our earlier educated girls lost the older tradition and could not have any benefit from the new education.

I hope that that stage is over and that today our college girls are more in touch with their home conditions and the real environment around them in the country where they are expected to serve. If evidences were needed this Conference and this Exhibition is a clear evidence of such a welcome change. I feel that all girls' high schools and women's colleges should be in the main institutions for training them as worthy mothers and home-makers and workers for the welfare of society around them and as caretakers and educators of the future generation through the teaching of what is being called "Domestic Science" or "Home Science". I wish that a more expressive name be given to this branch of learning which will include Science, Arts, Economics, and other subjects.

Vigilance Welfare Work

By SRIMATHI V. T. LAKSHMI, Inspector of Vigilance Service

There has been considerable misunderstanding in the minds of the public with regard to the recently constituted Madras (Government) Vigilance Service, vis-a-vis the Madras Vigilance Association and the scope of respective activities of the two bodies.

Founded in 1924-25, the Madras Vigilance Association was responsible for the passing of the Madras Suppression of Immoral Traffic Act in 1930 and starting of the Stri Sadana Rescue Home in 1936 and the Vigilance Home in March 1948 in the City. But, even in those days, the Association was getting a monthly grant towards the maintenance of these institutions, and their welfare workers were paid and their touring expenses were borne by the Government.

In May 1948, the provincialisation of the Vigilance Service was effected. In other words, the management of the Stri Sadana Rescue Home and Vigilance Home was taken over by the Government and the workers of the institutions became Government servants. The newly constituted Madras Vigilance Service is now attached to the Department of Certified Schools and its departmental head is the Chief Inspector of Certified Schools and Vigilance Service. Under him is the Inspector of Vigilance Service.

The Madras Vigilance Association still functions in the City, but they have no control over the Stri Sadana Rescue Home and Vigilance Home. They are only in charge of the preventive propaganda, in the City.

It is the Madras Vigilance Service that has under its control these two correctional institutions for the "erred victims" and "fallen women" respectively. Besides, there are three Government Shelters of Short-stay Home in Madurai, Salem and Coimbatore and a Government aided Rescue Home and Shelter in Kozhikode, all of which function under this Service.

The Two Homes

There has been a similar misapprehension between the Stri Sadana Rescue Home and the Vigilance Home. Often one is mistaken for the other or both are taken as one institution. These two (1) Stri Sadana Rescue Home and (2) Vigilance Home are two different institutions, functioning under different sections of the Madras Suppression of Immoral Traffic Act.

The Rescue Home in the City, which has been euphemistically called "Stri Sadhana" since its inception, is a long-stay training home, that functions under Sections 7 and 8 of the Madras Suppression of Immoral Traffic Act and receives minor victims below 18 years of age, rescued from brothels by the Police under Section 6 (1) and committed to its custody by Courts under Section 6 (2) of the said Act for periods ranging from two to seven years. Besides, by a Government order, the admission of a limited number of voluntary cases of young deserving girls, who have had moral lapses or are exposed to moral danger, into Stri Sadana, as a preventive measure, is left to the discretionary powers of the Chief Inspector of Certified Schools and Vigilance Service.

The Vigilance Home is the only one of its kind in India and it is meant to receive women under 30 years of age, convicted for street solicitation and prostitution and committed to its custody by Courts for a period of two to five years, under the amended Section 12-A (i) of the Madras Suppression of Immoral Traffic Act.

Location

The Stri Sadana Rescue Home and the Vigilance Home are separately accommodated in "Rahmat Bagh", San Thome High Road, Mylapore, and in "Everest", Kutcheri Road, Mylapore, with their respective residential Assistant Superintendents. But they are, at present, under the control and supervision of a common Superintendent. Both the institutions have a common dispensary, under a part-time medical officer, and a higher elementary arts-cum-crafts school. Media of instruction in the schools are Tamil, Malayalam and Telugu. The craft section of the School imparts instruction in spinning, tailoring, laundry, handwork and weaving.

The methods of rehabilitation of the discharged inmates of these two institutions comprise: (i) restoration to relatives, after reconciliation; (2) marriages with suitable men; and (3) employment as midwives, nurses, teachers, matrons, cooks and domestic helps after they complete the necessary special training.

The after-care of the discharged and rehabilitated inmates of these two institutions is attended to by the State Probation Department.

VIGILANCE SERVICE: Sri C. Subramaniam, Minister for Finance, addresses the gathering at the Annual Day celebrations of the Stri Sadhana, an institution run by the Madras Vigilance Service. Right: A dance drama is one of the items in the evening's programme.



bullet wounds in their arms, they never left their positions until order to withdraw was given, thereby setting up a gallant example to the rest of the men. The attack had a telling effect on the morale of the enemy and they abandoned their positions within 48 hours and made way for the occupation of Aswarapet. In this operation, the two constables showed courage and determination of a high order.

The Police Medals Awarded for Merit

Vaiyavur Rajagopal Rajaratnam,

Deputy Inspector-General of Police (Officiating),
Madras State.

This Officer was enlisted as a Probationary Deputy Superintendent of Police in the Madras Police Service on 1st November 1926 and was confirmed in that rank on 1st November 1928. As Deputy Superintendent of Police he was in charge of many difficult subdivisions, in all of which he showed commendable keenness, energy, and conspicuous ability. When in charge of the Ramanathapuram District for a brief period in 1936, he earned the congratulations of the Inspector-General of Police for his tactful and resolute handling of the arrangements in connection with the Panguni Uttirarn festival at Kamudhi at a time of high tension between the Nadars and Muslims.

He was promoted as Officiating District Superintendent of Police in 1942 and was confirmed in that rank in 1944. He was specially posted to the heavy Malabar District in April 1948 to deal with the Communist agitation which had assumed dangerous proportions in that district, and he fully justified the confidence reposed in him by bringing the situation well under control within a few months. He officiated as Commissioner of Police, Madras, from 23rd June to 27th October 1948. On his reversion, he was posted to the Tanjore District, where again he did excellent work in dealing with the Kisan agitation. As officiating Deputy Inspector-General of Police, he was in charge of the Northern Range from June 1949 to April 1950 and the Special Armed Police from May 1950 to December 1950. He is now holding the important and onerous post of Deputy Inspector-General of Police, Railways and C.I.D., with credit.

Majur Krishnayya Shetty,

Deputy Inspector-General of Police (Officiating),
Madras State.

This Officer was appointed as a Deputy Superintendent of Police in November 1927 after he took the degree of Master of Arts of the Madras University. After his practical training he was posted to the Salem Subdivision where he worked with zeal and energy, especially in dealing with the grave crimes in the subdivision.

His work in the subdivision for over three years was uniformly appreciated by his superior Officers. He then held charge successively of the Hospet, Sivakasi, Erode and Tiruchirappalli Subdivisions, where he continued to show conspicuous ability and energy. During the war period he was specially appointed as Deputy Superintendent of Police in the Office of the Inspector-General of

Police, Madras, and during the evacuation period it was his responsibility to move important records and the staff to Vellore, where the Government ordered the Inspector-General's office to be shifted to. Later, with a skeleton staff he returned to Madras and worked under heavy strain with efficiency. He was promoted as District Superintendent of Police in 1943 and posted to the West Godavari District. In 1945 when the post of an Additional Assistant Inspector-General of Police was created, he was posted to this important position. Later he was posted to Anantapur and then transferred to Salem. In 1947 Sri Krishnayya Shetty was posted as Deputy Commissioner of Police, Crime Branch, Madras City, which post he occupied with commendable enthusiasm and undertook with success many important investigations of a highly complicated nature. From August 1949 to May 1950 he held the post of the Superintendent 'X' Branch, C.I.D., Madras, with conspicuous merit and ability. He was promoted as Deputy Inspector-General of Police in June 1950 and was in charge of the heavy Southern Range from June 1950 to the beginning of last year. On reversion for want of a vacancy, he held the post of Superintendent of Police, Special Branch, C.I.D., Madras, from January to August 1951, and worked with the same efficiency. He is now holding the responsible post of Deputy Inspector-General of Police, Special Armed Police Units, Madras.

Cecil Justin Philomen Pinto,

District Superintendent of Police (Officiating),
Madras State.

This Officer was enlisted as an Inspector of Police on 3rd November 1924. He won the Inspector-General's Gold Medal for the best cadet of the year 1924-25 in the Police Training College. As Inspector of Police he held charge of difficult circles, displaying conspicuous ability in handling criminals, cases of murder and investigation of organised crime against property. In 1933 he was awarded the King's Police Medal for gallantry for effecting the arrest of a notorious dacoit after overcoming the resistance of riotous associates of the dacoit by shooting dead their leader. On admission to the gazetted rank, he was posted as Assistant to the District Superintendents of Police, Madurai Urban and Rural, for reclamation of Kallars, and in 1941 he was specially posted as Assistant Commissioner of Police, Southern Range, Madras. His work in both these posts was marked by ability and efficiency. He was promoted to the post of District Superintendent of Police in April 1947, and placed in charge of the Nellore District, where his handling of the communal troubles at Gudur was firm and tactful. As District Superintendent of Police, Kurnool, from June 1948 to April 1949, his work in connection with the Police action against the Hyderabad State was of a high order. He has been in charge of the difficult district of Krishna since July 1949, where he has had an extremely trying time in combating the Communist menace. He organised an efficient system of informants and infused confidence into the Village Protection Committees and achieved remarkable results in putting down Communist lawlessness in the district.

His work throughout his service has been characterised by ability, resourcefulness and devotion to duty of a high order.

Ramaswamy Ayyar Duraiswamy Ayyar,

District Superintendent of Police (Officiating),
Madras State.

He joined this Department as Sub-Inspector in 1919. In recognition of his good work as Station-house Officer, he was promoted as an Inspector in 1934 and was confirmed in that rank in 1939. His work as Inspector was of a high order and was characterised by thoroughness and zeal. He was promoted as Deputy Superintendent of Police in the Madras Police Service on 14th April 1942 and was first posted to the Tirukkkoilur Subdivision. He later worked as Deputy Superintendent of Police in the Crime Branch, C.I.D., and as Vice-Principal in the Police Training College, Vellore. In both these capacities, he turned out excellent work showing conspicuous ability and devotion to duty. He was promoted to the rank of District Superintendent of Police from 13th November 1947 and was posted as District Superintendent of Police, Railway Police, Tiruchirappalli, in which post he had to deal with two large-scale strikes in addition to many short-lived ones by the Communist-controlled Labour Union of the South Indian Railway. He displayed commendable energy, resourcefulness, tact and firmness in handling those situations and earned richly deserved praises from the Railway authorities. He is now in charge of the North Arcot District. He is a very conscientious and hard-working officer with a high sense of duty.

Mathilakath Achuthan Nair,

Inspector of Police (Officiating), Madras State.

Enlisted in 1936, this Officer commenced his career as Sub-Inspector in the Salem District where his work was marked by conspicuous merit. Following the Kayyur murder case, he was transferred to South Kanara, where his work continued to be characterised by efficiency and devotion to duty. He was promoted to the rank of Inspector in 1946. He was Inspector, Quilandy, in 1946 when the Communist rebellion broke out in the Chirakkal Taluk. Acts of violence and lawlessness were freely indulged in by Communists throughout the taluk and the situation was getting out of control. He was specially posted to the Cannanore Circle to combat militant Communism. He worked tirelessly at personal risk and with conspicuous ability. He personally handled and supervised the investigation of as many as 67 cases of lawlessness by Communists, including the Karivallur and Kayampayam shooting cases, which by the large number of accused involved and the sensation caused, made history in the Sessions trials in the State. All these cases he successfully pushed through with commendable ability, and brought the situation back to normal. Throughout his service he has shown commendable resourcefulness and single-minded devotion to duty.

Mohammed Amirulla Baig,

Inspector of Police (Officiating), Madras State.

This Officer joined the Police Department as a Sub-Inspector in 1936. During the early years of his service, he distinguished himself in detecting a large number of opium cases in Nellore District. In 1941 and 1942, this Officer handled many grave and critical situations with remarkable courage, tact and ability. In later years, his

work in connection with activities of Communists came to prominent notice. Disguised as a Communist, he gained the confidence of some Communists and tactfully arrested two prominent among them and seized ten unlicensed firearms and ammunition. When Communists armed with dangerous weapons attacked a Police party on 2nd January 1951, this Inspector shot dead Pedarthi Subbarao, the leader of the gang and saved the situation. He was also responsible for killing Gaddam Gaddigadu, a dangerous Communist, who was wanted in a number of cases of murder committed in Munagala Pargana. In July 1950, he was deputed to Bhimavaram in West Godavari District for arresting important Communists. He completed his work successfully and shot dead eight prominent Communists including Edupuganti Subbarao and Potluri Sundaram. He was also responsible for the arrest of Kasaraju Veera Raghaviah from whom six unlicensed weapons were recovered.

This Inspector throughout the service of 14 years has rendered valuable services marked by ability, tact and devotion to duty of a high order.

Doraiswamy Kuppuswamy Gounden

Head Constable No. 165, and Sub-Inspector of Police
(Officiating), Madras State.

This Officer was enlisted as a Constable in the year 1929. Right from the start, he exhibited a flair for detection. He was promoted to the rank of Head Constable in 1940, after which he functioned as a Crime Head Constable for some years in Vellore Town and also in other important stations. His work in detecting a case of house-breaking in Vellore Town in 1943 in which properties worth Rs. 15,000 were stolen, a grave burglary at Wallajah in 1944 involving the loss of properties worth Rs. 80,000 and a case of theft of currency notes from the counter of the Imperial Bank of India, Vellore, in 1948, in which a Kepmari gang of Tiruchirappalli was concerned, is worthy of special mention. He was also responsible for detecting a complicated murder case at Gudiyattam and a case of manufacture of counterfeit four-anna coins. In recognition of his valuable services, he has been promoted to officiate as Sub-Inspector of Police.

Throughout his service, the work of this Officer has been characterised by outstanding ability, devotion to duty and integrity.

Radio Set for Kasturba Hospital

The Government have accepted, with thanks, the offer of the Madras Provincial Welfare Fund to purchase and install a radio set at a cost of Rs. 520 in the Kasturba Gandhi Hospital for Women and Children, Madras, and have directed that the cost of maintenance of the Radio set should be met from the State Funds.

Madras Board of Transport

The Government have sanctioned the continuance, for a further period of one year from March 10, 1952, of the Madras Board of Transport, originally constituted in the Order, dated March 14, 1947, with the Hon'ble Minister-in-charge of Transport as the Chairman and the Secretary, Central Road Traffic Board, as the Secretary to the Board.

Campaign against the Drink Evil

By SRI V. C. PALANISWAMY GOUNDER, Minister for Prohibition

The question of temperate reform and abstinence from consumption of intoxicants has been engaging the attention of social reformers and politicians for a long time, though Government started taking active steps only recently. Statesmen all over the world have been thinking about this problem. While the climatic conditions and social customs in foreign countries did not tend towards total Prohibition, conditions in our country have been particularly suited to this reform and it was given to the Madras State to have the honour of first launching this great reform of total Prohibition.

It may be true that here and there people used to drink on special occasions, but the legalised and licensed vice of drink came into practice only during the British period in Indian History. Instances are not lacking showing how the descendants of great men were ruined by drink, and how puranas and all other religious books condemned drink. The high souled and austere Sukracharya himself became angry at the deceit practised on him in his wine, and proclaimed for the benefit of humanity: "Virtue will desert the man who through lack of wisdom drinks wine. He will be an object of scorn to all."

Condemned through the Ages

It was given in the Bombay Prohibition Enquiry Committee Report that according to Chinese tradition the Emperor of China in 1100 B.C. at a solemn assembly of the State forbade the use of wine. There is an instance in modern times of the decree of Tipu Sultan attempting at Prohibition by decreeing that all palm trees in his dominion should be cut down. The great Tiruvalluvar also has explicitly pointed out in his *Kural* as early as 1,000 years back the duty of the Nation to ban drink altogether. Statesmen all over the world have declared time and again that drink is a source of evil. Drink has been recognized as the major factor of causation of accidents, injuries and deaths in streets and highways, of adult crimes and juvenile delinquency resulting in distrust, poverty, malnutrition, inexcusable behaviour, family disintegration, inefficiency of workers in industrial plants, corruption of public officials, etc.

The founder of Brahma Samaj Sri Keshab Chandra Sen said in 1871 that "the drink habit has spread so widely that the people have become debauched and sensuous and are reduced to the state of brutes. The people are degenerated physically, morally and socially more by drink than by any other evil." Drink ruined several families. The uplift of the children was neglected. They were ill-fed, ill-clothed and deprived of their education. During the British rule the drink revenue received an impetus and with Government patronage this vice was indirectly encouraged and addicts became bolder and increased in large numbers, especially among the poorer classes and in the villages.

Steps taken for Abolition of Drink

With the wakening of national consciousness under the guidance of the Father of our Nation, Mahatma Gandhi, the problem of drink received fresh thought. Mahatma

Gandhi believed that the salvation of our people lay in deliverance from the degenerating habit of drink. No doubt in 1820 itself a regulation was passed to bring toddy under control. Other measures were passed in 1852 and 1864 which brought in regulations in the trade of toddy and arrack and by slow steps the sale of this vice was legalised under Government control. These regulations and the vendors resorted to all corrupt practices in plying their trade. The consumption of drinks was going at an alarming pace, which prompted several Temperance Associations in England to draw the attention of the Government to the alarming increase of drunkenness in India.

The House of Commons passed a resolution condemning in general terms the Excise Administration of the Government of India, and the Secretary of State called for a report. In 1905 and 1906 the Excise Committee was appointed to study the excise systems in India. As a result of the recommendations of the Committee, Advisory Committees were formed. Government tried to make drink expensive. But their negative measures made the people poorer as a result of the high price of toddy.

Temperance Bill Framed

In January 1921 a non-official Bill was brought to promote temperance. The Bill was framed generally on the lines of the Temperance Act of Scotland. The object of the Bill was to authorise voters in any prescribed area to exercise auction of limited number of liquor shops or prohibition of such shops in such areas and thereby promote temperance. The Bill as originally framed applied only to arrack shops in the first instance and extension to other kinds of liquor such as toddy and foreign liquor after some experience was gained. The Bill however was not introduced in the Council as the then Government considered that the Bill was more for political reasons than for real temperance. Then in December 1921 an Advisory Committee was appointed to go into the question. The questionnaire issued by the Committee contained questions on the evils caused by drink, the views as to Prohibition in its various forms and various methods for the prohibition of consumption of liquor. Questions were also asked regarding the prohibition of sale, transport and manufacture of drinks and the actual prohibition of drinks.

The Committee in its report observed that "obviously the shortest method of reducing consumption, if it were practicable, would be the introduction of partial or total Prohibition." Year after year, in the Budget debates on the demand for Excise, members made powerful pleas for Prohibition by stages and for encouragement of temperance. The Madras Legislative Council even passed a resolution in the year 1926 recommending that it should be the declared policy of the Government that total Prohibition should be the ultimate goal within a period of 20 years by gradual degrees and of reducing the consumption of arrack by adopting rationing of drink or other policy. As a result of the resolution passed in the Council, a meeting of the Excise Advisory Committee was convened in 1928.

The Committee was unanimously of opinion that the first essential step was the creation of an active public opinion throughout the Presidency against drink and education of the masses on the evils of drink in order that any temperance or Prohibition legislation undertaken might have the co-operation and support of the general public.

Prohibition Introduced in Salem

The Government accepted the recommendations and constituted a Temperance Advisory Committee. Experimental Prohibition was introduced partially in Salem District in April 1930. This was in a large measure due to the agitation carried on by our present Chief Minister, Sri C. Rajagopalachari. It was again left to our Chief Minister who had been working unofficially in Salem District for the closure of liquor shops to take up this question when he became Premier of this Province in 1937. So it was he who introduced Prohibition as a first step in 1937 in Salem District. Prohibition was extended to Cuddapah and Chittoor and North Arcot by 1939. The Prohibition Act was suspended from 1944 when Congress went out of office and shops were re-opened even in this district from 1945. But Prohibition was again introduced by stages in 1946 after the Congress came to power again, and total Prohibition was introduced in this State on 2nd October 1948.

Curiously enough, arguments are put forward that the measure curtails individual liberty; that the Government can ill afford at present the loss of revenue. Some others contend that emphasis on moderation in drink is preferable to complete Prohibition. Gandhiji has answered effectively those who apprehended the curtailment of individual liberty with the enforcement of Prohibition by law. He has said:

"You will not be deceived by the specious argument that India must not be made more sober by compulsion and that those who wish to drink must have facilities provided for them. The State does not cater for the vices of the people. We do not regulate licence houses of ill-fame. We do not provide facilities for thieves to indulge in their propensity for thieving. I hold drink to be more damnable than thieving and perhaps even prostitution."

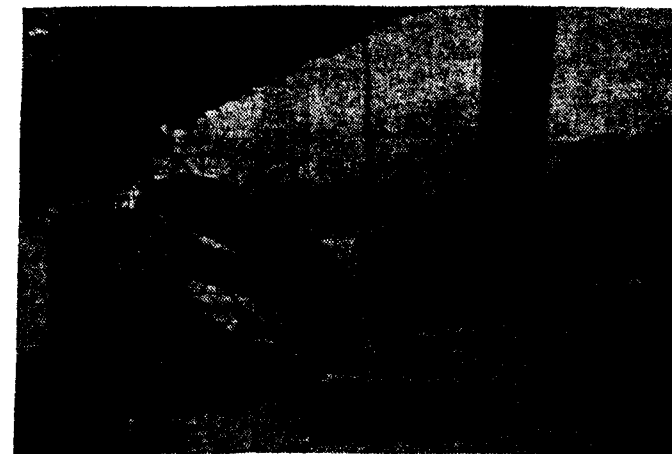
Liquor and Labour

Another curious argument put forward against Prohibition is that labourers should have their toddy in the evenings after the day's hard work to enable them to do better work the next day. This argument is fallacious as could be evidenced from instances everywhere. It was stated in the New Zealand paper *Vanguard* that a canal was built by 50,000 abstainers. Before 1904 drink was not prohibited to the workers working on the Panama Canal; the work was never done and it was a scandal. In 1904, Americans took the job in hand and declared it a Prohibition area. None was allowed to make, sell or buy intoxicating liquor of any kind. They then cleared the whole area of mosquitoes and the canal was opened in ten years, built by 50,000 teetotallers.

I have also in my recent tours come across statements about the efficacy of work by abstainers. In my recent tours I was told that the labourers have worked much better on the Bhavani Project on account of Prohibition. As in other fields of reform a well-meaning Government's



PALM GUR TRAINING: At the Wallajabad Jaggery Manufacturing Co-operative Society Training Centre (Chingleput District), trainees learn improved methods of making palm gur. Here the palmyra juice is in the rubber stage in the pan.



BETTER TOOLS: Trainees learn to handle better types of equipment under improved techniques of manufacture. Note the improved furnace.



FINISHING TOUCHES: Trainees give final shape to the jaggery in wooden moulds.

"Operation Prometheus"

By SRI J. M. LOBO PRAHBU, I.C.S., Secretary, Development Department, Government of Madras

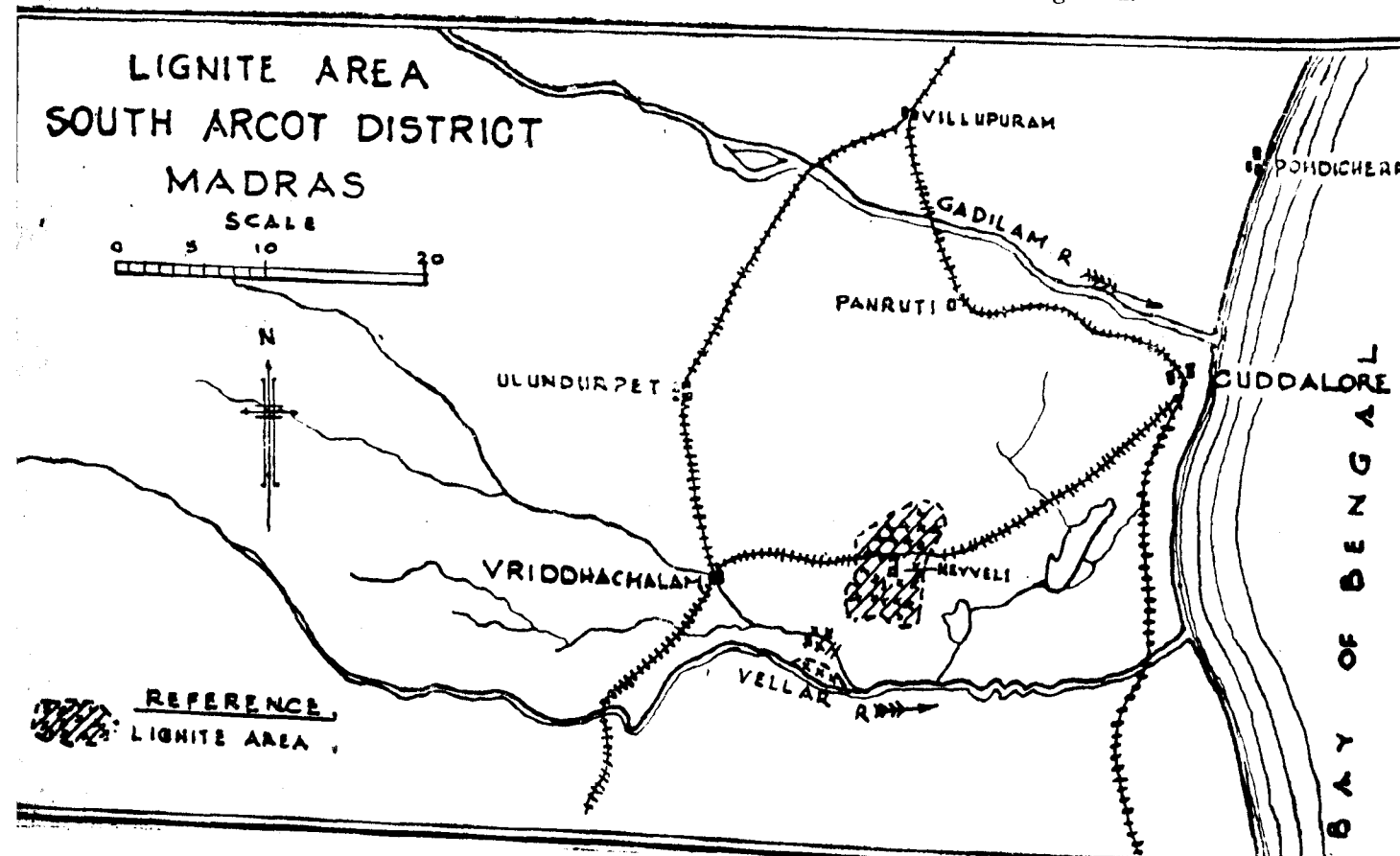
In Greek mythology, Prometheus kindles civilisation on earth by the gift of fire, stolen from heaven. In South India, to some extent, the progress of civilisation is threatened by lack of the means of making fire. The war depleted our forests, which in any case are inadequate for the needs of a growing population. There is no coal or oil in the Madras State and hydro-electric power is reaching its economic limits. Of the current demand of three million tons of coal, the Railways can handle only about 1.2 million, while sea transport which is more costly is responsible for another 0.8 million ton. The deficiency of nearly a million tons not only reduces the outturn of existing enterprises, but practically inhibits industrial expansion. The cost of coal, about Rs. 35 to 40 at Madras, and even Rs. 70 in some consuming centres, increases cost of production to the point of affecting the competitive position of some industries. In these circumstances, those in charge of industry in this State have been searching for new fuels.

During the last one year, lignite, an unfamiliar word, has been frequently mentioned as South India's fuel for the future. Lignite is a member of the coal family, brown in colour, immature in composition but with a varying calorific content, which in the case of our deposits is as high as that of Grade I coal from Bengal. The South Arcot lignite has a moisture content of only 15.08 per cent while German lignite registers 59 per cent and Australian

65 per cent, which implies a definite superiority for our deposits. The ash and sulphur contents are also generally low. It is therefore argued that if Germany and Australia have depended on their lignite, there is no reason why South India should not do the same, with a better variety of it.

Deposits of 2,000 Million Tons

The Madras State has in South Arcot round Neyveli, lignite deposits over an area of 100 square miles, in an estimated quantity of 2,000 million tons. Lignite occurs in between clays and soft sands as an erratic layer with no fixed roof or floor. It occurs from depths of 149 feet to 377 feet, in layers which vary from 13 feet to 90 feet. The overburden, that is, the soil about the lignite, varies in depth, the least so far ascertained being three times the size of the lignite deposit. It is variously composed of beds of pebbles, clays and sandstones. But more important is the water in the earth. The ground water table lies within 15 to 20 feet. This is no obstacle to mining, but further down are artesian aquifers, one above and another below the lignite bed, with water at high pressure. Some idea of this pressure can be gained from the fact that some 100 bore holes sunk in this area for irrigation purposes, continually discharge even 2,500 gallons of water per minute. Some of them have been doing this for 18 years without any diminution. In one of them the water rises in a geyser 25 feet above the ground.



SHAFT No. 3 in the background.
Spill from the shaft hole spread out in the foreground

The first problem of lignite mining in this area is control of these waters at high pressure to prevent them from drowning the excavation. In this connexion various factors have been studied concerning the cause, course and force of the aquifers. The strongest presumption is that the aquifers are re-charged from some watershed which may be hundreds of miles away. According to the recommendation of Dr. Auden of the Geological Survey of India, ground water investigation with power drills capable of reaching 1,500 feet underground is being undertaken.

Problems of Mining Studied

But important as this detailed investigation is, it has not been allowed to interfere with plans for mining. The history, in this connexion, goes to the years before the war when in the course of boring an artesian well a sample of chocolate brown coal was discovered and analysed as such. The transport bottleneck during World War II, which reduced coal supplies, forced the Madras Government to explore the possibilities of lignite. Between 1943 and 1947, the Geological Survey parties put down 33 bore-holes over an area of 53 square miles of which 23 square miles were proved to have lignite. As a result of these borings, it was decided in 1947 to sink a trial pit 18 feet in diameter, under the supervision of Mr. Ghose, a mining engineer. Simultaneously borings were continued in a total number of 75 which established a further area of 77 square miles bearing lignite. The first trial pit was abandoned at a depth of 30 feet and a smaller pit 10 feet in diameter was started. When this reached 172 feet, an uncharted artesian aquifer burst the pit floor and flooded the pit. Attempts to physically plug the hole, and chemically congeal the soil proved futile. Water up to a height in the pit of 100 feet was pumped out, but finally the pit was abandoned.

After January 1951, several things happened very quickly. First Dr. R. S. Sandford, a very high ranking American expert was sent by the U.S. Embassy to examine the prospects of the project. He appreciated the work done by Mr. Ghose, affirmed his approach and confirmed the vast possibilities of the project. More steam was therefore put in the work of digging a new pit, by impressing on Mr. Ghose that bulk samples of lignite should be available before the Point Four Expert from U.S., expected as a result of Dr. Sandford's report, arrived. Mr. Ghose responded admirably, taking care this time that there was

no damage from the artesian water. He put round the pit a curtain of bore-holes with chemicals and cement. He also had sufficient equipment, particularly well point pumps, to deal with the water.

Experts View the Project

The project was next visited by representatives of the famous firm of Lurgi. They agreed with Dr. Sandford and even evinced an interest of personally undertaking the enterprise. At this juncture, I found out that Hon'ble Minister Sri Sitarama Reddi who passionately believed in the possibilities of the project and had been associated with it in the early stages, would be in Europe. Government decided that advantage of his presence should be taken to consult the many European authorities to whom references had been made before. He saw some lignite mines and consulted various authorities, all of whom gave encouraging prospects for the enterprise. Then in August Dr. Kregzy of Johann Keller of Frankfurt visited the project and



LIGNITE obtained from Shaft No. 3.

reported that it was entirely feasible. Next in pit No. 3 at a depth of 175 feet the lignite bed was touched, and for the first time bulk extraction of lignite began. This almost coincided with the information that Dr. Eyrieh, Point Four Expert, was on his way. The lignite extracted was tested in the furnaces of the Government Electricity Department and in the engines of the Southern Railway and was pronounced to be nearly as efficient as coal.

Since the arrival of Dr. Eyrieh, Government have constituted two committees, one of experts, another of high powered officers, the Chief Engineer, Irrigation, the Coal Commissioner, the Director of Geological Survey and the American Engineer. The Expert Committee submitted a Scheme on 18th November 1951 within less than a month of its appointment, for an open cut mining operation in an area 500 by 500 feet, as a pilot project to exploit the surrounding one square mile in which 35 to 40 million tons of lignite are available. The area selected which has been tested by bore hole drillings is the best known so far, with lignite 60 feet thick, overburden of earth about 180 feet and water pressure capable of being tackled by use of well points and pumping equipment. The Scheme also includes plants for briquetting, carbonising, and for extraction of Montane wax. It is estimated to cost Rs. 65 lakhs of which

PROHIBITION

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MADRAS INFORMATION

duty is therefore clear. It has to remove the temptation to drink and enact laws that effectively prevent people from rushing to ruin. That was why the Congress declared that any Constitution which might be agreed to on its behalf should provide or enable the Swaraj Government to provide that intoxicating drinks and drugs should be totally prohibited except for medicinal purposes. Article 47 of our Constitution is the result of that resolution.

No Trading in Human Vice

As regards loss in revenue, no Government claiming to represent the people can continue to be a party to trading in human vice or allow the wanton degeneration and degradation of people. The major part of the Excise revenue came from the pockets of the poor and the middle classes and if the principle of equitable taxation were to be accepted, it is immoral for any Government to tax the weaker section who are less able to bear the burden for the benefit of the entire population. It is this that prompted the Government to forego the Excise revenue.

Lastly, the emphasis that moderation in drink is preferable to complete Prohibition is the most curious argument. The law of moderation does not function in respect

of vices such as drink. It is common experience that one who drinks always asks for more and it is the deceptive pleasure derived from the first cup that turns out addicts by hundreds: moderation is thrown to the winds and the lower and baser instincts of man are released, leading him on to ruin. As Gandhij has written: 'There is no half-way house between drunkenness and Prohibition.' Well-to-do men may pretend to be moderate. But there is no such thing as moderation possible among labourers.

So it is that the Congress Government alive to all its responsibilities launched upon Prohibition; it has come to stay and will stay with the co-operation of the people. The result of Prohibition has been remarkable. The test for success of this great moral and social reform is not by breaches of law here and there but by the social and economic uplift of the poorer people who are now happier and economically better. It has relieved the poor classes from their wasteful expenditure, made home life for the family happier and promoted harmony in family life. Prohibition has revitalised the economic, moral and social life of the great majority of the masses and undoubtedly the bedrock foundation building is the very essence of the rural reconstruction structure.

(From the Tamil talk broadcast from A.I.R. Madras)

The Wallajabad Jaggery Co-op

The Wallajabad Jaggery Manufacturing Co-operative Society in Kancheepuram Taluk, Chingleput Circle, was registered on 11th January 1949, and started on its work on 14th January 1949 with 13 members on rolls and with a paid-up share capital of Rs. 65. The membership of the Society rose from 13 to 29 and the paid-up share capital from Rs. 65 to 81. During the current jaggery season, 25 licences were issued for the manufacture of palmyra jaggery.

Before the introduction of the scheme, the Society was manufacturing jaggery under the old crude methods. It produced 60 maunds 9 lb. 25 tolas of jaggery valued at Rs. 374-8-0 under the crude method. The jaggery produced was black in colour, less sweet in taste, not only less sweet but also a little bitter due to the process of deliming the juice and in controlling the heat while boiling. Further, jaggery manufacturing is not an established industry for the tappers of this area.

The Palm Gur Development Scheme was introduced in the Society on 3rd June 1952 and four ex-tappers were trained in the improved method of manufacture of jaggery and sweetmeats. The Palm Gur Instructor conducted public demonstrations in the village and explained to the public the process of deliming the juice with the use of superphosphate and the manufacturing of jaggery. The construction, working and advantages of the improved furnace were explained. With his assistance, the Society manufactured palmyra, toffee, chocolate and brown sugar from palmyra juice and exhibited samples to the members of the District Prohibition Advisory Council at its meeting held on 28th June 1952, to the prominent persons of the locality and to the public.

General.—The production of jaggery under the improved method resulted in securing higher prices. It has also

reduced the cost of fuel, the labour and the time taken for the manufacture of jaggery. The sweetmeats produced under this scheme were very popular and were all sold even on the very day of production. It is more profitable to the poor ex-tappers. They have realised the benefits and are now very enthusiastic in following the improved method of production. The Joint Registrar, Thailand, who visited the Wallajabad Jaggery Society during December 1951, commended the working of the Palm Gur Development Scheme at the time of distribution of samples at the meeting of the District Prohibition Advisory Council held on 28th June 1952 at the Saidapet Collectorate.

The following are the details of production of jaggery and other popular sweets made after the introduction of the improved scheme in the Society:—

Name of the commodity.	Quantity.			
	MAUNDS.	VISS.	TOLAS.	VALUE.
Jaggery	9	12	27	56 13 6
Palmyra	0	17	30	13 5 0
Chocolate	0	5	20	5 8 0
Toffee (Almond) ..	0	3	30	2 13 0
Brown sugar	0	2	10	1 11 0

The entire quantity was sold except the following taken for exhibition:—

Jaggery—5 lb. 30 tolas.
Palmyra—30 tolas.
Chocolate—1 lb.
Toffee (Almond)—30 tolas.
Brown sugar—2 lb. 10 tolas.

ADMINISTRATION

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MADRAS INFORMATION

Charities and Religious Endowments

By SRI K. VENKATASWAMY NAIDU, Minister for Religious Endowments

The expression "endowment" means and includes all property of every description belonging to or held in trust for a charity. The endowment may consist in applying the corpus or utilising its income for the maintenance of a charity. Endowments are made for charitable or religious purposes. Charitable endowments are made for the benefit of the community for objects of public utility, such as rest-houses, choultries, patasalas, schools and colleges, houses for feeding the poor, institutions for the advancement of education, medical relief and public health. Religious endowments are made for the support of maths or temples or for the performance of any service or charity connected with a temple.

The Hindu religious endowments are of two kinds, namely, temples and maths. Endowments to temples are of two kinds, namely, endowments made for the support of the temple for the maintenance of daily puja and for the performance of festivals, and endowments made for the performance of any service or charity connected with a temple. The latter class of endowments is called specific endowments or kattalais. There are about 12,800 major temples in the State coming under the Act. Temples have been endowed with landed properties, assignment of public revenue and jewellery. They are not merely places of worship, but centres of culture and art. Next to temples, maths are the most important institutions in the State. There are about 212 maths in the State. These maths are presided over by Gurus who have disciples of their own. The object of the maths is to spread the knowledge of religion and to impart religious instruction to their disciples and followers. Both temples and maths are necessary institutions for the promotion of Hindu religion.

Partial and Complete Endowments

The endowment may be complete or partial. The endowment is said to be complete when the possession and management of the property vests with the trustee, in the case of a temple, and the head of a math, in the case of a math. A trustee has no right to the property. He has to administer the property in accordance with the terms or objects of the trust. He has to account for the property and its income. He may hold office by hereditary right or by appointment for a fixed term. Misappropriation or misapplication of trust funds is a betrayal of trust and the trustee is liable to be punished. The math and its endowments are not the personal properties of the head of the math. The math exists for the spiritual welfare of the disciples. The head of the math is an ascetic and he has got a duty to spend the income of the math for the purposes of the math. The head of the math is not a mere trustee. He has got larger powers of disposal of the income from the properties of the math. An endowment is said to be partial when a portion of the property or its income is reserved for the trust or when it is merely a charge on the property.

The Madras Hindu Religious and Charitable Endowments Act of 1951 was enacted to provide for better administration and governance of Hindu religious and

charitable institutions and endowments in the State of Madras. Religious and charitable endowments are public trusts. The public have a right to expect that the endowments are administered properly and that the objects of endowments are carried out strictly. There has been complaints of mismanagement and misappropriation of religious and charitable endowments. The Government have got a duty to see that mismanagement is put an end to and that misappropriation or improper dealing of funds is not allowed to continue. All charitable endowments do not come within the purview of the Act. In cases where charitable endowments are mismanaged, the Government will publish a notification in the Gazette expressing their intention to extend the provisions of the Hindu Religious and Charitable Endowments Act to such charitable endowments, and the concerned parties will be given an opportunity to make their own representations against the issue of such notification. After considering the objections, if any, the Government will decide about extending the provisions of the Act to such charitable endowments. Statistics are being gathered for extending the provisions of the Act to charitable endowments which are mismanaged.

[Powers under the Act]

Under the Act, the Commissioner has got powers of superintendence and control over all religious endowments in the State. This power is exercised by him through Deputy Commissioners, Assistant Commissioners and Area Committees. The State is divided into twenty divisions for the purpose of administration. Each division is in charge of an Assistant Commissioner. The Government have constituted an Area Committee for each division. An Area Committee has jurisdiction over temples and specific endowments getting an income of Rs. 20,000 and below within its division. Non-officials are appointed by Government as members of the Area Committee. The Assistant Commissioner of the division presides over the meetings of the Area Committee. He can take part in the proceedings but has no power to vote. The members of the Area Committee are given powers to appoint trustees, to approve Section 38 register, dhittam, budget, to review, audit report, etc., for temples under their jurisdiction.

It is the duty of the Assistant Commissioner of the division to guide the members properly in the discharge of their duties. The Deputy Commissioners have jurisdiction over temples fetching an income of about Rs. 20,000 and maths within a specific area. There are three Deputy Commissioners in the State and they have their offices at Coimbatore, Tanjore and Masulipatnam. They have also to conduct enquiries under the several provisions of the Act. Appeal lies to the Commissioner against any order of the Deputy Commissioner and in certain cases, further of the Deputy Commissioner and then to the High Court as against the Commissioner and then to the High Court as against the Commissioner. The Government have power to call for records from the Commissioner or any Deputy Commissioner or Assistant Commissioner or Area Committee and to rectify mistakes.

Rs. 26 lakhs will be for equipment which will remain over as an asset.

Pilot Scheme Formulated

The High Power Committee under the Chairmanship of Sri A. R. Venkatachari, Chief Engineer, considered the pilot scheme at its meeting on 16th January 1952. It agreed that subject to proceeding by stages, and by manual labour till mechanical equipment is purchased or contracted, the pilot project should be immediately undertaken. The Committee considered that all possible data from bore holes and shafts was available and that the pilot project will reveal actual size problems to be handled as they arose. The Committee felt that though the cost may be higher, it could be considerably reduced if the excavation was given to contractors who will bring their own equipment, one such contractor being reported to be immediately available. The Committee took notice of the availability of a power plant from Basin Bridge which could be installed to convert the fuel at site into electricity. The Committee had no objection to the lease of small concessions to parties bound to exploit them in a stated period.

The report of the Committee is now under consideration of Government. The balance sheet appears roughly as follows. On the credit side, lignite would relieve the shortage of coal which is now depressing industrial develop-



BORE HOLE at corner of 500' x 500' plot (baling out test).

ment. At an estimated cost of Rs. 20 per ton at pithead, fuel will be at least half as cheap as it is at present, and available in abundant quantities, so that the full scope of industrial development is not hampered. To the extent the transport load from the North is reduced, other raw materials like steel now held up will be available according to allocation. Secondly, the lignite which is considered the best in the world can become the foundation for other industries. It can be used at pithead for generation of electricity to be fed into the State-wide grid. The possibility of turning it into power gas is also under examination.

Important By-Products

Similarly, extraction of petrol by direct hydrogenation is a development for which the example is Germany which depended for all its war supplies of petrol from lignite. Another important by-product is Montane wax, which is capable of a variety of uses, as purifier in the candle industry and various polishes, in the raw state for making

gramophone plates, electric insulating materials, plastics and water proofing materials. As a cheap fuel lignite can be used for domestic purposes, brick making. The residue is useful as manure. Thirdly, the quarrying process will yield valuable deposits of fire clay for refractory bricks and China clay pronounced to be of the highest variety for pottery and porcelain. If a market for all the clay can be found, and the Japanese seem to be already interested, the entire cost of quarrying can be met from these clays only. Fourthly, the very water in the quarry which is considered an inimical factor, can, if properly husbanded and pumped, irrigate a good part of this arid area.

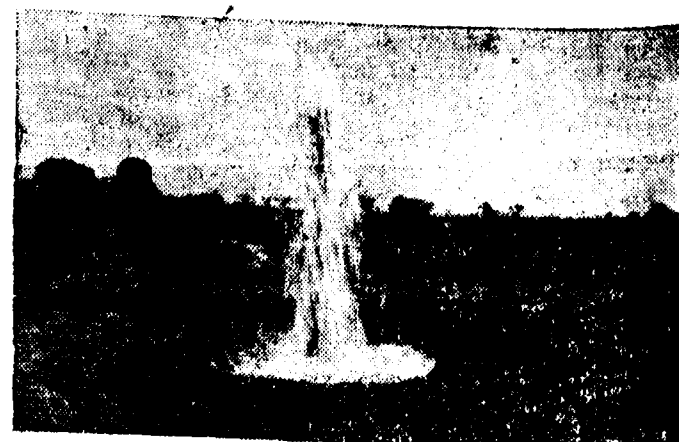
On the debit side are the factors arising from the conditions of water and soil. One view of the water, with pressure discharges of 2,500 gallons per minute, is that there is a problem in mining which has no parallel anywhere in the world, except perhaps in Germany. The water inhibits underground mining, which is cheaper and quicker. Another view is that the artesian water is under the lignite, the sub-artesian aquifers above being weak and easily controlled. The borewells round the existing pit have been of little volume and pressure. Regarding the soil, the problem of slope of clayey horizons is not considered to be free from difficulties. At the same time neither of these two difficulties are regarded as insuperable, provided the work proceeds experimentally.

"Operation Prometheus"

This is what the Madras Government are considering. Their finances impose a conservative policy, but with help from the Government of India which is expected, they may not hesitate to accept the recommendations of the High Power Committee to undertake immediately the pilot project.

I have tried to simplify a technical subject with the idea of acquainting the general public with a project of immense possibilities. The Government, particularly the Hon'ble Ministers for Industries and Labour, have shown an unflagging interest. On my part, I have regarded the project as integral to the industrial future of this State, something which I have designated "Operation Prometheus" to bring back to the surface of the earth, wood buried millions of years ago. My hope is that the end of this year will see the completion of the pilot project and the beginning of the full-scale exploitation of lignite.

(By Courtesy, A.I.R., Madras.)



ARTESIAN SPRING in a field south of Neyveli

Land Revenue Remission : Kurnool and Nellore

The Government have sanctioned the grant of wet and dry remissions for fasli 1361, on the scales indicated below, in 16 villages of Cumbum Taluk, 12 villages of Markapur Taluk, seven villages of Koilkuntla Taluk and nine villages in Banganapalle Sub-taluk in Kurnool District, which have been affected by adverse seasonal conditions.

Wet and dry remissions for fasli 1361 have also been sanctioned, on the same scales, in the following areas in Nellore District, which have been affected by adverse seasonal conditions :—

Wet and dry.—(1) Podili. (2) Darsi; entire taluks including the estate villages of Udayagiri and Pamur groups. (3) Kanigiri Taluk: entire taluk including the villages of Venkatagiri zamin, i.e., Marella Taluk and the estate villages of Udayagiri and Pamur groups, and excluding the area commanded by Mopad Project. (4) Venkatagiri: All the 230 villages of the entire taluk. (5) Udayagiri: All the villages including the estate village of Udayagiri and Pamur group and excluding the area commanded by Mopad Project. (6) Kavali: three villages, viz., Kaligiri, Chinna Annalore, and Dundigam. (7) Kandukur: All the 89 villages in Chundi estate. *Dry lands only.* Kandukur: 76 villages situated to the west of G.N.T. road.

In respect of both the districts of Kurnool and Nellore, the details of the remissions are as follows :—

1. *Wet lands.*—Full remission for wet lands with an outturn of four annas and below; no remission for wet lands with an outturn above four annas.

2. *Dry lands.*—(a) *Food crops (Cereals and pulses).* Full remission for food crops with an outturn of four annas and below; half remission for food crops with an outturn of above four annas and below eight annas.

(b) *Other crops (Crops other than Cereals and pulses).* Full remission for crops with an outturn

of below four annas; No remission for crops with an outturn of four annas and above.

All wet fields on which, owing to inadequacy of water, a successful dry crop has been raised, will be eligible for the remission of the difference between the wet and dry assessments. 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 four previous faslis should be excluded in Kurnool District and three faslis in Nellore District. Current wastes on dry lands, i.e., lands, which are not mamul wastes, will also be eligible for remission.

The Government have directed that all the concessions in the matter of remission of revenue should be applied to those estates, which have been taken over by the Government and which are in the affected areas.

The Government have also directed that the recovery of loan instalments in the affected tracts should be postponed to fasli 1362 both in the ryotwari areas as well as in the affected estates taken over by the Government.

In respect of Kurnool District, the Government have directed that the taluks of Cumbum, Markapur and Koilkuntla and the Banganapalle Sub-taluk of the Kurnool District be recognised as areas, where distress exists, for the purpose of granting subsistence loans to agriculturists. The Government have also sanctioned an allotment of Rs. 55,000 for the grant of subsistence loans to the ryots in the area in the Kurnool District mentioned above during the year 1951-52. The Government have also sanctioned an expenditure of a sum of Rs. 20,000 for running gruel centres in the Kurnool District. Sanction has also been accorded for an allotment of Rs. 15,100 for disbursement as fodder loans during 1951-52. An allotment of Rs. 10,000 has also been sanctioned for undertaking minor irrigation works in the Kurnool District.

Crop Competition Rule Relaxed

In the Food Production Crop Competition (1951-52) the minimum number of competitors for each firka was fixed.

In this Government Order it was stated that no competition would be held in a firka unless there were at least 50 entrants. It has been brought to the notice of the Government that in spite of utmost efforts, it has not been possible to secure the minimum number of competitors in some of the firkas in some districts. The Government have, therefore, considered the matter further and issued the following revised instructions :—

(1) The Crop Yield Competition in respect of paddy may be held in all firkas where at least 25 competitors have been enlisted;

(2) In other firkas where even the reduced minimum of 25 has not been secured, the competitors may be allowed the option to contest for the Taluk Prize, but no Firka Prize will be awarded; the competition plots of such entrants will be assessed by the Agricultural Department in accordance with the rules; and

(3) In firkas where no firka competition is held, the entrance fee of competitors who do not intend to compete for the Taluk Prize shall be refunded.

Relief to Unemployed Ryots

The Government have sanctioned a sum of Rs. 64,000 to the District Board, Anantapur, in order to enable it to undertake two road works for the relief of the unemployed agricultural labourers affected by adverse seasonal conditions.

Position of Trustees

Under the Act, the trustees are given very large powers and they have to exercise them in the interests of the institution. Properties of religious institutions cannot be sold, mortgaged or leased for more than five years without the prior sanction of the Commissioner. In the case of alienation of inam lands, sanction of the Government is necessary. These provisions are intended to prevent alienation of lands of religious institutions except in case of necessity or benefit to the institutions.

To prevent leasing of properties for religious institutions for low rentals, the Commissioner is given power under the rules framed under the Act to veto such leases. To prevent loss of jewels due to all sorts of claims put forward by the servants of the temple to the custody of jewels, Section 36 of the Act has been enacted which provides that no office-holder or servant of a religious institution has a right to be in possession of jewels and valuables except under such conditions and safeguards the Commissioner may direct.

It is the duty of the trustee to renovate and keep the temple and its surroundings in neat condition. He should see that the gopurams are renovated, that tanks are kept clean and that the vicinity, the entrance steps, corridors and floorings of temples are kept in good condition. To ensure that repairs, and renovations are attended to, a minimum of ten per cent of gross income in the case of institutions getting an income of Rs. 3,000 and below and 25 per cent in the case of institutions getting an income of above Rs. 3,000 has to be provided in the budget for repairs and renovation of buildings connected with the temple. In addition, every trustee should provide in the budget adequate provisions for dhittam, discharge of liabilities and working balance. The Commissioner has fixed not less than five per cent of gross income as working balance.

Amenities for Pilgrims

Section 30 of the Act empowers the trustee to incur expenditure on amenities to the pilgrims and for training of archakas, othuvans, Adyapakas and Vedaparayanikas, after making adequate provisions for the budgetted expenditure. If pujas and festivals have to be done properly, the archakas have to be made familiar with Agamic rules. If after making adequate provisions in the budget as required under the Act and for arrangements for the health and conveniences of the pilgrims and training of archakas, etc., there is a surplus, the trustee of a temple can with the previous sanction of the Deputy Commissioner appropriate the surplus or any portion thereof for any of the purposes mentioned in Section 59 of the Act. It is not every temple that has got a surplus. Some temples have no funds for carrying out repairs. Some temples have no adequate funds for performing pujas.

It is the sacred duty of trustees of rich temples to divert a portion of their funds to help those temples which are in need of funds for repairs or for performing puja. Besides, the surplus funds can be diverted for starting orphanages, poor homes for the disabled and helpless, for propagation of religion, for maintenance of asylums for lepers, etc. These are some of the great objects for which surplus funds of religious institutions can be diverted.

The accounts of religious institutions whose annual income is not less than one thousand rupees are being

audited by the Examiner of Local Funds. Trustees are liable for surcharge for misappropriation or wilful waste of funds or gross neglect resulting in loss to the institutions as disclosed from the audit reports. They are therefore bound to maintain proper accounts for income and expenditure of the institution and to see that no loss is caused to the trust during their management. Neither the Government nor the public can keep quiet when funds of religious institutions are misappropriated or mishandled.

(A.I.R., Madras)

Visakhapatnam Agency in 1950-51

The following are the salient features of the administration of the Visakhapatnam Agency during 1950-51:—

Crime.—Crime continued to be light during the year. The crime figures remained almost on a par with those of last year. During the year under review, there was a total number of 992 enquiries and trials, eight appeals and ten sessions cases.

Medical Facilities.—During the year under report, a periodical itinerary of the medical officers and midwives in the Agency villages adjoining their headquarters continued in operation. This method of approaching the hillmen at their respective houses is showing encouraging results and the hillmen are resorting to the scientific treatment in larger numbers than before. A total number of 822 in-patients and 76,778 out-patients were treated during the year. Two hundred and eighty-nine labour cases were conducted. The anti-malarial units at Araku, Chintapalli, G. Madgole, Krishnadevipeta and Paderu have been working satisfactorily, with the result that spread of malaria had been effectively controlled.

Livestock Improvement.—Breeding bulls were stationed at Sarabhannapalem, Malakamalakaram, Kongasingi and Araku Colony, to improve the livestock in the Agency villages.

Education.—There were 56 hill schools, 13 Board elementary schools, 80 aided elementary schools and 20 adult education centres in the Agency. The number of schools as well as the number of pupils increased appreciably during the year. Twenty adult education centres were opened in the Agency. Boarding houses for the use of the hill tribes children were ordered to be opened at Seetampeta and Lagisapalli and G.L. Puram during the year under report.

Loan and other Facilities.—A sum of Rs. 14,950 was distributed during the year as State loans in Gudum Taluk. The right of free grazing was given to the villagers of Kondasantha in Sanivaram reserve forest. Free grazing was also allowed except in the closed areas, for all cattle, excluding goats, to secure the co-operation of hillmen for the successful protection of the reserves. Eleven families of Ponsilikota forest settlement were permitted to cultivate 326 acres of land, free of charge, as in the previous year.

Survey of Cottage Industries

The Government have selected the Kumbakonam firka in Tanjore District, instead of Kalahasti firka in Chittoor District, as previously notified, for the survey of the principal cottage industry of brass, bronze metalware and cutlery.

ADMINISTRATION

Rights and Duties

By SRI J. M. LOBO PRABHU, I.C.S., Secretary, Development Department

Highest Loyalty to Work

It may appear superfluous to talk about the 'Rights and Duties' of Government servants since these are recorded in various monumental volumes, including the Constitution. In fact, a good part of the time of Government is lost enforcing duties and allowing rights to individual Government servants. Perhaps this is a justification for a better appreciation of the subject. If the spirit underlying rights and duties is realised by all concerned, there would be less trouble for them and for others.

The spirit of the rules is that the work of Government is so important that on one hand it should be precisely defined and carefully done, and on the other, adequately paid and duly protected. There should be no doubt of the importance of Government work in a country in which the life and livelihood of millions, mostly illiterate, are dependent on rules and laws very meticulous and very far-reaching. Since the War the regimen of rules, in the name of control, has been extended not only to what one may own or produce but also distribute and consume. The latest extension is in the name of Planning which aims at an overall grip of the entire human and material resources of the country. The natural result is that Government is more powerful and Government servants more important than they have ever been in the past, however dimly this fact is realised.

Carefully Ordered Mechanism

When Government work is of a vital nature, it has naturally to be done fully and carefully. This implies that the duties of Government servants will not admit of any evasion or deflection. They have to be discharged inexorably, without fear or favour. The responsibility extends from top to the bottom, each link having its function in the carefully ordered mechanism of Government. If some think and plan, others supervise and enforce, the rest have to execute and achieve. The very size of Government requires that there is no let or hindrance anywhere.

Such duties justify the pay and protection which Government servants demand. The pay must be such as to place the Government servant beyond reasonable temptation. It should also be related to the qualifications of Government servants, generally the highest in the classes from which they are drawn. Unfortunately the salaries of Government servants have fallen behind the emoluments of many of those who may have failed to enter Government service and taken to other professions. This is because in the period of inflation prevailing since the War, the income of Government has been inelastic, while the income of private enterprises and professions has adjusted itself to the value of money. This has no doubt been a cause of much dissatisfaction to Government servants. They can however console themselves that they have security of service and that some day inflation will end.

From the Presidential Address of Sri J. M. Lobo Prabhu, I.C.S., Secretary to Government, Development Department, on "The Rights and Duties of Government Servants" at the Celebrations of the Secretariat and N.G.O. Associations on 12th September 1952.

In all, three sets of duties and rights of Government servants may be discerned, first to their work, second to other Government servants, and third to the public. The highest loyalty of a Government servant is to his work. To the extent work is rendered in a detached spirit, it will be of advantage to and will ultimately be approved by those above. In fact one of the basic conditions for the successful working of democracy is the independence of the permanent staff to do its work. Accordingly, Government servants are protected by various rules which assure security of tenure for as long as work is properly done. It has been alleged that the weight of these rules reduce, on one hand, the initiative of individual Government servants, and on the other, prevent reward for good work. A comparison is made with private employees who receive promotion and rewards according as they contribute to the interests of their employers. Perhaps there should be more room for recognising exceptional work in Government servants but by far and large, Government servants must look for their reward in the success of Government and the prosperity of the country. This will be inevitably reflected on them if only for the reasons that success will encourage Government to enlarge its activities in which more scope for promotion will arise.

The duties and rights of Government servants among themselves, arise from the fact that the mechanism of Government is one and whole and every one has to do his part. This implies first a spirit of co-operation. So far, Government servants are known to have banded themselves to agitate their grievances. It may be desirable to use such associations also for improvement of all the members in the matter of their work. The best argument employees have against employers are that they are indispensable because of their value and merit. The integral character of the work of all Government servants is likely to be emphasised by the system of Whitley Councils which may be introduced shortly. It is to be hoped that these councils will lead to a spirit not only to get something but to give more to the country.

Relations with the Public

The rights and duties of Government servants with the public have tended to be confused because democracy has come too suddenly. While public servants are faced with a new allegiance, the public is inclined to expect too much. Any individual who has some work with Government is apt to regard himself as the whole public and to be resentful if his case is considered in the context of the rights of others. This attitude is changing and will do so the more, if public servants make clear their impartiality and their loyalty to the general good. It may be necessary also for Government servants first to be more expeditious, second to be more human. Delay arises largely because of rules made to ensure that no mistakes are made. This has implied a certain dispersal of responsibility, so that the individual Government servant is able to excuse his own slackness on the basis of that of others.

Remission of Land Revenue Ordered

Anantapur District

The Government have sanctioned the grant of wet and dry remissions for fasli 1361, on the scales indicated below, for the entire taluks of Dharmavaram, Madakasira, Hindupur, Kadiri (excepting Shrotriam Narasambhotlapalli village), Penukonda (excepting Pedaballi village) and forty-three villages in Tadpatri Taluk, which have been affected by adverse seasonal conditions;

Wet lands.—(a) Full remission for wet lands with an outturn of four annas and below; (b) No remission for wet lands with an outturn of above four annas.

Dry lands.—(a) *Food crops (cereals and pulses).*—(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. (b) *Other crops (crops other than cereals and pulses).*—(i) Full remission for crops with an outturn of below four annas; (ii) No remission for crops with an outturn of four annas and above.

All wet fields on which, owing to inadequacy of water, a successful dry crop has been raised, will be eligible for the remission of the difference between the wet and dry assessments.

The Government have directed that all the concessions in the matter of remission of land revenue should be applied to those estates, taken over by the Government, which are in the affected areas. The Government have also directed that the recovery of loans instalments in the affected tracts should be postponed to fasli 1362, both in the ryotwari areas, as well as in the affected estates, taken over by the Government.

Coimbatore District

The Government have sanctioned a liberal scale of land revenue remission for the taluk of Dharpuram in Coimbatore District, which has been affected by adverse seasonal conditions. The details are as follows:

Full remission for food crops with an outturn of four annas and below and half remission for food crops with an outturn of above four annas and below eight annas. As regards non-food crops, full remission for crops with an outturn below four annas while those with an outturn of four annas and above are not entitled to remission.

Chingleput District

Wet and dry remissions have been granted for fasli 1361, on the scales indicated below, in the entire district of Chingleput, which has been

affected by adverse seasonal conditions for the last five years in succession:

Wet lands.—Full remission for wet lands with an outturn of four annas and below; No remission for wet lands with outturn above four annas.

Dry lands.—(a) *Food crops (cereals and pulses).*—Full remission for food crops with an outturn of four annas and below; Half remission for food crops with an outturn of above four annas and below eight annas.

(b) *Other crops (crops other than cereals and pulses).*—Full remission for crops with an outturn below four annas; No remission for crop with an outturn of four annas and above.

All wet fields, on which, owing to inadequacy of water, a successful dry crop has been raised, will be eligible for the remission of the difference between the wet and dry assessments. 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. Current wastes on dry lands, i.e., lands which are not mamul wastes, will also be eligible for remission.

The Government have directed that all the concessions in the matter of remission of land revenue should be applied to the zamin and inam estates which have been taken over by the Government and which are in the affected areas. The Government have also directed that the collection of loan instalments and arrears of loans be postponed till fasli 1362 in the entire district of Chingleput, including estates taken over by the Government.

Ramanathapuram District

The Government have sanctioned the grant of full remission for fasli 1361 on wet lands with an outturn of four annas and below in the entire district of Ramanathapuram, except the 20 river fed villages in Sivaganga Taluk, which were excluded from the scope of special remissions last year.

All wet fields, on which, owing to inadequacy of water, a successful dry crop has been raised, will be eligible for the difference between the wet and dry assessment. 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 Government have directed that all the concessions in the matter of remission of land revenue should be applied to those estates which have been taken over by Government and which are in the affected areas.

The Sindri Fertiliser Factory

India produces very little artificial fertilisers of any kind while there is a great need in India for fertilisers of this sort, particularly having regard to the grave shortage of food-grains in recent years coupled with an ever-expanding population.

Prior to the war, and to some extent during the war years, India imported artificial fertilisers in considerable quantities; but owing firstly to the world shortage of artificial fertilisers particularly nitrogenous fertilisers, and secondly, to the shortage of shipping space, it became necessary to consider indigenous production of artificial fertilisers. A further strong point in favour of indigenous production of artificial fertilisers, indeed, almost an overriding reason for embarking on such an enterprise, is that the production of artificial fertilisers will lay the foundations of a heavy chemical industry, and if India is to industrialise in any direction, it is essential that she should have a heavy chemical industry. In fact this can be regarded as a key industry.

In July 1943, the Foodgrains Policy Committee advised that, in the future, India would require between two and three million tons of artificial fertiliser per annum and recommended that, as a first step, immediate action should be taken to establish production of nitrogenous fertilisers to the extent of 350,000 tons per annum. In view of the national importance of the industry, not only its direct importance but also its importance as the basis of a heavy chemical industry and a defence potential for the production of munitions, the War Resources Committee of Council resolved at the end of 1943 that Government should undertake the responsibility for the production of artificial fertilisers as a national industry.

Surveys carried out

During the next few months, Government consulted various experts, carried out surveys of the raw materials available particularly fuel and gypsum, also power supply. These consultations and surveys disclosed wide differences of opinion as to what fertiliser to produce, what process to employ, where to locate production, etc. Therefore it was decided to obtain the services of an Expert Technical Mission to advise on the best methods of establishing the industry in India.

Briefly put, the Mission recommended, as a first choice, one large factory for the production of 350,000 tons of ammonium sulphate per annum by gypsum process. They suggested two alternative sites, Harduaganj near Aligarh being the first choice, Sindri in Bihar being the second.

There was a great difference of opinion between Provinces, States and industrialists generally in regard to the choice of a site or sites for establishing production of artificial fertilisers and in an endeavour to reconcile these conflicting views, a conference was held of all interested parties in Delhi in November 1944. To put the position in a nutshell, everybody was prepared to agree that the establishment of one large factory was the best course to follow, provided the factory could be set up in the Province or State which each particular party represented.

There was also a considerable difference of opinion on the type of fertiliser to be produced, some wanted several varieties of fertilisers to be produced, others were prepared to accept ammonium sulphate to begin with, in the knowledge that the production of 350,000 tons of ammonium sulphate per annum represented only about 1/7th of India's ultimate requirements.

Sindri chosen

Notwithstanding all these conflicting views, the recorded conclusions at this meeting were as follows:—

- (1) That there should be one large factory for the production of 350,000 tons of ammonium sulphate;
- (2) that the Central Government should be responsible for the technical management of the factory;
- (3) that the Central Government must play the major part in financing the project, but that it was most desirable for provinces and States to take substantial shares;
- (4) that in addition to the single factory for the production of 350,000 tons which was to be first established, the possibility of starting a similar factory in Southern India should be explored;
- (5) that the factory should be established at Sindri (Bihar) in preference to Harduaganj, as Sindri possessed greater potential advantages.

Sindri is a small Indian village which can hardly be found on the map. It is situated in the banks of the Damodar River about 14 miles down stream from Dhanbad. A road has since been constructed connecting the terminal point of the Dhanbad-Jharia road system with Sindri.

Although it was agreed that it would be more costly to erect the factory at Sindri, the overriding factor in favour of Sindri was presented by the Railway Board representatives, who stated that there was a constant traffic of coal wagons from the coalfields to the North Punjab (which was then regarded as the area from which gypsum would come) and that normally a large number of these wagons returned to the coalfields empty. The contention was that if otherwise empty wagons could be returned loaded with gypsum there would be general economy all round. The alternative of establishing the fertiliser factory at Harduaganj meant that the number of empty wagons returned to the coalfields would be greater rather than less. The conclusion, therefore, was to establish the factory at Sindri, subject to it being ascertained that an adequate supply of water could be made available throughout the year, about which there was at this stage some doubt, in view of the fact that the Damodar practically dries up during the hot weather.

Implementing the Decision

Having decided to establish the factory at Sindri, a Mission was sent to the U.K. to investigate the question of supply of plant and machinery. The Mission was required to draw up specifications for the plant and machinery for the factory in such a manner that all interested parties could tender for the supply, thus throwing open the supply of plant and machinery to world competition.

Delay is cause not only of exasperation of the public, but of opportunities for corruption. In the existing state of things, therefore, the emphasis should be on quick disposal. In respect of the human touch, Government servants sometimes tend to be weighed down by the letter and not the essentially human problems involved. The attitude should change as Government servants acquire the confidence that honest work will be appreciated. The public has therefore to make its contribution to the rights and duties of Government servants. It has to exhibit a better understanding of the difficulties of those who see problems in their multitudinous and not individual aspects and who are subject to rules and subordinations which limit individual efforts.

It is said that a people get the Government they deserve. If the people expect an efficient, honest and sympathetic civil service, they must in some measure show the same qualities. The civil services in Madras have a very high tradition which they are sure to maintain by their own efforts provided there is appropriate appreciation from the people they serve. If the rights of Government servants are conceded, their duties will follow as day follows night. And contrariwise, Government servants who discharge their duties need not be afraid of their rights.

Gift of Radio Set to Hospital

The Government have accepted with thanks the gift made by Sri S. Maldhi Reddi, Kurnool, of a radio set with necessary equipment and loudspeakers, to the Government Headquarters Hospital, Kurnool, for the entertainment of the patients.

Zamindari Abolition : Advance Compensation

A number of inam estates notified to be taken over on October 1, 1951, were not taken over on that date, as they were covered by stay orders of the High Court, Madras. Some of these estates have been taken over subsequently on the vacation of the stay orders. In respect of these estates, the advance compensation due for them has been deposited with the concerned Estates Abolition Tribunals by the Director of Settlements, on behalf of the Government. The names of the inam estates, the amount of advance compensation deposited for them, and the dates of deposit are published in the following issues of the *Fort St. George Gazette*: (1) page 986 of Part II of the *Fort St. George Gazette*, dated 23rd July 1952; (2) page 1157 of Part II of the *Fort St. George Gazette*, dated 20th August 1952; (3) page 1297 of Part II of the *Fort St. George Gazette*, dated 17th September 1952.

In respect of certain inam estates for which advance compensation was already deposited, it was found for some reason or other that the amount deposited as advance compensation has to be withdrawn. The names of the inam estates, the amount withdrawn and the reason for such withdrawals have been published at page 1122 of Part II of the *Fort St. George Gazette*, dated the 13th August 1952.

Jails in 1951

The following are the salient features of the administration of jails of the Madras State in 1951:—

Admissions to Jails.—The Administration Report on Jails for 1951 shows that there was a decrease in the number of admissions to jails from 321,520 in 1950 to 314,707 in 1951, while the daily average population increased from 25,514.94 to 26,188.02. The daily average of the under-trial prisoners decreased from 8,867.25 to 8,386.06.

Manufacture of Articles.—39.63 per cent of the convicts were employed in the jail manufacture of various articles, the value of which was Rs. 27,80,898 in the year under report against Rs. 24,16,693 in 1950.

Administrative Measures.—During the year under review Dr. Walter C. Reckless, United Nations Expert on Criminology, visited Madras. A second grade Sub-jail was opened at Madurantakam and a second Borstal School at Alipuram, Bellary. The Central Jail, Cuddalore, hitherto used for the confinement of detenus, was temporarily converted into a Jail for confining ordinary prisoners. The Subsidiary Jails at Bandar Fort and Salem were converted into Special Subsidiary Jails. The prisoners, whose unexpired portion of sentences was one month or less on August 20, 1951, were released unconditionally, to relieve overcrowding in jails. The reciprocal arrangements regarding transfer of prisoners, ex-military and others, convicted by Civil Courts of criminal jurisdiction from the States, where they are convicted to their States of origin were extended to Part 'C' States, i.e., Ajmer, Bhopal, Coorg, Delhi, Cutch and Vindhya Pradesh. Condemned prisoners were supplied betel and nut. One hundred huts were constructed for warders in various jails and repairs to 74 huts in the Central Jail, Rajahmundry, were executed. The Republic Day, January 26, of every year was declared a Jail holiday for jails and borstal schools. Fire Officers and officers of higher rank were appointed as ex-officio visitors of jails.

Research in Indigenous Medicine : Advisory Council Set Up

The Government of India have set up a Scientific Advisory Council for the Central Institute of Research in Indigenous Systems of Medicine, Jamnagar, which will work in collaboration with the Gulab Kunwarba Ayurvedic Institute, Jamnagar. Vaidyaratna Captain G. Srinivasamurti, former Principal, School of Indian Medicine, Madras, is the Chairman of the Council. The other members are: Ayurvedacharya Jadavji Trikamji of Bombay; Vaidyraj B. V. Degwekar, M.A., M.S., LL.B., of Jubbulpore; Kaviraj Upendranath Dass, Lecturer in Ayurveda, Ayurvedic Tibb College, Delhi; Director, Ayurvedic Medical Services, Government of Saurashtra, Rajkot; Dr. K. S. Mhaskar, M.D. (Bom.), D.P.H. (Lond.), D.T.M.H. (C.Mb.), of Bombay; Dr. B. Mukerji, M.B. (Cal.), D.Sc. (Mich.), M.D. (Munich), M.P.S. (Lond.), F.N.I., Director, Central Drug Research Institute, Lucknow; a Statistician to be nominated at a later date and the Director of the Institute.

The term of office of the members will be three years. The chief function of the Council is to assist the technical staff of the Institute in formulating its research programme for all categories of research both initially and during its subsequent years of development.

Great Expansion of Educational Activities

By SRI N. D. SUNDARAVADIVELU, Deputy Director of Public Instruction

The last five years during which the first post-war National Government has been in charge of the State has been a period of great expansion of educational activities at all grades. It was notable not merely for the increase in the number of institutions and of scholars but also for reorganisation of the educational activities in those institutions.

One can still recall to his memory those days of apathy and indifference on the part of the public at large, especially in the rural areas, with regard to the education of their children. The problem then was of finding enough children to attend educational institutions and cases are not wanting where primary schools had to be closed down for want of strength even for a single teacher. At present, as everyone of us knows only too well, the problem is one of finding adequate accommodation for all those who want to go to schools and colleges.

Social Awakening

The social awakening inspired during the last one generation, the enthusiasm and love for education that our soldiers brought back from their foreign travels during the last war, the military concessions given to their dependants, are some of the factors that contributed to the demand on an unprecedented scale for expansion of education in our State. Even villagers who have had no education for generations together have begun to take an interest in education.

Our National Government in the State have realised that the best means of uplifting the down-trodden is to flood them with education and have taken note of the changed atmosphere prevailing. They realised that there were still very many villages without any educational facility whatsoever within their reach. Government have kept as their objective the provision of at least a primary school in all villages with a population of 500 and above. To this end the local bodies have been asked to give priority to the opening of new schools in school-less centres. Compulsory elementary education has been introduced as an experimental measure in select rural areas in each district. Government have also provided a sum of Rs. 5 lakhs for payment of a special subsidy to District Boards towards the expenditure on the opening of new schools in school-less centres with a population of over 1,000.

Elementary Education

Today the compulsory elementary education scheme is in force in 1,829 centres in addition to 29 urban and rural areas where it was in force prior to the last world war. It has been the constant endeavour of the Education Department to increase the enrolment of the children in elementary schools. As a result of these the number of elementary schools increased from 35,916 in 1946 to 39,000 during 1950-51. While 32.42 lakhs of school-age children were attending primary schools in 1945-46, today their number is as many as 40.27 lakhs. As it stands now, about 60.6 per cent of boys and 35.2 per cent of girls between the ages of six and 12 are at school. The expenditure on elementary education had increased from Rs. 3.27 crores in 1945-46 to Rs. 6.66 crores during 1950-51.

Let us consider now the reorganisation that has been going on for some years. It was felt that education in the past was bookish and the taught were merely passive listeners and not active participants in the educational activities. It was also realised that education should aim at the harmonious development of hand, head and heart and to achieve this objective, children need education through activities. Hence it was decided to convert elementary schools into Basic schools, where the method of education is one of learning through a craft which may vary from place to place in accordance with the environment. As a result of the steps taken in this direction there are today 507 Basic schools in the State. To achieve this end in view we have today 59 Basic training schools for training Basic school teachers. Retraining has also been given in 40 Basic training schools to the ordinary elementary school teachers.

Government have not been unmindful of the fact that a contented teaching profession is necessary to the proper development of educational institutions. Hence scales of development of educational institutions. Hence scales of development of the teaching profession under various managements have been revised during the period under review. Taking for example a higher elementary grade teacher in an aided institution, as against the grant of Rs. 16 per mensem paid to him till the end of 1946 his present scale of grant is 27-1-30. Similarly, though not to the same extent, the scales of pay of all grades of teachers working in institutions under different managements have been favourably revised.

Secondary Education

Let us now turn to the field of secondary education. In the field of secondary education the expansion of educational activities is more striking. The number of secondary schools in the State has gone up from 655 boys' secondary schools and 200 girls' schools in 1945-46 to 1,143 for boys and 256 for girls respectively, during 1950-51. Today the number of secondary schools has increased to 1,526. This is the result of the encouragement and support to secondary education given by the Government who have adopted a policy of providing every taluk in the State with at least with one high school. Similarly the number of students increased from 325,117 boys and 79,821 girls to 534,122 boys and 123,527 girls by 1950-51. To further the cause of secondary education they have liberalised the system of grants and subsidies. The rate of teaching grant to aided secondary schools has been raised from half the net expenditure to two-thirds of the net cost. District Boards and Municipal Councils who were formerly getting only lump-sum fixed subsidies for running secondary schools were also given the benefit of grant on the basis of one-half of the net cost. Consequently the State expenditure on secondary education rose from Rs. 45,19,142 to Rs. 1,30,37,772 during 1950-51.

The improvement in secondary education is noticed not merely in numbers but also in quality. It was felt that every one who wanted to have the benefit of secondary education was forced to go through certain fixed courses without serious consideration of the students' aptitude. There was not enough provision for fitting them for life.

AGRICULTURE

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MADRAS INFORMATION

Eventually the head of the Mission in consultation with various Indian Government officials of high standing submitted the following proposals :—

(a) A firm of American experts known as the Chemical Construction Corporation (C.C.C.) should be employed to prepare designs for the complete factory, supervise construction of the factory and see the factory into production.

(b) That a consortium of U.K. chemical plant manufacturers, the Power Gas Corporation (P.G.C.) should be employed :—

(1) to supply, in accordance with the consultants' specifications, certain specialist plant of their own manufacture for the factory ;

(2) to act as Agents to the Government of India in the procurement, in accordance with the consultants' specifications, of the remaining plant required for the factory and to erect the same under the supervision of the consultants' experts.

It was eventually decided to accept these proposals and agreement were entered into accordingly.

The agreement with the Chemical Construction Corporation was signed on 8th February 1946.

The agreement with the Power Gas Corporation was signed on 2nd June 1947.

The above dates fix the "starting date" for work on the project, although a considerable amount of preliminary work was done by the parties to the above agreements on the authority of "letters of instructions to proceed" issued prior to their formal execution.

Similarly, preliminary work at site such as survey and purchase of land, erection of temporary accommodation, site levelling, etc., was started prior to the signing of the agreements between Government and the principal parties.

The agreements provide that as much as possible of the plant required for the factory shall be manufactured in India, provided of course Indian prices were competitive. Under this arrangement all structural steel work buildings and a considerable tonnage of the simpler plant items have been manufactured in India. It was difficult,

however, to find capacity for the manufacture of the more complicated items. Moreover, Indian manufacturers were fully booked up with orders against their 60 per cent quota of steel and the competition in India for orders for the manufacture of plant for the fertiliser factory was not very keen.

Question of Water-supply

The question of water-supply is of great importance. The requirements of water for the fertiliser factory and its connected activities amount to some 12 million gallons per day. When the question of siting the factory at Sindri was being considered, the Bihar Government representatives assured the Central Government that tests carried out by their experts proved that the surface flow in the Damodar River was never less than ten cusecs or the equivalent of five million gallons per day. The estimated requirements of the fertiliser factory at that stage were in the order of five to six million gallons per day. Requirements have since increased, consequent on expansion of the power generating plant and the proposed establishment of a cement factory.

Observations carried out by the Central Government experts, however, established that for several months out of a year, the surface supply dropped much below five million gallons per day, in fact at the worst period in 1945 the flow for a time was as low as $\frac{1}{2}$ million gallons per day. Consequently, the Central Government had to consider whether the water required could be obtained or not. To examine this very complex question, Government appointed an Ad Hoc Committee of Experts whose conclusions were that, provided certain major works were carried out, the supply of water required could be ensured throughout the year. These works consist of—

(a) construction of a dam on the Gowai River, a tributary of the Damodar River, which joins the Damodar about four miles upstream from Sindri ;

(b) construction of an infiltration gallery to tap the water available in the sands in the Damodar bed when the surface supply diminishes ; and

(c) construction of the necessary riverside pumping and purification works.

AGRICULTURE

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MADRAS INFORMATION

Cement Factory

In the manufacture of ammonium sulphate by the gypsum process, to the scale of 1,000 tons per day, some 900 tons of calcium carbonate sludge will be thrown up as a by-product. The disposal of this sludge is a problem in itself and the obvious solution is to turn it into cement, so that it may become an asset and not a liability. Plans to utilise the by-product sludge in this way are under consideration.

Coke Supplies

For gas making, which is a preliminary to the manufacture of ammonia, some 600 tons of coke per day is required. To ensure that a proved method is followed in the operation of the fertiliser factory in the early stages, it has been decided to use high grade metallurgical coke for gas making. To reduce this drain on India's limited resources of high grade metallurgical coke, schemes are being investigated

(a) for the direct gasification of low grade coals ;

(b) for the establishment of coke ovens at Sindri for coking second grade coals.

Gypsum Supplies

A reference has already been made to the gypsum process. India has no great resources of natural sulphur and it is only by the employment of the gypsum process that import of vast quantities of sulphur can be avoided. Furthermore, it is only by the employment of the gypsum process that India can be regarded as self-supporting in times of emergency in the matter of production of ammonium sulphate. Plans as they stood originally involved the extraction of some 2,000 tons of gypsum per day from deposits in the salt range in the North Punjab. These resources however now lie in Pakistan. Explorations have been conducted with the object of locating alternative sources of supply in India. Extensive deposits have been located in Bikaner and large-scale tests in the U.K., on gypsum from the source has established its suitability for use at Sindri. Other reserves are being developed in Jodhpur.

The necessity of these measures was accepted. The construction of a dam on the Gowai will create an artificial lake impounding 700 to 1,000 million gallons of water. The construction of the infiltration gallery is an experiment which will be of enormous value not only to India, but also to the rest of the world, in the problems of extracting water from the deep sands of a river with a seasonal flow.

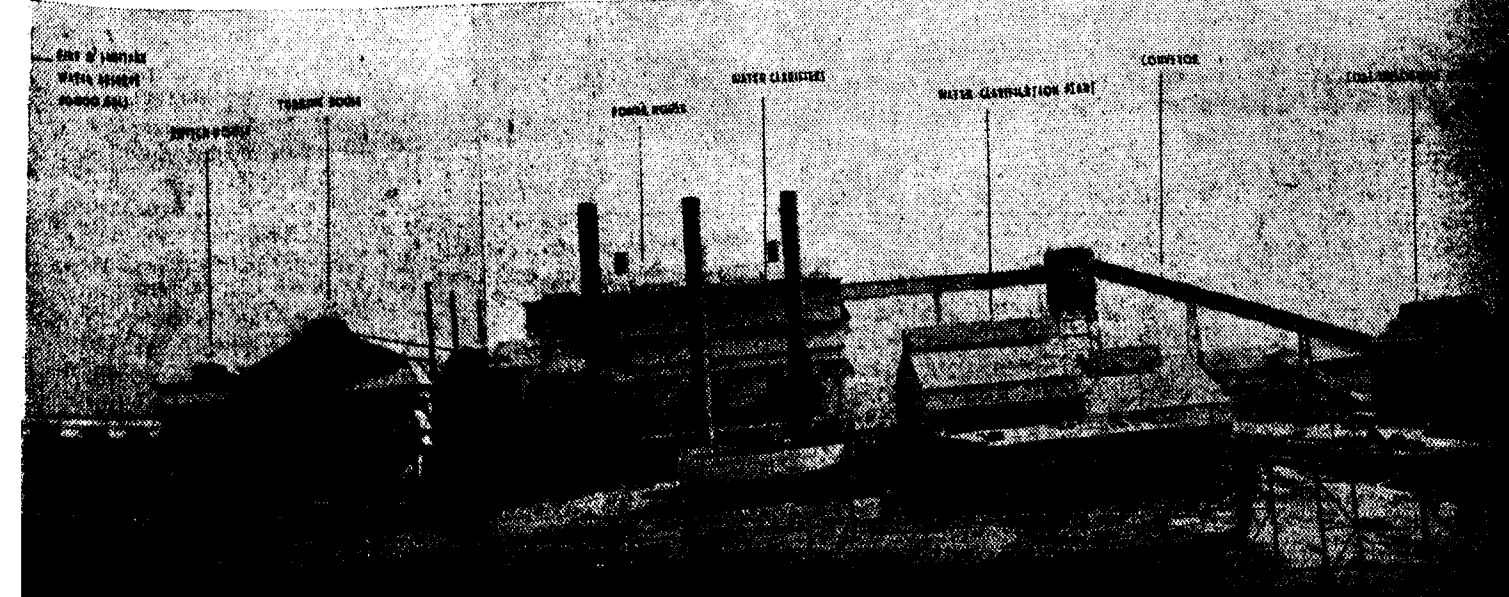
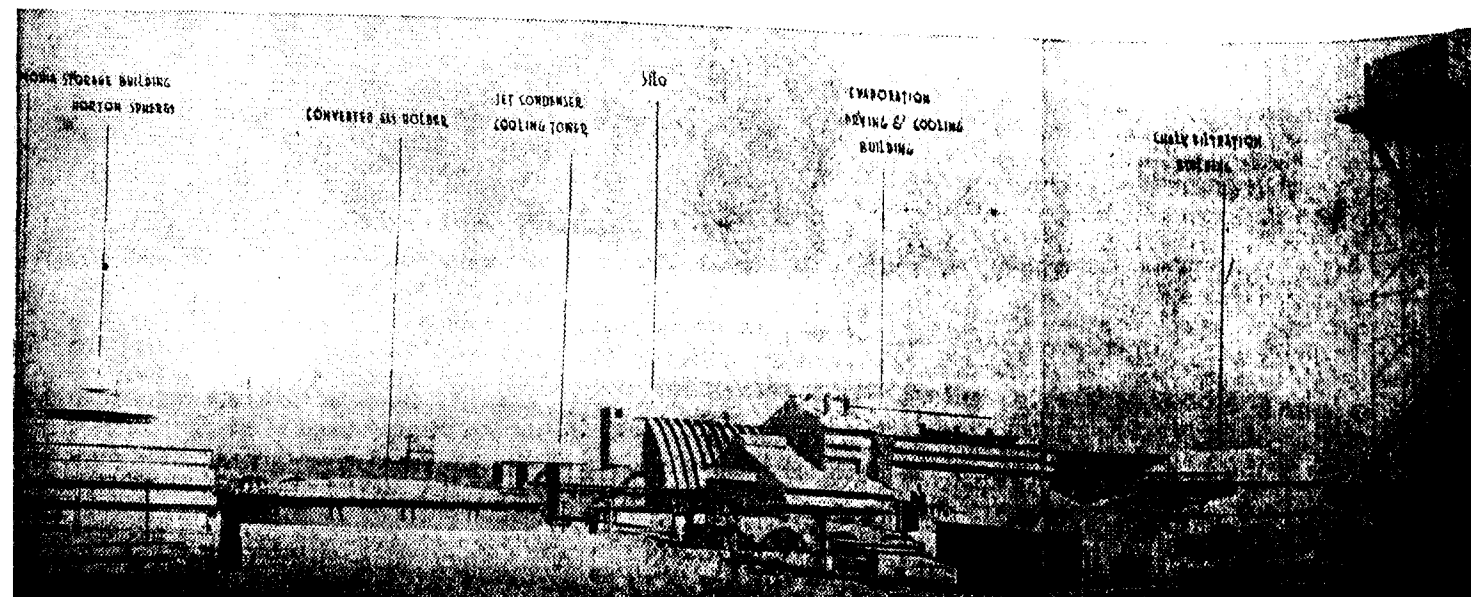
Power Supply to the Bihar Grid

Most of the mines in the Bihar coalfields are operated by electric power supplied by local generating sets or by a local distribution system. The Bihar Government had intended, for a long time, to modernise and economise in the matter of electric power distribution by the erection of a big thermal station in the coalfields and the installation of a grid distribution system. The site chosen for the generating station was at Sindri and, after the plans for the establishment on the fertiliser factory had taken shape, the Central Government were approached by the Bihar Government with the request to supply water, railway and other facilities to their grid power station. It is of importance to mention at this point that the fertiliser factory must have its own power station because the factory requires a vast amount of low pressure steam for process work. Economical production requires that steam should be first passed through turbines for the generation of electricity, the exhaust steam being distributed throughout the factory for process work.

Accepting that the factory must have its own powerhouse, the electric load being in the order of 45,000 Kilowatts (which with the necessary stand-by means a powerhouse of 60,000 K.W.) it would have been a violation of all principles of modern planning for the Bihar Government to establish another thermal powerhouse of some 20,000 K.W. within half a mile of the fertiliser factory powerhouse. Therefore, in consultation with the Electrical Commissioner and other responsible authorities, an approach was made to the Bihar Government with the proposal that additional generators should be installed in the fertiliser factory powerhouse to supply power in bulk to the Bihar Grid. This proposal was accepted by the Bihar Government. This means that the fertiliser factory powerhouse has an installed capacity of 80,000 K.W.

This giant 29-crore-rupee project will have a daily output of 1,000 tons of Ammonium Sulphate.

SINDRI : A grand panoramic view of the Sindri Fertiliser Factory.



EDUCATION

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MADRAS INFORMATION

Grants Increased to Panchayat Elementary Schools

The Government have sanctioned, with effect from September 1, 1952, an increase of Rs. 2 per mensem to the minimum of the scale of teaching grant now in force for the teachers in Panchayat elementary schools. The enhanced rate of teaching grant will be as follows: lower elementary grade trained teacher—Rs. 20; higher elementary grade trained teacher—Rs. 27— $\frac{1}{2}$ —30; secondary and collegiate grade trained teachers—Rs. 37—1—45.

The Government have directed that the Panchayats should also contribute Rs. 3 per mensem to supplement the salary of the above categories of teachers. The Panchayats' obligation of paying Rs. 3 extra to each teacher will continue to be in force even after his salary reaches the maximum of Rs. 20 in the case of lower elementary grade teachers, Rs. 30 in the case of higher elementary grade and Rs. 45 in the case of secondary and collegiate grade trained teachers.

As regards the lower elementary grade teachers, whose emoluments have been ordered to be fixed, according to the Order dated March 29, 1952, at a minimum of Rs. 40 per mensem from March 31, 1952, the Panchayats have been ordered to pay in full the difference, to make up the minimum wage of Rs. 40 per mensem, including dearness allowance, to the lower elementary grade teachers from their own funds up to the date of the Order in the present case.

This action has been taken on representations that many Panchayats are not paying their teachers the additional salary from their own funds, ordered to be paid in the Order dated June 5, 1947, on account of their poor finances.

and for training them as good citizens. It was therefore felt necessary to provide varied opportunities for a vocational bias to such of those secondary school students that desired them. Accordingly the secondary school system was reorganised from the school year 1948-49 providing for diversified courses like secretarial, pre-technological, aesthetic and domestic science courses.

Citizenship Training

Citizenship training was introduced in our training schools so that the students may get training in self-government, parliamentary methods and correct social behaviour and attitude. The provision of crafts in school activities helps to give the youngsters an opportunity to learn by doing and get a sense of achievement and self-confidence.

The decision with regards to the medium of instruction is worth mentioning. It is a well-known fact that children can learn best only through that language which is the

breath of their breath, blood of their blood to which they have been accustomed right from their cradle. To most of us that language is the mother-tongue. Hence Government have ordered as early as 1938 that the medium of instruction should be the mother-tongue of the students. Under the present circumstances, in most of the areas the mother-tongue of the majority of the citizens and the regional language are one and the same. Hence they have ordered the adoption of the regional language as the medium of instruction in high schools. However, provision has also been made to adopt the medium other than the regional language if there are a fairly good number of linguistic minorities wanting such a medium in any particular area.

For higher education adequate knowledge of English is necessary as things stand at present. Within a period of 15 years the official language of the Indian Union is to be Hindi. Realising the need for higher education and anticipating this constitutional requirement, provision has been made for the teaching of both English and Hindi in our schools.

I should not fail to remind you of the great boon confirmed on Harijans by way of full-fee concessions in all educational institutions of every grade. The recent concessions granted to N.G.Os., Local Board employees and teachers in aided institutions are, I am sure, quite fresh in your memory.

To summarise, education according to one's aptitude, instruction through the mother-tongue, introduction of citizenship training and social studies, emphasis on visual education and excursions and the introduction of military training are some of the noteworthy changes that have been brought into our high schools during the last five years.

Collegiate Education

In the field of collegiate education, Government laid down as their policy that there should be at least one college for every district. With a view to encourage private agencies to come forward to provide facilities for collegiate education, the rate of teaching grant to aided colleges has been raised from one-half to two-thirds of the net cost. This gave an encouragement to the opening of more private colleges.

When there were 59 Arts colleges in the year 1945-46 at the end of 1950-51 we had as many as 70 Arts colleges. The expansion is not confined to the Arts colleges alone. It is noticed in professional colleges also. While there were six training colleges in 1945-46, 14 training colleges were in existence during 1950-51. The opening of three new Government Engineering Colleges, one at Kakinada, one at Anantapur and one at Coimbatore, and the opening of two Government Training Colleges deserve special mention.

The importance of adult education in a country like ours where the percentage of illiteracy is high, has also been realised and necessary steps have been taken. As many as 2,000 adult literacy schools have been opened and 52.1 thousand adults are receiving the benefits thereof in accordance with a comprehensive three-year scheme of social adult education costing Rupees 14.86 lakhs.

The Library Movement

Let me now pass on to the library movement. To encourage the reading habit Government have taken upon

EDUCATION

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MADRAS INFORMATION

themselves the responsibility of sponsoring the library movement. The Madras State Libraries Act of 1948 has been enacted with a view to organise a network of libraries in each district. We may rightly take credit for being the first State in India to pass legislation of this kind and to take steps to implement its provision. As many as 16 districts have started central libraries as a first step and schemes for further development are under consideration. These are in addition to the existing Government aided libraries numbering over 2,000.

The education of the handicapped has also received greater provision. Three Government schools for the blind, one at Cuddapah for the Telugu districts, one at Salem for the Tamil districts and one in the bilingual area of Kasaragod for the Kannada and Malayalam districts have been opened, raising the number of such schools to seven. Government have also opened one school for deaf mutes at Chunangad, South Malabar, in addition to five such institutions being aided by the State Government.

All these increased educational activities mean greater demand for teachers of various grades. Government have taken necessary steps to increase the number of trained

teachers. The number of teachers under training in 1945-46 were 13,904. By 1950-51 the number had increased to 20,976.

As against the expenditure of Rs. 40,10,000 on training schools and colleges in 1946, Government spent Rs. 57,20,000 for the same purpose during 1950-51.

Increased Expenditure

Is it not unnatural that these should result in increased expenditure to the various bodies and in particular to Government? As against a total expenditure of Rs. 4.6 crores on education during 1945-46 it has been found to be Rs. 11.39 crores as expenditure during 1951-52. Government have provided in the current year's Budget a sum of Rs. 11,79,63,200 for education.

I suppose I have given you an overall picture of the trends and activities in the educational field to indicate to you how the need and importance of education at all levels have been realised and considerable attention has been paid to it and steps have been taken for an all-round expansion and improvement in the standard of education. (A.I.R., Madras)

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Development of Sheet Glass Industry in Southern India

The Sheet Glass Industry is comparatively less developed in Southern India, though the raw materials required for the production of sheet glass, viz., sand, soda ash, sulphate, limestone and dolomite are plentifully available. The Government of Madras are therefore anxious that a factory for the manufacture of sheet glass should be established in this State as early as possible. In a preliminary scheme for a Fourcault Glass Plant prepared by Messrs. Ateliers J. Hanrez, Belgium, the capital outlay was estimated at Rs. 24 lakhs for a glass factory capable of producing 7,000,000 square feet of packed glass per year single thickness of 2 mm. and at Rs. 31 lakhs for a factory capable of producing 14,000,000 square feet of glass of the same thickness.

The details of the scheme are available with Messrs. Larson and Toubro, Engineers, 4-5, Club House Road, Mount Road, Madras-2. The Government have decided that private enterprise should be invited for setting up a sheet glass factory in this State. The Government on their part will be prepared to extend any reasonable help, financial or otherwise, required for the establishment of the factory. Persons or companies who are desirous of starting a glass factory may apply to the Secretary to Government, Development Department, Fort St. George, Madras, before 1st May 1952, giving detailed information regarding their financial standing, business experience, and the assistance they require for the establishment of the factory.

Four Main Groups

To come to the factory itself, it is divided into four main groups, namely—

- (1) Powerhouse Group.
- (2) Gas Plant Group.
- (3) Ammonia Synthesis Plant Group.
- (4) Sulphate Plant and Storage Group.

Powerhouse.—The Powerhouse group contains the complete plant for generating power for the factory and for the supply of process scheme.

Gas Plant.—The Gas Plant is the beginning of the fertiliser factory proper. The factory can be more properly termed a nitrogen fixation plant. To fix nitrogen it is necessary to produce hydrogen, which, in combination with the nitrogen, forms ammonia.

The method employed at Sindri for the production of hydrogen is called the Semi-water Gas Process. Gas producers are charged with coke which is ignited; the producers are then blown with air, the oxygen of the air combines with the carbon of the coke forming CO and a mixed gas is carried forward consisting of CO and nitrogen.

In the next part of the cycle, the producers are blown with steam, which produces more CO and hydrogen. This

also goes forward in the gas stream; thus we have a final mixed gas consisting of CO, nitrogen and hydrogen. The blowing cycle is much more elaborate than this indication of broad principles only.

The next stage in the process is to convert the CO to CO₂. This is done by the reaction of still more steam with the CO in the presence of a catalyst. The CO is then scrubbed out and passed into storage, the remaining gases, hydrogen and nitrogen, go through an elaborate process of purification; they are then reacted in the presence of a catalyst to form ammonia, which brings us to the Ammonia Synthesis Plant.

Ammonia Synthesis Plant.—In the Ammonia Synthesis Group, the main feature of the plant is the compressor house. This building contains eight large seven-stage compressors, each operated by a motor of 2,750 h.p., the compressors working up to a pressure of nearly 6,000 lb. per sq. in. The reason for this elaborate compressor plant is that ammonia synthesis takes place much more efficiently when carried out at high pressures and temperature. In the ammonia synthesis area there will also be installed elaborate refrigeration plant for gas cooling, making this section of the factory one of the most important and complicated of the whole plant.

An interesting feature in the Ammonia Synthesis Group is the ammonia storage section. This consists of two Horton spheres each designed to hold 800 tons of ammonia. Constructed of plates 1½" thick, imported, shaped to form, these spheres were welded on site.

Sulphate Plant.—In countries rich in sulphur such as Italy, Japan, and America ammonium sulphate is made by reacting ammonia with sulphuric acid. There is very little sulphur in India; therefore, to ensure self-sufficiency as regards raw materials, it has been decided to adopt the more elaborate gypsum process. Gypsum is calcium sulphate. The gypsum is crushed, then ground into fine powder and passed to reaction vessels. Ammonia does not readily react with gypsum, therefore to ensure complete and efficient reaction, the CO₂ which is scrubbed out of the gas stream at an earlier stage is brought back into combination with the ammonia to form ammonium carbonate. Ammonium carbonate reacts with calcium sulphate, the product being ammonium sulphate and calcium carbonate.

The ammonium sulphate liquor is filtered out from the calcium carbonate, crystallized, dried, cooled and passed on to storage.

The storage arrangements are most interesting. Storage is being provided for three months outturn or 90,000 tons. The storage building is a parabolic arch reinforced concrete silo. The dimensions are 150 feet span, 90 feet high to the top of the arch and 1/8th of a mile long. The building will be air-conditioned. By means of an overhead conveyor the building can be stocked without the use of manual labour and by means of a gathering machine and an underground conveyor the product can be removed without the use of manual labour. The methods of construction adopted to build the silo was unique.

In the bagging plant, provision has been made for the automatic filling and weighing of 20,000 to 30,000 jute bags per day and loading them into outgoing rail cars; no small problem in itself.

Mention has to be made, very briefly, of one other point. To connect the factory with the main

Facts about the Sindri Factory

Up to date estimated cost of the project (crores of rupees)	29
Savings of foreign exchange by avoiding import of fertilisers (crores of rupees).	10
Total yardage of reinforced concrete, including the silo (cubic yards)	91,000
Tonnage of structural steel in the factory (tons)	11,000
Tonnage of plant in the factory (tons).	45,000
Installed capacity of powerhouse (kw.).	80,000
Pipe lines in the factory and building for distribution of steam, water and gas (varying in size from the smallest size to 72 inches bore) (miles)	80
Belt conveyors in the factory (miles).	7
Electric power cables in factory (miles).	170
Railway track in the factory and marshalling yard (miles)	12
Consumption of water at full expansion (million gallons per day)	12
Water in circulation over forced draft cooling towers (million gallons per day)	1,440
or (tons per day)	648,000
Refrigeration for gas cooling and air-conditioning equivalent to (tons of ice per day)	3,500
Gas generated (million cubic feet per day)	33
Anhydrous ammonia manufactured (tons per day)	300
Outgoing finished products—	
Ammonium sulphate (tons per day).	1,000
Cement (tons per day)	300
Raw materials—	
Coal (tons per day)	800
Coke (tons per day)	600
Gypsum (tons per day)	1,800
Other raw materials (tons per day)	400
Outgoing by-products and waste—	
Calcium carbonate sludge (tons per day)	900

Electricity Sub-Stations

The Government have sanctioned the extension of supply of 66 K.V. of electricity from the Mettur Electricity System to Rasipuram and Namakkal in Salem District and also the establishment of 66/22 K. V. Sub-Stations at these two places at an estimated cost of Rs. 45.3 lakhs initially and rising to Rs. 54.5 lakhs in ten years.

E.I.R. system it has been necessary to build a railway line from Pathardihi to Sindri. This has involved the construction of six miles of track with deep cuttings, high embankments and the construction of several bridges. There will be about 12 miles of railway line inside the factory and a large marshalling yard outside, and when in full production seven complete trains per day will have to be handled.

The foregoing is a very brief summary of the main outlines of the scheme. It has vast potentialities and the whole factory has been planned in such a way that the outturn can be doubled by the installation of additional plant, while at the same time every section of the factory will be kept in the correct position for the most efficient flow of production. Alternatively, the factory can be expanded to produce different types of out-turn such as nitric acid for India's industry generally, ammonium nitrate or nitro-chalk as fertilisers, etc., etc.

The township has been planned to provide housing and amenities for workmen on Labour Ministry scales. Each married workman will have at least a two-roomed house with electric light, cooking facilities, bath-house, piped water supply and water-borne sewage. The township will eventually be self-contained as regards shopping centres, hospital facilities, schools, recreational facilities and amenities.

The Government Farm Housing Accommodation Scheme

The Scheme is designed to provide housing accommodation primarily for the lower middle-class people employed in Government and quasi-Government services. Seventy-three houses with two designs will be constructed on the Government Farm which lies to the east of the Chingleput Collector's Office, Saidapet, and south of Chamiers Road. The first type of houses (four in number) will cost Rs. 13,700 each and another type (69 in number) Rs. 10,500 each. The economic rents for the houses will be roughly Rs. 90 per mensem for the bigger houses and Rs. 80 for the smaller houses. The total estimated cost of the scheme, inclusive of cost of provision of amenities, is Rs. 8,36,100.

Price of Malt Extract Reduced

The Government have ordered the reduction of the price of Malt Extract produced at the Government Malt Factory, Coimbatore, by four annas per lb. The sole agency for the distribution of the product in Madras, Hyderabad, Mysore and Travancore-Cochin this year is Messrs. New India Pharmaceutical Industries, Limited, Madras.

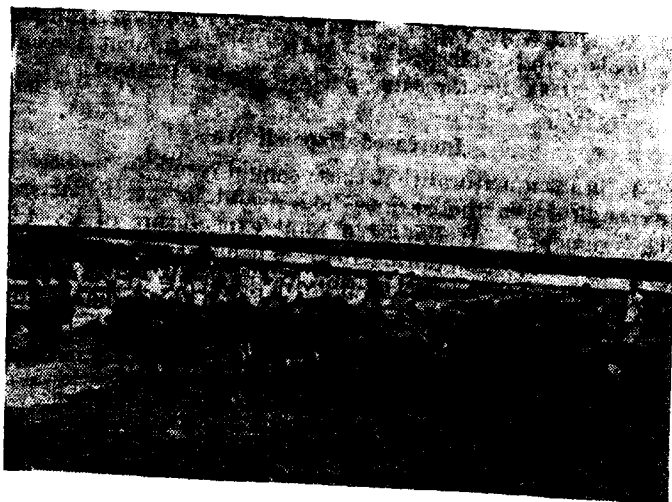
Grant for Road Works

The Government of Madras have sanctioned a full grant of Rs. 35,000 to the Cuddapah District Board in the first instance for the execution of Mallala-Lavanur Road work (estimated to cost Rs. 70,000) as an unemployment relief measure.

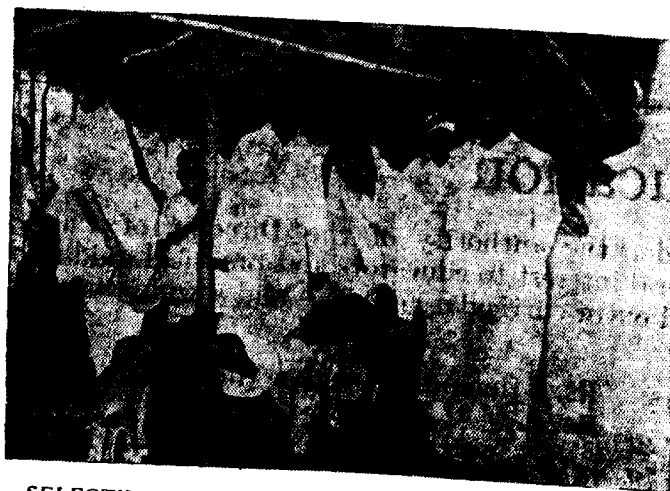
Road Works to Relieve Unemployment

The Government have sanctioned about 82 road works at an estimated cost of Rs. 13.59 lakhs, as a relief measure to provide employment to agricultural labourers affected by adverse seasonal conditions in Chittoor District and two works at an estimated cost of Rs. 67,000.

Salvage of Dry Buffaloes at Vattambedu



GREEN PASTURES: A herd of dry she-buffaloes at Vattambedu village, Sularpet Taluk, Nellore District. The Government have sponsored a scheme for the salvage of these animals.



SELECTIVE BREEDING: Sri D. Sanjeevayya, Minister for Co-operation, notes the difference between the country-bred calf and the pedigree calf (dark in colour and larger in size) born to a Murrah buffalo bull.

TRACTOR: Available waste land at Vattambedu extends to 600 acres. About 60 acres have been reclaimed with a tractor, which also aids to bale out river water for irrigating the fields.



Cattle owners and in particular the milkmen engaged in the dairy trade of the Madras City are often confronted with the problem of rearing the milch animals during their dry period. Heavy cost of living, high cost of cattle foods, lack of proper pasture grounds, and accommodation to the cattle are the main factors that stand in the way of their rearing during the dry and gestation period. Owing to these factors, the cattle owners part with their animals, while they are nearing their dry period. Oftentimes, these animals, which would have played their part gallantly in supplying a nutritious "Nature's Own Perfect Food-milk," during their lactation period at Madras City, and would have assured their worth as good yielders for years to come, by their present performances at the pail, enter the portals of the slaughterhouse.

Thus, there is a depletion not only of the livestock strength, but also of the cattle wealth of our country. With a view to arrest this depletion and to mitigate the hardships meted out to the dry animals, the Government of Madras have sponsored two schemes, one for salvaging the dry cows at the Kambakkam Reserve Forest and the other for dry she-buffaloes at Vattambedu village, in Sularpet Taluk, Nellore District.

Regular Breeding Centre

A Co-operative Salvage Society for dry buffaloes was at first started at Vattambedu with a view to organise the professional cattle caretakers of this area. Vattambedu is a regular breeding centre for buffaloes. These professional cattle caretakers collect dry animals from the Madras City and its surroundings; pasture them and return them to the respective owners, when once the animals near their calving period. Village factions and constant misunderstandings made these members quarrel with one another and also behave in indifferent ways towards their trade and consequently to adopt malpractices, to cheat the cattle owners and their belongings—dry stock. A co-operative society, which was started to organise these cattle-rearers did not function well, as the members proved disloyal to the society. The Registrar of Co-operative Societies, however, did not like the idea of winding up the entire scheme. Hence, with the approval of the Government, he transferred the activities to the Madras Co-operative Milk Supply Union, Limited, Madras, on 1st December 1950.

The Union undertook to work the scheme with the available waste land extending over about 600 acres. Half this acreage is in the name of the Venkatagiri Estate and the other half belongs to the local Siva temple and has been leased out to the Milk Supply Union. This entire area with the exception of a few patches of clay here and there, is made up of sandy loam. The Madras Milk Supply Union has already reclaimed about 60 acres of this area by going in for improved agricultural implements and a tractor. The latter also serves as a motive force to bale out the river water for irrigating the fields. Cultivation of paddy, cholam, guinea grass, etc., are in full swing. The grains from cereals and millets are sold to the public and the dry straw is utilised for feeding the cattle maintained at this farm. With a view to provide succulent green fodder all through the year, the Union

has drawn up a programme to cultivate guinea grass on about 15 acres of this land. A beginning in this direction has already been made, by bringing about four acres under this special variety of grass.

Government Aid

Temporary thatched sheds to shelter the dry buffaloes and quarters for the staff at this farm have been erected. The Government have given the services of one Senior Inspector of Co-operative Societies, one Stockman-Compounder to look after the animals and one Cattle-man Attendant to look after the Murrah buffalo stud bull maintained at this farm, for grading up the livestock. The District Veterinary Officer (Milk), Madras, inspects the animals periodically and renders necessary medical aid and tests the pregnancy of the animals. The Dairy Assistant, Madras, also visits the farm and assists in the cultivation of crops and in particular the fodder crops. The Madras Milk Supply Union has appointed a special Salvage Committee to look after the affairs of the farm.

The Government of Madras, considering the functions of this farm as a special type of activity to improve and

preserve the condition of livestock, have given a subsidy of Rs. 360 towards the salary of the cattle-men and another sum of Rs. 100 towards equipping a veterinary first aid set. The Madras Co-operative Milk Supply Union has invested a sum of about Rs. 30,000 towards the purchase of improved agricultural implements such as tractor, mould-board plough, cultivator, pumpsets, etc.

Sri D. Sanjeevayya, Minister for Co-operation and Housing, visited this salvage of dry buffaloes farm on 10th August 1952. The Registrar of Co-operative Societies, Madras, the Deputy Registrar of Co-operative Societies, Madras, the Sub-Collector, Gudur, and the Salvage Committee Members of the Madras Co-operative Milk Supply Union, received the distinguished visitor and took him around the farm. The Minister for Co-operation, after seeing the varied activities of the Salvage Farm observed that this institution is serving a useful purpose in improving the condition of livestock and in preserving the cattle wealth on co-operative basis. He desired that many more salvage farms of this kind are started, in different parts of the State, to arrest slaughter of useful milch animals and to preserve the cattle wealth of our country.

Multipurpose Societies

activities and it runs a reading room also. The following are further details regarding the Society:—

- (1) Date of registration—24th April 1917.
Date of starting—26th May 1917.
- (2) Number of members—1,617.
Paid-up share capital—Rs. 3,571.
- (3) Population of the villages included in the area of operation—4,000.
- (4) Percentage of population served by the Society—42 per cent.
- (5) Whether the Society has adopted the social and recreational activities by law—Yes.
- (6) Individual maximum borrowing power—Rs. 750.
- (7) Profits earned by the Society—Rs. 356-2-0 (1950-51 period).

Melur

The Melur Co-operative Multipurpose Rural Credit Society affiliated to the Mercanad Co-operative Union in the Nilgris District (Post Melur) was registered on 24th December 1918 and started on work on 18th March 1919. It had 66 members with a paid-up share capital of Rs. 1,858 on 30th June 1951.

During 1950-51 the Society borrowed Rs. 12,000 from the Central Bank and repaid Rs. 10,885, leaving a balance of Rs. 11,464. There are no overdues. During the year, the Society disbursed loans to its members to the extent of Rs. 13,000 and collected from them Rs. 11,423 leaving a balance of Rs. 14,530. There are no overdues.

The Reserve Fund of the Society was Rs. 3,515-2-0 on 30th June 1951. It earned a profit of Rs. 340-8-0 during 1950-51.

Hundi boxes have been distributed to the members of the Society as a first step towards multipurpose activities and a thrift deposit of Rs. 328-7-0 has so far been collected through them.

Amadaguntla

Amadaguntla is a village about 18 miles from Kurnool in the Kurnool Taluk on the Kurnool-Pathikonda road. The Amadaguntla Multipurpose Rural Co-operative Society was registered on 19th January 1933 and started on its work on 29th January 1933. It has 123 members on rolls with a paid-up share capital of Rs. 2,937-11-0. The Society has accumulated Rs. 931 under reserve fund, of which Rs. 744-12-0 has been invested in the District Co-operative Central Bank, Kurnool.

The Society borrowed a sum of Rs. 24,447-8-6 in September and October 1951. This includes a sum of Rs. 3,000 taken under post-sanction system. The Society has issued loans under the continuity mortgage system.

Rupees 26,140 is due from members as on date, of which Rs. 1,540 is overdue.

The Society earned a profit of Rs. 333-9-0 during the year 1950-51.

Pichamapalayam

The Pichamapalayam Multipurpose Co-operative Society in Coimbatore Circle was registered as a rural credit society on 24th April 1917 and it was converted into a multipurpose co-operative society during the year 1942. The main object of the Society was to enable its members to purchase rations and other controlled articles and to meet the credit needs of the members. A ration shop was run by the Society till the middle of the co-operative year 1951-52 and as derationing was introduced in the rural areas, the ration shop was closed.

The President of the Society is one of the Honorary Arbitrators selected by the Tiruppur Co-operative Union for disposal of arbitration references. He collects the loans in time from the members of the Society. The Society has recently introduced social and recreational

BOOK REVIEWS

SOUVENIR of the Fourth Annual Session of the Indian Conference of Social Work, Madras State, Vijayavada

Published by the Indian Conference of Social Work, Krishn District Branch, Vijayavada.

Pages XXXII + 106.

In October 1951 a three-day conference of the Fourth Annual Session of the Madras State Conference of Social Work was held at Vijayavada. Her Highness the Maharani of Bhavnagar presided over the Conference, and His Excellency the Maharaja of Bhavnagar, Governor of Madras, inaugurated the proceedings. In his inaugural address the Governor made a significant point: "With the increased share and interest that the Government are taking in welfare schemes, equally so the work and responsibility of voluntary bodies and workers should increase. There is no question of the one excluding the other."

All social workers will recognise the truth of this dictum, and they will assuredly welcome the publication of this Souvenir, which not only records the comprehensive nature of the proceedings covering every aspect of social service, but also gives the texts of the addresses made by the specialist-delegates at the Sectional Meetings.

The scope of the Conference embraced Rural Community Development, Planning Social Welfare in Industry, Planning and Administration of Social Work, Training of Social Workers and Social Defence. Topics discussed included a variety of subjects as rural communities, family planning, dietetics, minimum wages in industry, social security, amenities for labour, medical social services, and juvenile delinquency.

This neatly printed Souvenir, with its wealth of photographs taken at the Vijayavada Session, might well serve as a manual for social workers, as a text-book in training classes and as hand-book of talking points in advanced discussion groups.

GUIDE BOOK FOR VEGETABLES

Published by the Commissioner, Food Production, Madras.

Pages 18.

[Price annas two]

The novel format of this booklet will attract immediate attention. It is designed and cut in the shape of a brinjal (eggfruit) and the dark-purple of the vegetable on the cover heightens the effect.

The booklet is a handy guide to all vegetable gardeners, giving in tabular form vital details regarding 40 vegetables, under the following heads: Methods of planting, seed rate, spacing plant to plant, time suited for planting, time of harvest, duration of the crop and yield per acre.

TENTH ANNIVERSARY SOUVENIR, 1951

Published by the Tagore Memorial Students' Library, 21 Kamalatope Street, Madurai.

Pages XXX + 82.

The Tagore Memorial Students' Library, Madurai, was founded on 24th September 1951, to commemorate the revered memory of Gurudev, and the T.M.S.L. has now completed ten years of useful service, spreading sweetness and light even as the Sage of Shantiniketan would have desired.



TURKISH VISITORS: A Turkish Press Delegation, comprising journalists from Turkey, recently visited India on a goodwill mission tour. Here members of the Delegation are seen with the Chief Minister and the Minister for Information and Publicity.

On the notable occasion of its tenth anniversary, this brilliantly got-up Souvenir has been published by the Library, and loving care has been lavished to produce a volume worthy of the event. Selected articles in Tamil and English by well-known contributors present a composite picture of Indian cultural life; the stories and poems maintain a high standard in literary effort. The art plates would do credit to any professional publication. The T.S.M.L. is endeavouring on the right lines to propagate the ideals of Gurudev Tagore in the south.

H.E. the Governor's Appeal

(Continued from page 6)

of our Government. This makes every single person as important and responsible as every other. That, in its turn, carries with it a burden of grave responsibility; for every single one of us, so-called high or so-called humble—has constantly to fulfil his civic and social duties to the best of his ability and capacity. If any one of us fails, he endangers the State, for its safety lies not on the publicised activities of particular great individuals or powerful groups who may happen to be in special position in life, but on the determined performance of his daily duties by everyone, whatever the sphere of his activities might be. This realisation, to my mind, will solve most of the ills from which we suffer and will enable us to think of our neighbour before we think of ourselves. Little acts of kindness, ordinary courtesy and considerateness, for which there are opportunities for every one of us at all times, create bonds of brotherhood that make life rich and purposeful for all and the world a worthwhile place to live in.

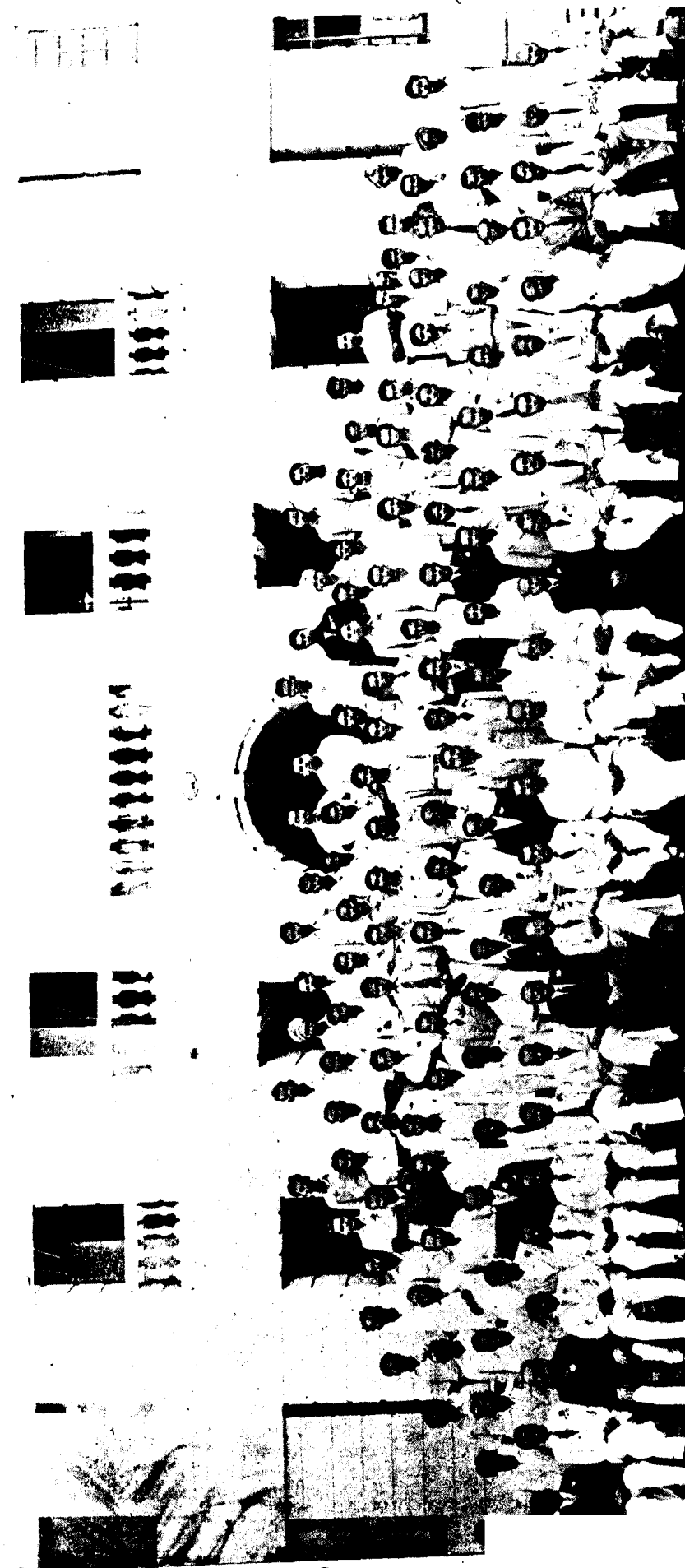
I offer my grateful thanks to the President and the Prime Minister for the trust they have so generously reposed in me by calling upon me to fulfil the duties of this high office; and I pray that I might prove worthy of their expectations. In placing myself unreservedly at your service, I most earnestly hope that we of Madras might play our fitting part in the proper shaping of the destinies of our country, and help in the consolidation of her unity and the ensurance of her liberty for ever.

(By Courtesy, A.I.R., Madras.)

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS, AND EDITED AND PUBLISHED BY THE DIRECTOR OF INFORMATION AND PUBLICITY, GOVERNMENT OF MADRAS.

First General Elections, 1951—52

Officers and Staff



Group photo taken on the occasion of the tea-party given by the Public (Elections) Department to Sri B. Gopala Reddi

Prime Minister's Visit to Madras State

In his seven-day tour of Madras State, Prime Minister Sri Jawaharlal Nehru exhorted the people to take up the task of reconstruction of the country in their own hands without waiting for initiative or assistance from the Government. This gospel of self-help was spread by him amongst the lakhs and lakhs of people in Rayalaseema, who gathered to welcome him in hamlets, villages and towns in his whirlwind tour of the famine-stricken areas.

The Prime Minister moved and mixed with the people freely. Bouquets and garlands were tossed back to the smiling women and children. Little girls wandered about the villages, proud and smiling, till the flowers in the returned garlands faded.

The Prime Minister arrived in Madras on 4th October 1952. The same night he proceeded on a tour of Rayalaseema and the border villages of Mysore for a first-hand study of the famine conditions prevailing in the areas.

Anantapur

Arriving at Tadpatri, in Anantapur District, next morning, the Prime Minister was received by the local officials and leaders. Representations were made to him of the condition of the people. They emphasised the need for more relief works and more gruel centres and for taking up of the Tungabhadra High Level Channel as a permanent measure for averting the recurring famines in the district. The Prime Minister stressed that for immediate as well as long-term measures of relief, public co-operation was essential and appealed to all public men to offer their support in this endeavour.

Starting from Tadpatri, Prime Minister made a hundred-mile tour of inspection of drought-affected parts of Anantapur before proceeding to Mysore in the afternoon.

At a number of gruel centres on the way, the Prime Minister watched the distribution of gruel to the aged, infirm and the children, and also inspected the newly dug and newly deepened wells in which water was reached at sixty to seventy feet below the surface. He also visited destitute homes and relief works at a number of places. At Kadavakal the Prime Minister tested the gruel and found it tasty and good. Addressing those assembled at Muchchukota centre, the Prime Minister said: "We want to do all we can to help you, both the Madras and the Central Governments. We shall of course do what we can. But in order to achieve best results—because our resources are limited—we must all work together and co-operate, the people and the Government, and then I hope we will achieve something not only to give relief for the present but also provide for future contingencies and difficulties."

After inspecting the affected areas in Tadpatri, Dharmavaram, Anantapur and Penukonda Taluks, the Prime Minister left for Mysore in the evening.

Returning from Mysore, next day the Prime Minister saw more of the affected areas in Anantapur District. He halted at centres like Kodur, Palasamudram, Gorantla, Kadiri and wound up the programme in the district with an address to a mammoth gathering in Anantapur Town, the headquarters of the district. Addressing the gathering the Prime Minister said: "Unfortunately in our country, we have not yet got rid of some feudal ideas such as that

manual labour is degrading. We should remember that there is nothing more ennobling and honourable than manual labour. So long as we do not realise it, we shall remain a second-rate country. You may argue about Socialism, Communism and so on. But you must understand the basic truth. Whether you go to Russia, America or England you will find manual labour is sound. It is mainly labour that counts in the world. That is so in any progressive country. Of course there cannot be manual labour alone without intellectual labour. The wealth of the country is to be produced necessarily with hands and minds. You have therefore to understand that the modern world is based on science and technology. Hence the need for developing technology in the country."

Cuddapah

Next day, the 7th October, the Prime Minister commenced his tour of Cuddapah District, with a public meeting at Cuddapah. Declaring that he disliked the application of Famine Code for relief of distress, which he characterised as "doling out charity to impoverished and beggarly people," the Prime Minister said: "I like to grant relief on as large a scale as possible, Famine Code or no Famine Code. However impoverished we may be, we do not want people to be treated as beggars, waiting for charity. Even if our resources are limited, our outlook must be straight. The conception behind the Famine Code dating back from the time it was framed by the British rulers is not the conception I like."

The Prime Minister next visited a number of centres in some of the badly-affected areas of Cuddapah District, like Rayachoti. At Rayachoti he visited the famine relief work centres run by the Women's Welfare Department which provides useful employment to a large number of women and children. In the evening he visited Madanapalle and a few other centres in Chittoor District, halting at Chittoor for the night.

Beauty of the South

In the course of a talk to Pressmen in the night, the Prime Minister had something to say about the panoramic beauty of the area. "In North India we are used to very high mountains like the Himalayas and generally speaking a vast flat plain. As soon as one comes to the Deccan the scene changes completely and there are neither high mountains of that type nor flat plains. Generally speaking we have undulating land, downs with small hills. This typical Deccan scenery exists in Maharashtra, parts of Central India, Hyderabad, Mysore, Rayalaseema—this undulating land, these extraordinary hillocks standing out of it like islands, full of curious shaped boulders sitting on one another. The whole scene appeared to me very attractive and impressive. These rock formations denoted strength and some kind of permanence. I am always fascinated by them whenever I see them."

"Another rather lovely feature of the scenery of the South is the varying colour and hue of the hills. They seem to change colour with every slight change in climatic conditions or the time of the day. Sometimes they are bluish, at other times rather purple. These several colours and ever-changing hues are fascinating to watch."

THE PRIME MINISTER ARRIVES

Shri Jawaharlal Nehru, Prime Minister of India, visited Madras State on a seven-day tour, primarily to see for himself the famine-stricken areas of Rayalaseema and to inspect the relief measures launched there.

The Prime Minister arrived in Madras on October 4, 1952. Pictures show the Prime Minister alighting from the aircraft being met by Chief Minister Sri Rajagopalachari; Ministers of the Madras Government are introduced; leaving the Airport.

The Prime Minister left for Rayalaseema the same night.



PRESIDENT'S AND POLICE MEDALS FOR GALLANTRY AND MERIT,

1ST MARCH 1952.



Sitting :—(Left to Right) Sri C. J. Pinto ; Sri V. R. Rajaratnam ; Sri T. G. Sanjevi, I.G. of Police ;
Sri M. K. Shetty ; Sri R. A. Doraiswamy Ayyar.

Standing I Row :—(Left to Right) D. Kuppaswamy Coundan ; M. Achuthan Nair ; N. B. Anantaraman ;
B. Audiseshiah ; P. Thirupalaiah ; S. K. Subba Rao ; M. Amirulla Baig ;
G. Jayarama Reddy.

Standing II Row :—(Left to Right) S. Ramasamy ; R. M. Govindarajulu ; K. B. Balakrishnan Nair ; M. Manuel ;
C. Muthaiah ; K. G. Doraisami ; S. Subbiah Naicker.





RAYALASEEMA ALBUM



Immediately after arrival at Tadpatri Shri Jawaharlal Nehru got on top of a bus to give the milling crowd darshan.

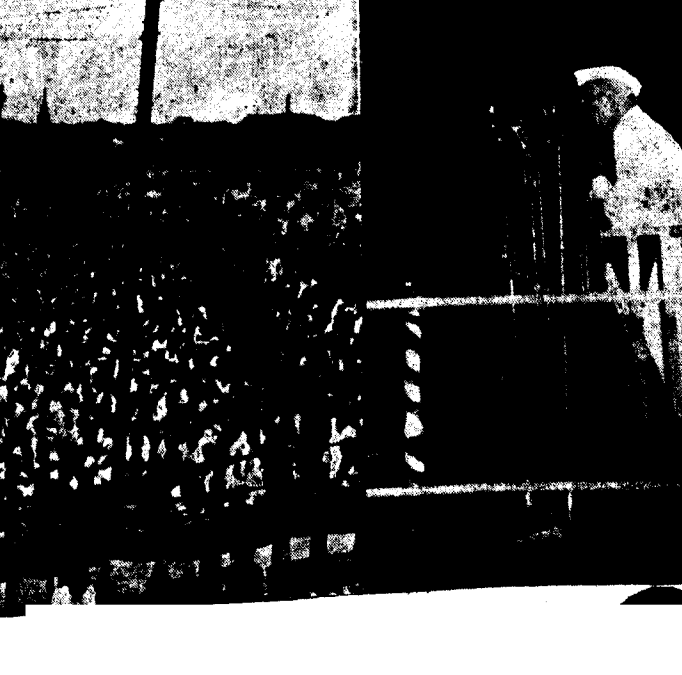
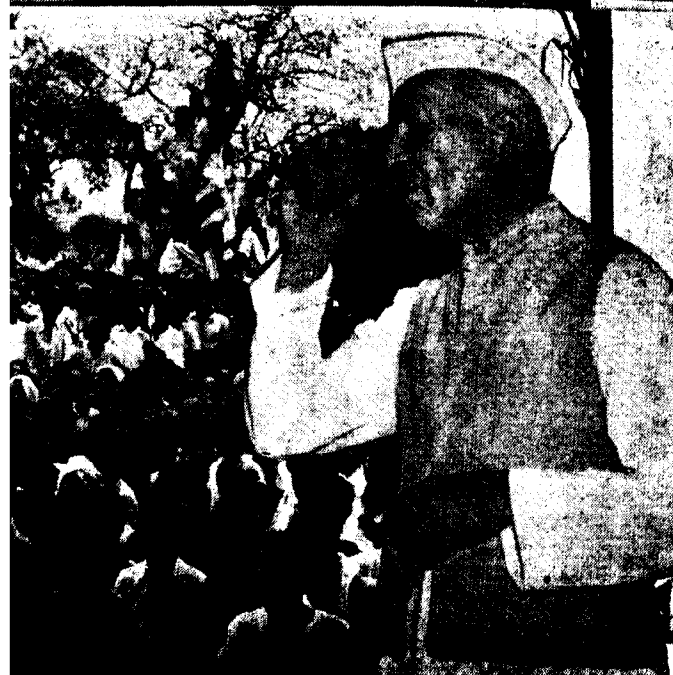
Top row : Distributing sweets to children at a wayside stop; Inspecting the Pappur Harijan well; Saris for poor women at Gurrmkonda village; At the Rayachoti Relief Centre run by the Women's Welfare Department.

Centre left : Visibly moved at the Guttur Gruel Centre; *Darshan* at Penukonda.

Bottom left : Tasting gruel at Kadavakal.

Right : At the Varadarajar temple, Kancheepuram.

Bottom : At the Island Grounds, Madras City.



OUTGOING LEGISLATORS ENTERTAINED

H.E. Shri Sri Prakasa, Governor of Madras, entertained former Ministers and Members of the old Legislative Assembly and Council at a tea party in Raj Bhawan, Guindy.



Above: H.E. the Governor with Sri H. Sitarama Reddi, Sri P. S. Kumaraswami Raja, Sri C. Perumalswami Reddi and Sri B. Parameswaran.



Right: Some of the ladies present.

Lower Right: The Governor with the guests.



SRI A. B. SHETTY'S PARTY: After acting as Finance Minister in the Caretaker Ministry and presenting the Interim Budget, Sri A. B. Shetty gave a party in the Government House Estate, Mount Road (above and right).



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"WE SEEK TO SERVE AND NOT TO COMPETE"

May 1952

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COVER PAGE—

A recent study of the Hon'ble Sri C. Rajagopalachari, Chief Minister of Madras State.

Free Grazing Allowed in Famine Areas

Lopping and removal of leaf fodder has been permitted free of charge from all the forests in charge of the Forest Department in Chittoor Revenue District, subject to the following conditions: (1) Only fodder trees will be lopped and the lopping should be confined to the end branches of trees, not usually exceeding the thickness of the thumb; (2) Lopping and removal of leaf fodder will be restricted to the hours between sunrise and sunset; (3) No lopping is allowed in areas under regeneration or under plantations or in areas closed to grazing; (4) The concession will last till the end of December 1952 or till the necessity ceases, whichever is earlier.

The concessions of free grazing, free penning of cattle and free removal of hill grass by cart-loads in Cuddapah Reserve Forests have been extended up to June 30, 1953.

All the reserves and the Panchayat forests in the taluks of Bellary, Rayadurg, Kudligi, Hospet, Harpanahalli, Hadagalli and Sandur (except the reserve forests in Sandur Taluk) have been thrown open for free grazing and for free cutting of edible leaves.

It is enough for me that I have exhausted myself, my strength and energy in India's task. I do not care what happens to my reputation after I am gone. But if the people choose to think of me then, I should like them to say, 'This was a man, who with all his mind and heart loved India and the Indian people. And they in turn were indulgent to him and gave him of their love most abundantly and extravagantly.'

The next day, on the 10th October, the Prime Minister addressed the Congress Legislators and workers of the Madras State. He also inaugurated the Tamil Nad, Andhra, Mysore and Coorg Branches of the Bharat Sevak Samaj. In the evening the Prime Minister was accorded a Civic Reception by the Mayor, Aldermen and Councillors of the Madras City Corporation.

On the 11th October the Prime Minister left for Delhi by plane.

Public Call Office at Kormur

A public call office was opened at Kormur Post Office on September 1, 1952. It is connected to the Nellore Telephone Exchange.

Altogether the scenery in the Deccan with its great variety and yet with a certain similarity is very attractive and impressive. It is the kind of country which should produce, as it has done in the past, both high civilisation and hardy men and women. During the last fortnight I have seen a good deal of these in Hyderabad, Rayalaseema and Mysore. And hence my mind is full of it. The one thing I rather missed in the South are snow-covered mountains."

The Prime Minister also addressed a large gathering of the citizens of Chittoor on the morning of 8th October.

On his way back to Madras, the Prime Minister visited Kancheepuram, the famous pilgrim centre. The Prime Minister studied and admired the architectural beauty of the Varadaraja Swami temple. Later he addressed a huge gathering at Kancheepuram.

Madras City

Back in Madras, the Prime Minister had a busy round of engagements for the rest of the days of his sojourn.

At Raj Bhavan, the Prime Minister met the representatives of the various social service organisations doing work in the City. An exhibition was organised by the Guild of Service. The Prime Minister told the social workers: "I think you will learn more about the economics of India by living for some time in an Indian village trying to do things by yourself there, than by reading books."

The Prime Minister also addressed a gathering of more than 20,000 students at the Presidency College grounds. Exhorting the students, on the task ahead, the Prime Minister said: "Life is a continuous struggle. We have to be active. We have to do things. We have to build up. We are partners in a tremendous adventure. We must not lose heart when something wrong happens. We should keep our perspective and not lose it. Do not become narrow and do not imagine that you are looking at a mountain when you happen to be near a mole-hill. Develop quality in yourself. But I warn you against this business of quality caste. That is a very bad thing. It is completely opposed to any democratic idea. We have to produce quality in the people of India as a whole, allowing those of a higher stature to go up, of course."

On October 9th the Prime Minister visited the Madras Institute of Technology at Chromepet and also addressed a mammoth gathering of the citizens of Madras at the Island Grounds in the evening. On the 9th morning the Prime Minister conferred with Sri C. Rajagopalachari, the Chief Minister, and other Ministers of the State Government on problems affecting this State.

At the public meeting the Prime Minister dealt with the question of land reform, industrialisation, Communist activity, anti-Hindi movement, Community Projects, Kashmir and foreign settlements in India. Winding up the speech on a personal note, the Prime Minister said: "I have been a very ambitious person in many ways, but I do not know if I can call myself ambitious in the normal sense of the word. But there is one ambition left in me and it is this; that in the years to come and in the few years left to me I should throw myself with all the strength and energy left in me into the work of building up India. I want to do it to the uttermost till I am exhausted and thrown away as on the scrap heap. I am not interested in what you or anybody else may think of me afterwards."

MADRAS ENGAGEMENTS...

After his whirlwind tour of Rayalaseema, Prime Minister Shri Jawaharlal Nehru fulfilled a number of engagements in Madras City.

Photos of some of the functions are shown here.

Top: Inaugurating the Bharat Sevak Samaj at Rajaji Hall.

Centre left: At the National Girls School, Triplicane, where the girls performed their famous Swastik Kolam drill.

Centre right: With elementary school children on the steps of Rajaji Hall.

Left: A word of cheer to a blind boy at the Social Science Organisation Rally at Raj Bhavan, Guindy. Visit to the Madras Institute of Technology, Chromepet.

Right: With the Governor and the Chief Minister at the Airport. The Prime Minister bids farewell from the aircraft.



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Task of Relieving Poverty and Distress

Chief Minister Appeals for Patriotic Devotion



Sisters and brothers !

I was sworn in today* as Chief Minister of the State of Madras. May I say a few words to you before I enter on my duties and ask for a blessing ? You are all aware of the circumstances under which the leadership of the Congress Party in Madras and the office of Premier for this State have been placed on my shoulders. I had planned and was living in anticipatory fancy in my garden of peace, when suddenly the situation developed as it did and down came this like a bolt from the blue.

The unanimous demand of the Congress Legislature Party reinforced by the insistent appeal of all its senior members created a sudden situation which I could not callously resist. The alternative would have been a denial of all the principles which I have been declaring and preaching as to the sacredness and equal nobility of all work such as one is imperatively called upon to perform for the community. It is no doubt recklessness to undertake this task which, as a friend observed in a letter to me, involves more than one labour of Hercules. But it is a recklessness compelled by duty.

With Faith in God

I am old and can claim therefore the traditional right to respect and consideration on that account. I depend very much on this to make up for the necessary deficiencies arising out of my age. I cannot run about the country accepting all sorts of functions as a young or middle-aged man could do. When I scanned the letters and messages of joy that have inundated me this week, I trembled in fear. "How can I expect to be able to fulfil the great hopes roused by this event ?" I asked myself. But something inside me said, "Why do you fear ? Have you lost faith in God ? Surrender yourself to Him and all may be well."

The affection and almost superstitious confidence that I read in the numerous messages received by me indicate a countrywide fresh psychology which, I am hopeful, will be in itself an asset. I referred the other day to Agriculture and Character. In respect of one of these, namely,

* Broadcast to the people of Madras State by Hon'ble Sri O. Rajagopalachari, Chief Minister of Madras, on 10th April 1952 at 8-45 p.m.

Character, there is nothing wanted from outside but one's own will to be made up. I think our people have got tired of *adharma* and may God help them to resolve firmly and well. If I could see an improvement in the moral atmosphere around us, it would be the greatest joy of my life, and I shall not mind the travail and the risk involved in this strange, sudden event in my life.

"Perilous Adventure"

I ask for the wholehearted co-operation of you all, with me and every one of my colleagues. Do not think in terms of castes and groups, political, professional or others. It is only the general confidence that has been shown in me that sustains me in this what I know is a perilous adventure. I feel I shall have the goodwill of all good and patriotic people and their sincere co-operation in their respective spheres, be it in the Government offices or in the bazaars or in other places where the public are served ; from those engaged in Government Service or in trades or in industries, or leading their quiet and useful lives as citizens, especially those engaged in raising the food the people live on and those engaged in building up the minds of boys and girls either as parents or as teachers.

Let there be a silent but determined war against evil thoughts and indecency of speech or action or entertainments, and against all forms of exploitation for selfish ends. Let every father and mother realise and remember that the good name of Madras will serve our children better than anything else we can make and provide for them losing or risking that good name of Madras. Let us try to recover this which I fear we have lost. The totality of character or reputation of the State is made up of individual behaviours which are entirely in the hands of each one of us. Always let us realise the immediate presence of God everywhere and at every moment. This is a fact and not a fable. Do not believe anything said about anybody without hearing the other side. Every responsible citizen should deem himself a judge bound by the fundamental laws of fair play which are really the same as what is embodied in judicial procedure minus the formalities. Let us not slander one another. Slandering others is not a form of public service or a substitute for our own good behaviour. May all our efforts be to raise ourselves and not to pull others down.

Need for Patriotic Devotion

My acceptance of this task has rightly or wrongly evoked general rejoicing. It has also received the approval of group leaders although expressed grudgingly and guardedly. It is also an encouraging circumstance that it has roused full-throated resentment in certain quarters, which makes me think paradoxically that I have probably done right. I appeal to everyone to relax from angry moods and tensions and fill their mind with patriotic devotion. Let us leave for our children a fairly happy Madras for an inheritance. Not property, but order and security and good government are the biggest wealth we can leave behind for the boys and girls whom we leave behind us. All property gains or loses value according to this great and important coefficient of wealth, namely, order and security.

(Continued on page 32)

India Leads in World Potato Research

First in successful world research on charcoal rot which affects potato crops, the Central Potato Research Institute at Patna has been able to secure types resistant to this disease. Laboratory tests, at the Institute, on a large collection of potato varieties from India and different parts of the world have given a few varieties immune to charcoal rot. There has been no previous record of resistance in potato varieties to this disease, which is prevalent not only in India but in the countries of the Middle East, Southern Europe and the Southern States of the U.S.A. as well.

Charcoal rot of potatoes is caused by a fungus which lives in the soil. Investigations conducted by the Plant Pathologist of the Central Potato Research Institute have shown that the incidence of the disease can be reduced by harvesting the tubers before conditions become favourable for increased activity of the parasite. It has been found in actual experiment that harvesting of tubers before the commencement of March, under conditions prevailing in Bihar, has reduced the incidence of the disease to less than ten per cent.

The Chain of Creation

Isavasyamidam Sarvam! The Universal Spirit, the Power that is worshipped by several names, pervades everything in the material world. He became Food and Food is an endless chain. Everything eats something to live and grow, and everything is food again for something else. This is the Upanishad exposition. Some seek to interpret *annam* as the soul. This is unnecessary. Interpreting it as it plainly stands is good enough. All life and all matter are inter-related into an endless chain. There is no waste but can be made into good food again. Man and animal eat, and what they cast out Mother Earth makes into food again. Thus the chain of creation goes round endlessly. There need be no loss if we fall in line with this law of reconversion. All the food that a city or a village eats can again be put into the earth and reconverted soon into fresh food that we need. Finally the buried carcasses, bones and all again sprout into nourishment for men and livestock. Compost is not an ill-smelling untouchable thing, but a shastraic truth! I wish I had the physical strength to do it myself, not one day or one week, but all the days. May the municipalities and villages that take good interest in compost-making receive the blessings of God! He who does compost does an act of worship.

—C. RAJAGOPALACHARI,
Chief Minister.

Valuable Food Crop

This is but one of the outstanding aspects of the research work now carried on at the Central Potato Research Institute, Patna. There are others, too, of importance to potato-growers all over the world. Potato as a food-crop has great value for an over-populated country like India. Bulk for bulk, the yield is ten times that of any cereal crop. In terms of output of calories, an acre of potato yields more than double that from a like acre under wheat. Apart from its starch content, potato is a rich source of Vitamin C and has a little of Vitamin B. A pound of potato is equivalent to 427 calories of energy. The average consumption of potato in India today is 9 lb. per capita per annum.

Potato grows in the same climatic conditions as wheat. It grows best under 60° to 80°. It can stand lower temperatures without frost, but it cannot stand higher temperatures. It is a winter crop in the plains.

Today, in India, 500,000 acres are under potato cultivation, and of these 90 per cent are in the plains. Here comes a problem for the research worker. Breeding potato varieties for the hills and for the plains are two different tasks. Foreign varieties introduced in the plains have been failures. Due to the extreme variability of climatic conditions in India, research work is essential for finding suitable high-yielding varieties for the different tracts. And that is one of the main functions of the Central Potato Research Institute.

Successful Breeding Tests

Breeding varieties that would grow well in areas where no potato was grown earlier have been investigated—and successfully, too, in certain cases. One such instance is at Koilpatti, south of Madurai. Exploratory trials in that region this year have been successful. Another variety, evolved by the Institute, has given promising results when tried in Netarhat, a semi-hilly tract in Bihar. It is expected to give a substantial food-crop to the poverty-stricken Adibasis of the region. This variety matures in forty-five days and gives about 100 maunds per acre.

Surveys of the fungal and bacterial disease affecting potato crops in the field and during storage are being studied by the Institute to assess the damage and devise control measures. Like cholera and typhoid affecting human beings, potato crops suffer from a similar disease known in scientific parlance as "Bacterial wilt". It is epidemic in parts of Uttar Pradesh. It has been found that the parasite causing the disease is transmitted through the agency of the cutting knife. Research at the Institute revealed that dipping the knives in denatured spirit, easily available to the cultivators, gives complete control over the disease. Here, again, the Central Potato Research Institute was the first to lead in research.

Close Study of Foreign Varieties

Fungi of certain potato diseases, such as leaf spot and stem canker, have been isolated and named for the first time by the Plant Pathologist at the Central Potato Research Institute. Experiments are now in progress to control these diseases.

Crop Yield Competition During 1952-53

The Government have ordered the continuance of the Crop Yield Competition during the year 1952-53 on the same lines as in 1951-52. The competition will be confined to paddy only, covering all varieties grown under any system of irrigation.

The Government of Madras have sanctioned an expenditure of Rs. 46,275 for the Crop Yield Competition Scheme of 1952-53 for purposes of award of prizes. The details regarding the prizes are as follows: (1) State Prize—Rs. 500 in cash plus a gold medal worth about Rs. 100; (2) Regional Prizes—Rs. 200 in cash plus a gold medal worth about Rs. 50 for each of the eight Agricultural Regions; (3) District Prizes—Rs. 100 in cash for each of the 27 agricultural districts; (4) Taluk Prizes—Rs. 50 in kind for each of the 225 taluks; and (5) Firkas Prizes—Rs. 25 in kind for each of the 1,069 firkas.

The Government of India have decided to award six cash prizes of Rs. 5,000 each or a Ferguson Tractor each, in addition to the certificate of merit *Krishna-Pandit* to the farmer securing the highest yield per acre, in respect of paddy, wheat, potatoes, jowar, bajra, and gram in the competitions held in the various States in the country in 1951-52 and in 1952-53.

Superior Types Evolved

After continued observations ranging over long periods, promising types are sent for trial. As a result of a series of trials like these, it would be possible to select suitable and superior varieties for each climatic zone. Certain hybrids have been found suitable for Delhi, Punjab and Uttar Pradesh, while others have given good results in Bengal, Bihar and Orissa.

In the Agronomy Section of the Institute, the work of selection of improved types to suit different soil and climatic conditions goes on. Varieties have been selected by the Central Potato Research Institute and successfully tried in areas where potato was either not normally grown or was considered uneconomical to grow. The manurial and cultural requirements of the local varieties have been studied, and it has been found that nitrogenous manures are very effective, irrespective of the nature of the soil; when used with organic manure, the yields are very high.

Rice Research at Cuttack

Rice, the most important single food-crop of the world supplying about one-fourth of the food energy for the human race, is found in over 8,000 varieties all over the world. Of these, about 3,000 varieties are, today, being grown on a 100-acre stretch of farm attached to the Central Rice Research Institute at Cuttack for experimental purposes. The object is to breed selective types with higher and improved yields.

In India, the average yield of clean rice is 750 lb. per acre, although yields of 2,500 lb. have been obtained in Japan. Both climate and variety are responsible for the low Indian yield.

For co-operative action as regards production, conservation, distribution and consumption of rice, the F.A.O. has appointed an International Rice Commission to initiate, wherever possible, co-operative projects for increased production of this staple food. One such scheme known as the International Rice Hybridisation Project is now functioning at the Cuttack Rice Research Institute.

The project is for the benefit of the participating countries such as Pakistan, Burma, Ceylon, Indonesia, India, China, Japan, Malaya, the Philippines and Thailand. Its

unique nature lies in the fact that is the first co-operative attempt at breeding, worked out on an international basis, in the history of rice improvement. The project is run by funds provided by F.A.O. as well as by contributions from the participating countries.

Two Main Heads

Although botanically rice belongs to one species alone, only a few varieties are commercially important. These come under two main heads: the *Indica* and *Japonica* stocks. The *Indica* variety is sown not only in India, but also in Indo-China, Indonesia, Burma, Thailand, Ceylon, the Philippines, Palestine and other tropical countries. The *Japonica* type is found in the sub-tropics, the countries of Europe, in Italy and Spain, Japan, the northern areas of China, Korea and Australia.

The two types differ in some fundamental respects. The *Japonica* type, with round grains, thrives well in cool climates. It responds to fertilisers and produces high yields, as in Italy and Japan. The *Indica* type has long grains, requires warmer climate and produces a fair crop on soils with low fertility. It responds to fertilisers up to

Tirumangalam Makes Thrilling Progress

The concept of local self-sufficiency—self-sufficiency in food, clothing and other basic essentials of life—is slowly gaining momentum. The significance of expressions like 'Grama Swaraj', and 'Panchayat Raj', is gradually dawning on people in the light of the successful working of the pilot schemes launched here and there in India and the progress of the Rural Welfare Scheme in this State. Discerning foreign observers too have begun to take notice of this new trend.

Recently, Miss Dorothea Wehrwein of the Food and Agricultural Organization toured the Tirumangalam Firka of the Madurai District with Sri G. Venkatachalapathi, Director of Rural Welfare. She visited the Vidyalyayam where Grama Sevaks are being given training in the fundamental principles and practice of rural reconstruction. Miss Dorothea Wehrwein was impressed by the spirit in which the Grama Sevaks were equipping themselves for their role in society—of service and dedication to their fellow-men. They were weaving their Khadi, they were getting instructed in the running of village industries; they cooked their own food, washed their vessels and cleaned their latrines.

The party also visited twelve villages in the Model Firka, and saw the working of the scheme in its many-faceted aspects.

Kallupatti.—An important item of work done in this village that attracted the attention of the visitors was the work done among the women of the village. In the past six months, 150 families have produced 21,385 hanks of yarn and have exchanged them for clothing required by the families to the value of about Rs. 4,500. In addition to this, a sum of Rs. 510 out of the same was spent on agricultural requirements, purchase of ornaments and brass vessels and for medicines and food articles. Still there was a saving of Rs. 120 which has been deposited in the Savings Bank for being drawn in times of need.

Chillapatti.—In this village consisting of about 150 Harijan houses, a school building worth Rs. 5,000, a well with parapet wall and platform and bathroom estimated to cost Rs. 1,500 and a village latrine estimated to cost Rs. 1,200, have been built with the Government aid of just Rs. 1,000. The neat and tidy appearance presented by the village was very much appreciated by the visitors.

Appakarai.—The neat community latrines and complete village drainage built with the full co-operation of the villagers, with no cost to Government, the only assistance given being the supply of cement at controlled price and technical advice, was a pleasant surprise to the party when they visited this village. A grant of Rs. 750 has been given by the Government towards various works executed in this village including a village school proposed to be raised and in respect of which a voluntary contribution of Rs. 2,500 and two acres of land free of cost have already been collected.

Gopalapuram.—In this village a derelict irrigation tank was re-excavated by the voluntary labour of the villagers.

Pudupatti.—In this village, a school building likely to cost Rs. 10,000 has been constructed by the self-efforts

of the villagers. The school is also being used as a community centre. Here again the village drainage has been built by the villagers themselves with very little cost to the Government. When there is not enough work to be done in the fields, 55 families out of the 155 houses in the village devote their spare time for the production of Khadi and for the weaving of their own requirements in clothing.

Kallanai.—In this village an abandoned tank which had long gone into disuse, was renovated by the villagers, men and women working on it. Every family in the village made contributions in some shape or form—in cash, kind or labour towards the construction of tank. Some of them gave free labour for two or three days in a week. Some gave free service of carts and bullocks for carting purpose. Others gave bricks, cement, etc. and also cash contributions. Thus the villagers have been able to achieve in one year the restoration of the tank, which would otherwise have cost at modest computation Rs. 30,000. The restoration of the tank will bring into cultivation an additional ayacut of 60 acres of land in addition to the increased yield that can be expected in the existing ayacut. For all this work, the Government have given only the implements needed at a cost of Rs. 500. This work is an astonishing feat of self-effort of the Rural Welfare staff of that area.

Nedungulam.—This village presented a typical appearance of what could be achieved by emulation of the Gandhian principles. Here an aged couple belonging to a respectable family devoted their attention to village drainage, village sanitation, etc. In the course of one year, this couple realised a sum of Rs. 150 from the village waste collected by them. Following this example, all the villagers have now taken to compost making from waste vegetable matter. A maternity and child welfare centre has also been opened in this village by the efforts of the villagers.

Miss Dorothea Wehrwein was greatly impressed by the magnificent work done in this selected area. The sanitary improvements, conversion of night-soil into manure, the village drainage and initiative of the villagers in raising their own stature with the minimum aid given by the Government, and often even without waiting for it, spoke volumes for the new spirit and the new life that have come into these villages. The visitor expressed the view that while at Etawah (U.P.) emphasis was laid on agricultural development, here at Madras there was greater emphasis on social and economic development in general. She was, however, of the opinion that the agricultural staff in the selected firkas should be strengthened for more intensive work. Recording her impressions, Miss Dorothea Wehrwein wrote: "It was very thrilling to see the changes and progress which can result from devoted and persevering work."

Gift for Hospital

The Government have accepted, with thanks, the gift of a G.E.C. 5-Valve Radio Set from Srimathi Thillaiammal, Secretary, Coimbatore Seva Nilayam, Coimbatore, for the entertainment of the patients in the Government Headquarters Hospital, Coimbatore.

Location of Community Projects

The following areas in Madras State have been selected by the Central Committee appointed under the Indo-American Technical Co-operation Agreement for Community Projects:

Madras (six Projects);

1. Kurnool-Cuddapah Canal areas.
2. Coimbatore (Gobi-Erode-Bhavani-Dharapuram Tahsils).

3. Malabar (Palghat).
4. East Godavari (Kakinada-Peddapuram).
5. South Kanara (Karkal-Mangalore).
6. Madurai (Nilakottai-Melur-Madurai).

A Project area comprises roughly about 300 villages with a total area of about 450 to 500 square miles, a cultivated area of about 150,000 acres and a population of about 200,000. Each Project area is divided into three Development blocks, each consisting of about 100 villages and a population of about sixty to seven y thousand.

Thus the areas now selected will cover about 260,000 square miles in about 16,800 villages all over India, inhabited by about a crore of people. A few more areas or development blocks are expected to be selected shortly, covering Delhi and some other States.

Other areas selected in other parts of India are:

Part 'A' States

Assam (two Projects and two Development blocks); Bihar (four Projects); Bombay (four Projects and one Development block); Madhya Pradesh (four Projects); Orissa (three Projects); Punjab (four Projects); Uttar Pradesh (six Projects); West Bengal (eight Development blocks).

Part 'B' States

Hyderabad (two Projects and one Development block); Madhya Bharat (two Projects); Mysore (one Project); Pepsu (one Project); Rajasthan (two Projects and one Development block); Saurashtra (one Project); Travancore-Cochin (two Projects).

Ajmer (one Development block); Bhopal (one Project); Bilaspur (one Development block); Coorg (one Development block); Himachal Pradesh (one Project); Kutchment block); Manipur (one Development block); Vindhya Pradesh (one Development block).

The Community development programme in 46 Project areas and 19 Development blocks, spread all over the country, has been approved by the Planning Commission in its capacity as the Central Committee under the Indo-U. S. Technical Co-operation Agreement. These are to be undertaken immediately by the Central and State Governments, the underlying idea being to develop to the fullest extent possible the material and human resources of the area, through the co-operative endeavour of the people themselves with active assistance from the State.

As additional agricultural production is the most urgent objective, the projects have been located largely in those areas where on account of irrigation facilities or assured rainfall, additional effort is likely to produce the most substantial results.



A ROAD IS BUILT: The road from Mangampatti to Kanmai was only a swampy cart-track. The villagers decided to build a good mile long road. A 100 volunteers, one from each house, assembled one morning.



YOUNG AND OLD took part in the construction, with only a short midday break. Crowbar, spade and basket were used to good purpose.

ROAD NOW READY: Thus self-help provided the villagers of Mangampatti with a good road fit for bullocks and carts. The Rural Welfare staff aided in the work.



a point. But after that fertilisers only give it vegetative growth but no further grain formation.

In sub-tropical regions, *Indica* varieties give a generally low yield. Since the rice plant is so very sensitive to climatic environment, *Japonica* varieties cannot be grown in India to produce the same results as elsewhere. It is here that the need for hybridisation comes.

Hybridisation Schemes

At the Central Rice Research Institute at Cuttack, hybridisation experiments centre on breeding varieties giving high yields and which respond to manuring. This is sought to be achieved by crossing Indian and South-East Asian varieties of rice with Japanese varieties noted for high yields in Japan.

The hybridisation scheme was started at the Cuttack Institute in 1950. The participating countries like Burma, Ceylon, India, Indonesia, Indo-China, Malaya, Pakistan, the Philippines and Thailand have offered two to four varieties for crossing and from Japan has come some of the best *Japonica* varieties.

The hybridisation scheme works in two stages. The crosses are to be made for all the participating countries and the first hybrid generation is raised at the Central Rice Research Institute. The seeds of the hybrids are then supplied to the participating countries for growing the second and subsequent hybrid generation. The second stage of this work is done in the participating countries themselves, where they will grow the second and subsequent hybrid generation plants and select suitable varieties adaptable to local conditions.



RUSSIAN FOOD GIFTS TO INDIA: Mr. Cherednichenko, leader of the delegation representing the Russian Trade Unions, handing over the food packets to Dr. A. Lakshmanaswami Mudaliar, President of the Madras Branch of the Indian Red Cross Society. The food gifts arrived in the two Russian Ships Admiral Ushakov and Karaganda.

150 Cross Combinations

At the Cuttack Institute over thirty *Indica* parents submitted by nine countries have been crossed with eight *Japonica* types. This consists of about 150 cross combinations out of a total of about 270 envisaged in the scheme. In all, as many as 115,000 flowers have been individually crossed and 15,000 hybrid seeds obtained.

During the last year, the Central Rice Research Institute raised 3,000 hybrid plants from crossed seeds obtained from the different crosses. The Institute has collected seeds from these hybrid plants and sent them to the respective participating countries for starting the second stage of the project, i.e., growing the hybrid parents and selecting suitable ones from them.

The hybrid seeds meant for India are still under study. In the International Scheme for *Indica* varieties of rice from India have been included for crossing with *Japonica* types. But India has about 4,000 varieties of rice. To meet the full requirements of this country, a hybrid scheme financed by the Indian Council of Agricultural Research is also being carried out at the Institute, in which thirty-three *Indica* varieties from the various States of India are being crossed with *Japonica* varieties. This scheme will be completed within three years.

Today, in India, after continued research, about 300 improved varieties of rice are available. Improved varieties give 15 to 20 per cent more yield than the conventional types grown so far.

Welfare Fund T.B. Hospital in Nellore

By SRI C. SUBBIAH CHETTY, Honorary Secretary, Nellore District Committee, Madras State Welfare Fund

After the inauguration of the Madras Provincial Welfare Fund by Lady Nye on the 30th January 1947, a public meeting of the citizens of this district was convened on 14th February 1947 by the then District Collector, late Sri S. Joseph Reddy, and the Nellore District Committee was formed.

Under the able guidance of Sri S. A. Iyengar, I.C.S., the then District Collector, and Sri Ponaka Govindu Reddy, our first President, it was resolved that a tuberculosis hospital with 30 beds to begin with should be constructed and equipped at Nellore and handed over to the Government for being run by them. The Government were pleased to accept our proposal to take over the hospital after it was constructed and equipped, and manage it themselves. The then Surgeon-General to the Government of Madras, Colonel Bhatia, was pleased to inspect and fix up the site for the location of the hospital. On account of objections raised by interested parties the site was again inspected by Dr. K. Vasudeva Rao, the then Deputy Surgeon-General, Madras, and was approved by him. An extent of about 9½ acres was acquired for this purpose. The Government were pleased to hand over to us the adjacent vacant land and thus the total area now in our possession is about 30 acres. Our thanks are due to Sri B. Joogappa, M.A., the then District Collector, for handing over the site to us and for the keen interest he evinced over this hospital.

Foundation Stone Laid

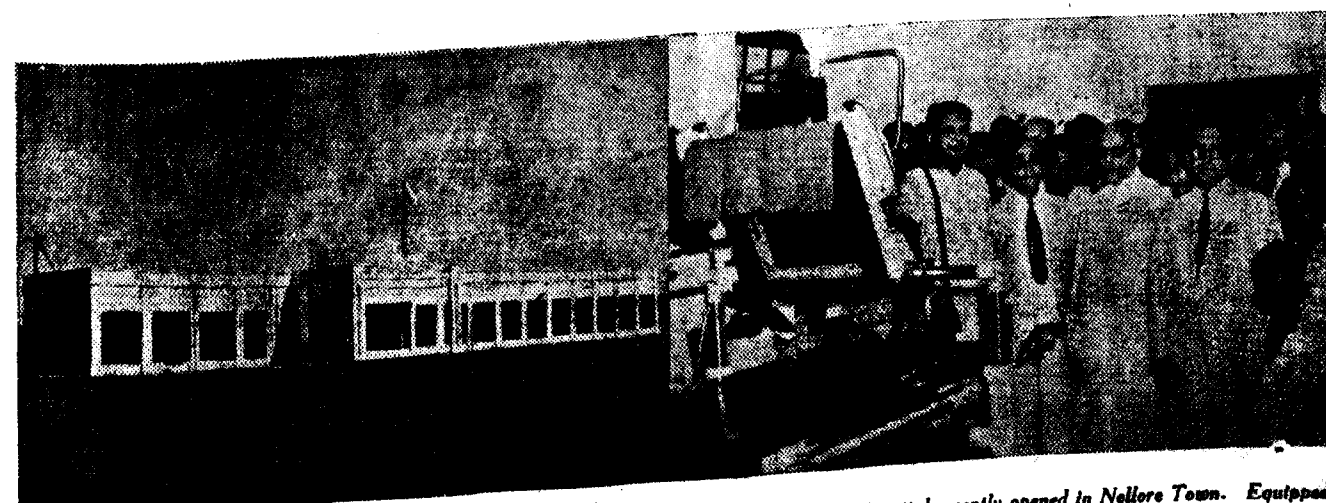
When our committee felt nervous to secure required funds for the construction of this hospital, our then Finance Minister, Sri B. Gopala Reddi, was pleased to co-operate in our efforts and he gave a dynamic drive to fulfil the long-felt desire of having a T.B. hospital here. On 2nd October 1950, Mahatma Gandhi's birthday, the foundation stone for this Welfare Fund T.B. Hospital was laid by Dr. T. S. S. Rajan, the then Health Minister.

As per the plans sent by the Government for the construction of various buildings, estimates were got prepared and tenders were called for by giving due publicity. Our building sub-committee with Sri C. V. S. Narasimha Rao, the then Executive Engineer, P.W.D., and Sri B. Satyanarayana Pantulu, the then Pennar Bridge Engineer, selected Sri P. Venkatapathi Raju, Vijayavada, as building contractor.

As per the decisions of our equipment sub-committee, the hospital is fully equipped with 100 m.a. X-Ray plant, furniture, steel cots, beds, ward lockers, etc., and fully electrified. The Director of Medical Services, Dr. P. Arunachalam, inspected the buildings and equipment and suggested certain requirements to be provided for this hospital. On 30th August 1952 this hospital was handed over to the Government and it is now working in full swing. Two general wards of two beds each are almost filled up with patients and there is a big waiting list for further admissions. It is the wish of our committee that the Government should expand this institution to a 200-bed hospital in the near future.

Finances

With the total collections so far made amounting to Rs. 3,44,363-7-0, an amount of Rs. 2,27,070 was spent for the cost of site and buildings, Rs. 43,700 for the purchase of the X-Ray plant, Rs. 5,400 for electrification and Rs. 56,216-9-9 for other equipment, establishment and other miscellaneous expenses. We have contributed Rs. 3,000 towards the Assam Earthquake Relief Fund, Rs. 1,000 for the purchase of medicines for the poor cholera patients at the time of the epidemic and Rs. 250 for the purchase of clothes to Harijans of Chemudugunta village. We have now at present an amount of Rs. 11,976-13-3 to the credit of our account at the Imperial Bank of India, Nellore.



T.B. HOSPITAL FOR NELLORE: At left is the Welfare Fund Tuberculosis Hospital recently opened in Nellore Town. Equipped with modern X-Ray plant, the hospital has two general wards of 18 beds each and four special wards of two beds each. Right: Sri B. Gopala Reddi who declared open the hospital, and Sri A. B. Shetty, Minister for Health, are seen here in the X-Ray room.

RURAL RECONSTRUCTION

For the time being the Committee's main emphasis is on the rural community projects of the basic type having predominant bias on rural development. Urban development also comes within the sphere of a community project but owing to financial and other limitations the Committee considers that for the time being it is not possible to undertake the development of the urban component of the programme except in respect of a restricted number of projects which concern the rehabilitation of displaced persons or very under-developed areas.

The lines of activity to be undertaken in these projects cover all aspects of development including agriculture and rural development cottage and small-scale industries, education, health, housing, reclamation of culturable waste land, agricultural extension services, encouragement of village arts and crafts, animal husbandry and improvement and extension of communications, etc.

Location in States

In allotting Project areas or Development blocks to particular States the main consideration has been the area of the State and its capacity to absorb big projects. All Part "A" States except West Bengal, all Part "B" States and Bhopal and Himachal Pradesh among Part "C" States have been allotted community project areas.

In the case of West Bengal, eight Development blocks specially adapted to fill the need of rehabilitation of displaced persons have been allotted. These blocks would be equivalent to nearly three Project areas. The State Government had suggested location of seven blocks in the area. The Planning Commission has added the eighth block comprising about 100 villages around Fulia in Nadia District.

Extra Allotment by the Planning Commission

The allotments of areas have, in most cases, exceeded the original suggestions made by the State Governments in response to the Planning Commissioner's earlier communication to them asking for suggestions regarding the areas in which they would like community projects to be located and the number of such projects. In the case of Madras, the six projects allotted by the Commission include an additional project in Madurai District so as to secure two projects for the Tamil Nad, as requested by the State Government. Four approved projects in Madhya Pradesh include an additional project in the area which was

VISIT TO GOKULAM: At the Gokulam Village Training Centre, 34 inmates are trained in crafts like spinning, weaving, paper-making, bee-keeping and silkworm rearing. Dr. M. V. Krishna Rao, Minister for Education and Information, is seen here, inspecting the working of the centre.



MADRAS INFORMATION

6

Scheme for Survey of Cottage Industries

The Government have sanctioned a scheme for the survey of cottage industries in the State and have directed that the survey be undertaken without delay.

According to the scheme, the survey of cottage industries in this State will be done on the method of 'stratified random sampling'. Considering the district as the strata, the number of industrial units to be investigated in each district, which is proportional to the number of people, engaged in the cottage industries in that district, is reported to be about 9,460. The scheme also makes provision for a sample of 20 units on the average per each district, in respect of new industries, which may have sprung up in the last two decades. The total number of units to be investigated would, therefore, be roughly 10,000 in the entire State.

This action has been taken on the resolution adopted by the State Cottage Industries Board, that a comprehensive survey of cottage industries be undertaken immediately, collecting full data, regarding the availability of raw materials, manpower, etc.

merged in the Madhya Pradesh as a result of integration under the new Constitutional set-up. In Assam, where two Projects and two Development blocks have been approved, the latter two have been specially recommended by the Planning Commission and they will be located in the tribal area.

Punjab and Bombay

In regard to the Punjab, where four projects have been approved, the Planning Commission says: "In view of the considerable development work which has already been done in Nilokheri and Faridabad and the investment which has been incurred, the Central Committee considers that the benefits of integrated rural and urban development are likely to be realised sooner in the areas around these townships than elsewhere." The Committee has, therefore, recommended the siting of one Development block around Nilokheri and two Development blocks around Faridabad which will comprise one full Project.

In Bombay, the Committee has recommended one additional Project and one Development block in excess of the three Projects suggested by the State Government. In Rajasthan, an additional Project has been suggested in Jodhpur and an extra Development block in Bikaner. This makes up a total of two Projects and one Development block in the Rajasthan State. In Hyderabad, the total of two Projects and one block includes an additional Development block suggested by the Commission.

Approximate Cost

The total cost of the community projects including the Development blocks has been roughly estimated at about

(Continued on page 24)

HEALTH

7

MADRAS INFORMATION

Is Cancer Curable?

By Dr. K. M. RAI, Director of the Barnard Institute of Radiology

The question "Is Cancer Curable?" is so often asked by almost everybody irrespective of his or her education or status in life, that it merits scientific consideration and scientific answer. It is therefore appropriate that on the eve of the celebration of the Second World Cancer Day (6th April 1952) when all over the civilised world attention would be focussed on the fight against Cancer, I should be asked to place before you correct facts about the curability of Cancer. I should therefore endeavour to give you as complete an answer as possible on this question with the available knowledge at present. For this purpose, it is necessary to consider the incidence of Cancer among us, its cause, modern methods of treatment and the rate of cure.

In the more advanced Western countries where the expectation of life has greatly improved, Cancer today is the most important single disease. In those countries it has taken second place in the list of causes of death previously occupied by tuberculosis, the first being cardiovascular and respiratory diseases. It is therefore not reasonable to forecast that in time Cancer will reach the peak as a cause of death in the human race. Sir James Paget half a century ago remarked once to Sir John Bland-Sutton that he was convinced that everyone would die of Cancer, if he or she lived long enough. We need not be taken aback by what Sir James Paget said 50 years ago. That statement was made half a century ago when methods of treatment were not so advanced as now with regard to Cancer. Today the outlook is more optimistic and later on I shall give you the available figures as regards the cure of Cancer and that everybody need not die of Cancer. Another question often asked is whether the incidence of Cancer is on the increase.

Incidence of Cancer

Taking all factors into consideration, such as better awareness on the part of the patient regarding Cancer and early diagnosis, etc., it can be definitely stated that Cancer is of the following types:

Lungs, Brain, Nervous system, Pancreas, Prostate, Rectum, Ovaries, etc.

Cancer is found to be on the decrease in Oesophagus, Liver, Uterus, Lip, Penis and Skin. In a recent analysis of the total number of patients that reported at the General Hospital for treatment during the last 18 months, the following figures are rather revealing:

The total number of patients reported for treatment	3,035
Males	2,097
Females	919
Children (under 12 years)	19
Cases that were found to be non-malignant	45
Cases that were found to be malignant	2,990
Cases that were found to be beyond any treatment	670
Of these 3,035 patients—	
Cancer of the Mouth	1,552
Cancer, Breast	244
Cancer, Penis	212

Cancer, Nose, Pharynx, Larynx, Maxillary Antrum, Frontal sinus and Tonsils	258
Cancer Oesophagus, Stomach, Intestine, Rectum and Anus	141
Ulcer	141
Soft tissue malignant tumour	118
Cancer lymphatic glands including Hodgkin's and Lymphosarcoma and other secondary Carcinomatous conditions	115
Other types of Cancers	258
Total	3,035

Analysis

From these figures, it will be seen that in our country at any rate, the incidence of Cancer in the general population is different from that obtained in the Western countries. Out of 3,000 and odd cases reported for treatment, over 1,500 cases were oral Cancers; about 250 cases were Cancer of the breast; over 200 cases were Cancer of the penis; nearly 150 cases were skin Cancers—this gives us a total of over 2,000 cases of Cancer in these situations. The total number of cases reporting with Cancer of the womb at our Women and Children Hospital is in the neighbourhood of about 1,200 a year. Thus it will be seen that in the accessible parts of the human body, we have over 3,000 cases per year as against a total of about 4,000 of all types of Cancers. Analyzing this in terms of percentage, fully 75 per cent of the incidence of Cancer is in the accessible parts of the human anatomy. This has a great bearing on the question "Is Cancer Curable?"

Before going to the question of curability, there is one little snag about the term 'cure' in Cancer. Scientifically speaking, you can say that a certain condition is cured, if you only know the cause. Unless the cause is removed, there could be no meaning in the word cure. Here in this disease, Cancer, we do not know all the causes of Cancer, though we know a good deal about them. Therefore, it would be unscientific to use the word 'cure'.

SELF-SUFFICIENCY: The Gokulam Village Training Centre sends up students for Higher Grade Government Technical Examinations. The Centre is run, as far as possible, on a self-sufficiency basis, with only minimum aid from the Government. Cotton towels and silk pieces woven at the Centre were shown to the Minister for Education.



Our committee thanks most sincerely His Excellency the Governor's Andhra Cyclone Relief Fund, Madras, for their liberal contribution of Rs. 1,50,000, the Nellore District Tuberculosis Association for Rs. 47,856-14-6, the United Nations Appeal Fund for Children for Rs. 28,789-4-9, Srimati Tikkavarapu Krishnamma for Rs. 20,000 and the Mica Welfare Fund Committee for Rs. 15,000. A further grant of Rs. 15,000 was granted by the Government of India which is expected shortly.

We have already requested the Madras Post-War Reconstruction Committee to kindly sanction a contribution for the construction of special ward for ex-servicemen and we expect to have it soon, when a special ward will be constructed.

Need for More Beds

It is distressing to note that tuberculosis has been on the increase in this district and many affected poor people are finding it difficult to get accommodation in the sanatoria at Madras and other places. It is an urgent necessity to increase the beds in this hospital. We take this opportunity of appealing to the general public of this district to contribute liberally to this noble cause and enable our committee to give this hospital the required bed strength. We are glad to announce that the Central Government have been pleased to exempt contributions towards the Welfare Fund from payment of income-tax.

This is the first non-official effort to get a tuberculosis hospital constructed at a cost of about three lakhs of rupees and we hope and trust that the Government will raise it to a 200-bed hospital in the near future. In view of the valuable help and kind co-operation given by Sri B. Gopala Reddi Garu, our committee unanimously resolved to name the locality of this hospital as Gopal-nagar.

The District Committee with very great pleasure conveys its grateful thanks to the Minister for Health, Sri A. B. Shetty, for presiding on the occasion, Sri B. Gopala Reddi for opening the hospital, Dr. P. Arunachalam for opening the X-Ray block, Sri S. Govind Swaminathan for opening the U.N.A. Clock and Srimati C. Ammannappa Raja for opening the Bathula Kanakamma ward.



WORKERS RELAX: Workers of the Government Coach-building Factory at Chrompet recently spent an enjoyable evening with fun and games. Sri P. C. Mathew, Transport Commissioner (left) presided on the occasion. The variety programme included a "tiger-hunt", snake-charmer act and a drama.

Role of Health Visitors

An unpublicised event, but unique and important in its own way in national reconstruction, took place on October 14 in Madras City. And that was the School Day Celebrations of the Government Training School for Health Visitors in Kellys Road, Kilpauk, Madras.

The great and vital role that Health Visitors could play in the social and preventive aspect of treatment of diseases was stressed by Dr. Isaac Joseph, Deputy Director of Public Health, presiding over the celebrations. Dr. (Kumari) H. M. Rajamanickam, Assistant Director of Public Health, read a report on the working of the school. Mrs. Mona Hensman unveiled a portrait of Dr. (Mrs) Veerasinghe Chinnappa, retired Assistant Director of Public Health, on the occasion.

The president said that in advanced countries, there were organisations of public health nurses who served as a link between the medical institutions and the homes of the patients, and looked after the families of the patients. He said in the cases of diseases like venereal diseases and tuberculosis, environment had a lot to do, and the mere removal of the patient to an institution did not solve the problem. Very often the patients returned only to get a relapse. In such cases, the environment of the patients required a careful looking after. It was in such cases that public health nurses and social organisations played their role. They had to look after the welfare of the family. They had to take care of the sanitary conditions of the house and surroundings to which the patient returned.

In a vast and thickly populated country like India, all this meant colossal work. But a beginning, Dr. Isaac said, had been made in this direction. The Health Visitors trained from the Institution, could, with a little additional training, function as Public Health nurses in the absence of a proper department of public health nursing. In conclusion, Dr. Isaac said, that those were tasks to which they should attend to without delay, in this era of national reconstruction and growth.

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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 during July 1952 is given below.

The Nilgiris District.—During the month, 6,000 lb. of potato seeds and 58 lb. of new strains of wheat seeds were supplied to the ryots. A total sum of Rs. 7,260 was paid to 30 ryots as agricultural loans for purchasing seeds and to 30 ryots as agricultural loans for purchasing seeds and to 30 ryots as agricultural loans for purchasing seeds and to 30 ryots as agricultural loans for purchasing seeds. Usual propaganda on compost-making, soil conservation and contour-bunding was carried on. Pests and diseases were effectively controlled in an area of 34 acres. Three beehive boxes were supplied to encourage bee-keeping in the selected firkas; 3,500 blue gum seedlings were distributed during the planting week; 500 seedlings were planted. Thirty-six compost pits were laid. One elementary school was opened at Balithala hamlet.

North Arcot District.—Ten charkas were introduced; 112 compost pits were dug; 1,953 trees were planted; and 14 wells were deepened during the month. The villagers of Kalasapakkam constructed and offered a thatched shed worth Rs. 1,200 as additional accommodation to the District Board School at Kalasapakkam. A poultry shed was constructed at Kadalady.

Tanjore District.—During the month, 65 charkas were introduced and 1,455 hanks of yarn were produced; 34 compost pits were dug and 62 were rectified; 48 compost pits were laid; and 531 tons of compost taken to the fields; 50 cherries were cleaned; 27 insanitary pits were filled up and 36 trench and Wardha type latrines were filled up and 37 mass meetings were conducted and 136 bhajans and congregational spinnings were held.

South Kanara District.—Two acres of waste lands were terraced and two flushout latrines were completed in Kumbha firka. One Adult Literacy class was opened at Belur and the Belur Board Elementary School was raised to an Higher Elementary School. The Community Hall constructed by the Grama Sangh, Kumbha, was opened by the Collector on 3rd July 1952. The total cost of the work was more than Rs. 7,000 and the Government grant was only Rs. 1,500. In Manjeshwar firkas, four furlongs of road work was completed.

In Mulki firkas, six acres of lands were brought under cultivation. Green manure seedlings were planted in 3,050 acres of land. Six beehives were supplied. One leaching type of latrine was constructed, and one well work completed. In Nileshwar area, five manure pits were laid and two trench latrines were constructed. Propaganda was carried on on the construction of trench latrines. Seventy new charkas were distributed and 70 houses were visited to induce inmates to purchase charkas and spin regularly.

Salem District.—During the month, two bathrooms and two reading-rooms were constructed and 15 drinking wells were deepened. The World Health Day was celebrated on a grand scale at Gangavalli village by conducting a procession and by convening a public meeting. A magic lantern show was also exhibited on health and sanitation which was witnessed by about 2,000 villagers; 439 manure and rubbish heaps were removed and 28 cherries cleaned. Ten

soak pits and 23 cesspools were made. Thirty-eight trench latrines and septic tank latrines were constructed. Ninety compost pits were laid. Four manure pits were dug and 64 rectified; 6,795 tree cuttings and seedlings were planted.

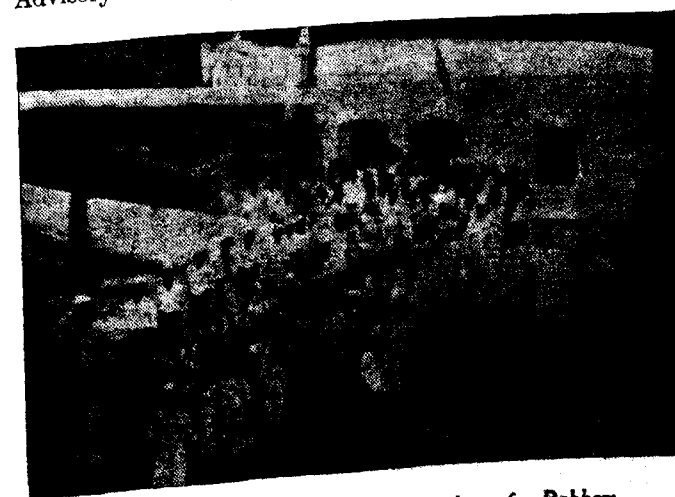
During this month, seven charkas were distributed to self-spinners on instalment basis and six charkas were renovated. The self-spinners produced 3,230 hanks of yarn and 52 lb. of cotton slivers, for whom Khadi clothes were sold for Rs. 151-8-3. A sum of Rs. 29-12-8 was paid as subsidy.

South Arcot District.—In Kadampuliyur centre, 70 compost pits and 20 trench latrines were put up; 9,083 trees were planted during the Vanamahotsava Week. Fourteen kisan charkas were distributed to the ryots during the month. A spinning competition was held at Manaputhur and prizes to the value of Rs. 9-13-6 were distributed to the spinners.

In Chinnasalem centre, one adult education centre was revived and two adult education centres were opened, bringing the total to 44; 32 fruit-bearing trees and 1,817 other trees were planted during the Vanamahotsava Week. Two wells were completed.

Anantapur District.—During the month, 20 new charkas were distributed under the Extensive Khadi Scheme. One hundred hanks of yarn were collected. The villagers of Manasamudram gave one acre of land free of cost to the Grama Seva Sangham for the construction of a school building. About 280 books were supplied to the branch libraries. Ten compost pits were filled up and about 60 of them cleaned.

Malabar District.—About 504 lb. of green manure seeds, vegetable seeds and seedlings of coconut, mango and Maltas lime were distributed; 125 tons of manure were distributed for cultivation in Tellicherry, Kuthuparamba and Mattanur firkas. In Payyanur area, 174 lb. of chemical manure and 448 lb. of bonemeal were distributed. Forty-nine compost pits and six trench latrines were dug. Six Agricultural Advisory Committees were constituted. The Grama



RURAL RESURGENCE: The people of Pakkam village, Tiruvallur Taluk, respond to the call of gram-kalyan, and volunteer to self-imposed tasks of rural reconstruction. Here, on Independence Day, the community, after flag salutation, sets out in procession.

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in the ordinary sense as we do with reference to such conditions as a cure in malaria or a cure in dysentery. Since we do not know all the causes of Cancer, it would be unscientific to say that the condition is cured. So, it is but natural that the cure rate should be defined in terms of years, if we are to talk on a scientific level. Thus, in talking about Cancer cure we say the patient is cured for three years, five years, ten years or more.

Natural Expectation of Life

You are all aware that Cancer is largely a disease occurring in men and women after the age of 35, although no age is completely exempt. This in turn naturally leads to another question, that is, what is the natural expectation of life in Cancer at any particular age? Or otherwise one could ask: "How long would a patient live, if no treatment were given?" This expectation of life in the patient with Cancer cannot be stated in general or absolute terms. The age incidence and the anatomical site decide the ultimate prognosis owing to the greater virulence of the disease in the young and the natural shorter expectation of life in the old, the type of growth, its easy accessibility for early diagnosis and adequate treatment, its degree of malignancy, its mode of dissemination and its anatomical situation—all these have an important bearing on the expectation of life and therefore on curability.

But it is nevertheless useful to compare the 'known average' duration of life in the most common type of malignant diseases as the first step in the estimation of curability in the treatment of Cancer. This has been worked out by many workers in the field and it is now estimated that the mean duration of Cancer in certain of the untreated cases are as follows:—

Mean Natural Duration of Cancer.

Stomach	12.2 months.
Colon	8.4 months.
Breast	39.3 months.
Rectum	14.3 months.
Uterus	15.2 months.
Tongue	13.3 months.

This is the average duration of life in a patient when left untreated from the commencement of the disease to death. Therefore, the cure rate in Cancer should be assessed with reference to this expectation of life after the commencement of the treatment.

Modern Methods of Treatment

What are the modern methods of treatment? They are surgery, Radiotherapy, which includes radium, X-rays and radioactive isotopes, hormonal treatment and lastly chemotherapy.

Either any one of these can be exclusively used or they may be used in suitable combinations, such as surgery with radiation therapy or radiation with hormonal treatment, etc. Apart from the methods suggested by me there is no other known method of scientific treatment for any Cancer.

Let us now analyse the results of these methods of treatment in relation to the types of the Cancer that we commonly come across in the human race—what percentage of each type could be cured under best of conditions.

According to the available statistics, the permanent healing percentage is as follows:—

	Percentage cured in early cases.	Percentage cured in late cases.
Cancer of the breast.	When early 75	Less than 20
Cancer of the womb.	" 80	" 10
Cancer of the mouth.	" 80	" 20
Cancer of the lip ..	" 85	" 10
Cancer of the skin ..	" 95	" 30
Cancer of the rectum.	" 50	" 0
Cancer of the bladder.	" 50	" 0

On a further analysis of a five-year cure from Cancer of the breast in all the stages according to the modern methods of treatment, the following figures are available:

	PER CENT.
Operation only	23
Operation and post-operative irradiation	29
Operation and pre-and post-operative irradiation	40

Two Important Factors

This analysis shows that the prolongation of life with the pre- and post-operative irradiation is nearly double than with surgery alone and this percentage is improved by another five per cent by using diathermy knife in place of the ordinary knife. It is therefore seen that the cure of Cancer in the very large majority of cases entirely depends upon two important factors: (1) early diagnosis and (2) adequate and efficient treatment. It is obvious from this that naturally better cure rates are obtained as methods of treatment are more and more specialised. Further, very early diagnosis is easily possible in all those Cancers which occur in accessible parts of the human anatomy and fortunately for us the largest percentage, fully 75 per cent of Cancers at any rate in our country, come under this category. Therefore, if they are diagnosed early and treated properly, over 80 per cent of these should get a permanent cure. If 80 per cent of the commonly occurring Cancers can be cured, it can be said without any fear of contradiction that Cancer is far more curable than either heart or kidney disease.

Unfortunately, there is an impression not only in the minds of the lay public but also among some sections of medical men that Cancer is incurable. This is largely due to the failures of treatment either because the patient reports so late in the stage of the disease when nothing except bare palliation is possible or due to inefficient and inadequate treatment. Therefore, in conclusion, the answer to this question "Is Cancer Curable?" is a most emphatic "Yes, if diagnosed early and treated adequately, in the large majority of cases."

(By Courtesy, A.I.R., Madras)

Distribution of seeds

The Government have sanctioned a scheme for the multiplication of "Crotalaria Striata" seeds at the Agricultural Research Station, Nilleshwar, for five years. It is proposed to produce 750 lb. of seed every year for distribution to the coconut growers in the East Coast district.

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W.H.O. EXPERTS ADVISE ON MATERNAL AND CHILD-WELFARE SERVICES: Dr. L. R. Tuli, Dr. G. Mettrop, Dr. (Miss) G. Heller and Miss D. Pedersen, Advisers from the Regional Office for South-East Asia of the World Health Organisation, visited Madras at the request of the State Government during the first fortnight of April 1952, to assist the Government in planning the development of Maternal and Child Health Services throughout the State. They were joined by Dr. (Miss) S. Pandit, Maternity and Child Health Adviser of the Directorate-General of Health Services, Government of India, and by Mr. T. G. Davies, Chief of Mission, UNICEF.

After visiting several institutions in Madras City and in the neighbouring districts, the team prepared a draft plan of operations for a Maternal and Child Health Service, in close co-operation with the Director of Medical Services and the Director of Public Health and their staff members.

The plan of operations emphasises the improvement and extension of training facilities for different types of health workers and the development of Maternal and Child Health Services in rural areas. Before leaving Madras for Hyderabad, the team accompanied by the Director of Medical Services and the Director of Public Health paid visits to the Chief Minister and the Minister for Health.

Diagnostic X-Ray Photos Exempted from Sales Tax

The Government have, in modification of their previous orders, directed that diagnostic X-Ray photos be exempted from the levy of Sales Tax. This action has been taken on representations to the Government that radiographs cannot be considered to be finished products, that the radiologists, who are professional men, cannot be considered to be dealers for purposes of the Madras General Sales Tax Act and that they cannot be deemed to buy or sell radiographs.

Best Drama Script on Tree Planting

The Standing Committee on Tree Planting has adjudged the drama script in Malayalam entitled *Mavin Chuvathil* as the best Malayalam script for the competition in drama scripts about tree planting. The author of this script is Sri T. Sankunni Menon, M.A., Viyyur, Tiruchi District, who will be awarded a prize of Rs. 100.

Gifts to Hospitals

The Government have accepted, with thanks, the offer of a gift by Srimathi Mhetab Bai, Chingleput, of an empty Oxygen cylinder with a complete set of accessories for use in the Government Headquarters Hospital, Chingleput.

The offer of Sri O. S. Konar, Keeranur, to provide electrical fittings to the Government Dispensary, Keeranur, has also been accepted by the Government with thanks.

The Government have accepted with thanks the gift of a table grand model H.M.V. Gramophone with a number of records offered by Srimathi Jaya Doraiswami to the Erskine Hospital, Madurai, for the entertainment of the patients.

A gift by Sri Pasupuleti Siddiah, Mica Mine Owner Gudur, of 20 palliasses and eight bed-side lockers for the use of the Government Hospital, Gudur, has also been accepted by the Government with thanks.

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Seva Sanghams of nine villages were reconstituted and seven youth leagues were formed. Sixty-three charkas were introduced and 9 lb. of cotton were distributed. Nine persons were given training in carding.

Chittoor District.—During the month, 13,511 trees were planted; 25 compost pits were dug; 12 bags of seeds were distributed and 40 streets were cleaned.

West Godavari District.—During the Vanamahotsava Week, 50,000 plants seedlings and seeds were distributed. A mass sanitary drive was also conducted in the colony of the quarry workers. Electricity was given to two pumpsets in Jagannadhapuram village on the same day.

East Godavari District.—During the month, 13 sanitation drives were conducted; 15 compost pits were dug; 40 manure heaps were removed; and 1,042½ tons of manure taken to the fields; 34 spinning demonstrations were conducted; 27 new charkas were distributed and 65 charkas were repaired; 419 hanks of yarn were collected and 1,368 plants were planted.

Kurnool District.—In Yerragondapalem, 12 compost pits were dug and 30 manure pits were set right. The Rural Welfare staff cleaned 38 streets and removed five manure pits outside the village. In Kurnool centre, nine compost pits were filled up and two manure pits were removed outside the villages and 98 manure pits set right. Fifty-two spinning demonstrations were conducted and 993 trees were planted. In Kurnool centre, the Rural Welfare staff organised one cub-pack with 40 boys, conducted 12 adult classes and 12 spinning demonstrations. More than 25,000 lb. of seeds were distributed.

Nellore District.—Thirty-nine spinning demonstrations were given and six new charkas introduced; 1,038 hanks of yarn were spun and 162 yards of Khadi woven; 14½ lb. of vegetable seeds were distributed and 3,628 trees planted; 35 new compost pits were dug and 329 old ones set right; 239 tons of compost manure was produced. Seventy-three individual and 23 mass sanitary drives were conducted. Forty-four soak pits and 232 manure heaps were set right; 27 wells and 44 sewage pits and canals were cleaned.

Tiruchirappalli District.—In Musiri firka 19 charkas were introduced during the month and 632 hanks were collected during the month. A maternity centre at Jambumadai has been opened by the Kasturibai Centre Trust.



MESSAGE OF KHADI: The cult of Khadi is essential for self-sufficiency in the village. The children of Pakkam make an auspicious beginning with taklis.

In Vellokoil Centre, 22 mass sanitation drives were conducted; 23 soak pits were dug up and 26 latrines were provided. Forty compost pits were laid and recreation activities in five villages were conducted.

Tirunelveli District.—During the month, 35 pits were dug; 20 charkas were sold and 1,233 hanks of yarn were collected. Tools to the value of Rs. 7,233-14-0 were supplied to the artisans free of cost.

Bellary District.—Forty-five sanitary drives were conducted; 18 compost pits were laid and 35 charka demonstrations were conducted. A spinners' competition was conducted at Chintakunta village in Alur Taluk and prizes were distributed to the winners. Thirteen charkas were distributed among the self-spinners during the month.

Srikakulam District.—During the month, 42 sanitary drives were conducted; three charkas were introduced and 39 spinning demonstrations were organised; 74,293 trees were planted during the month.

Krishna District.—An earthen road of two-mile length connecting Tunikipadu village with its hamlet Bhagavanpuram has been completed at an estimated cost of Rs. 10,000 of which the villagers bore one-third in the shape of labour and materials. During the Vanamahotsava Week on 30th July 1952, a mass sanitation drive was conducted in the cheri in the morning and a public meeting was held in the evening.

Cuddapah District.—During the month, 12 new charkas were introduced; 24 spinning demonstrations were conducted and 500 yards of Khadi cloth was produced; 28 new compost pits were dug and 100 tons of compost was manufactured in the three selected firkas, 40 sanitation drives were conducted in several villages and 21 cesspools were laid. Twenty-two adult education classes were conducted.

The *Bhudan* movement was started and it is meeting with good response in the several villages of the Rural Welfare area. At Nakkaladinne village seven ryots offered 1.75 acres of land as free gifts during the month.

Ramanathapuram District.—Thirty-nine sweeping campaigns were conducted; 56 propaganda meetings were organised and 32 compost pits were dug; two thousand trees were planted during the month; 5,110 hanks of yarn were spun. Khadi was exchanged to spinners for yarn. A spinning competition was conducted and 22 persons participated in the competition.

Guntur District.—In Ongole firka, during the month, 20 individual and five mass sanitation drives were conducted; in all the firka areas, 144 compost pits were laid; 321 tons of compost was carted to the fields; 28 spinning demonstrations were conducted. In Ongole firka, 160 hanks of yarn was produced and ten adult night classes were conducted. During the Vanamahotsava Week, 19,680 trees were planted or distributed in Ongole firka.

Madurai District.—The Rural Welfare Officer inspected 68 villages and made intensive propaganda work in selected villages about agriculture, sanitation, co-operation and other activities; 106 public meetings were arranged. Street levelling to a length of 2,345 cart-loads and drains construction up to about 1,355 feet were made; pits were dug up. Trench latrines numbering 24 and 19 urinal pits were formed. Fifty-six compost manure pits were dug up; 108 cesspools were constructed in the month. Charkas

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were distributed to 23 individuals and 6,560 hanks of yarn were produced by the self-spinners. Eight cinema shows were conducted in the firka area.

Chingleput District.—Forty-eight compost pits were dug; seven Wardha type community latrines were constructed and 17 charkas were introduced. An Agriculturist Association was formed in Vengathur village.

Visakhapatnam District.—In Pendurthi firka, 22 mass and 42 independent sanitation drives were conducted; 51 hanks of yarn were collected; 34 spinning demonstrations were conducted; 62 compost pits were dug; five magic lantern shows were exhibited; and 23,345 trees were planted.

In Kotauratla firka, 19 mass and 36 individual sanitation drives were conducted; 62 compost pits were dug and 16 spinning demonstrations were conducted.

Coimbatore District.—In Vellokoil centre, 47 compost pits were formed; five Grama Seva Sanghams and three Valibar Sanghams were organised; 31 soak pits and 23 Wardha type latrines were constructed. The pilot scheme of leather work and hand-spinning by charkas worked successfully. The Harijans in the spinning centre produced 292 hanks of yarn during the month. Twenty men worked in the leather works and produced 296 pairs of chappals.

In Tiruppur centre, 30 charkas were introduced; 183 hanks of yarn were collected and 27 compost pits were dug. In order to provide employment to the Harijans in the distressed area of Palladam, 50 kisan charkas were purchased.

Transport of Paddy and Rice

The procedure in regard to the transport of paddy and rice from one place to another within the State for personal consumption has been laid down in Notification II of G.O. No. 1068, Food and Agriculture, dated 1st July 1952. The notification was published at page 924 of Part II of the *Fort St. George Gazette*, dated 9th July 1952. The procedure in regard to the transport of paddy and rice by landholders for personal consumption according to the Government Order is briefly set out below for the information of the public:—

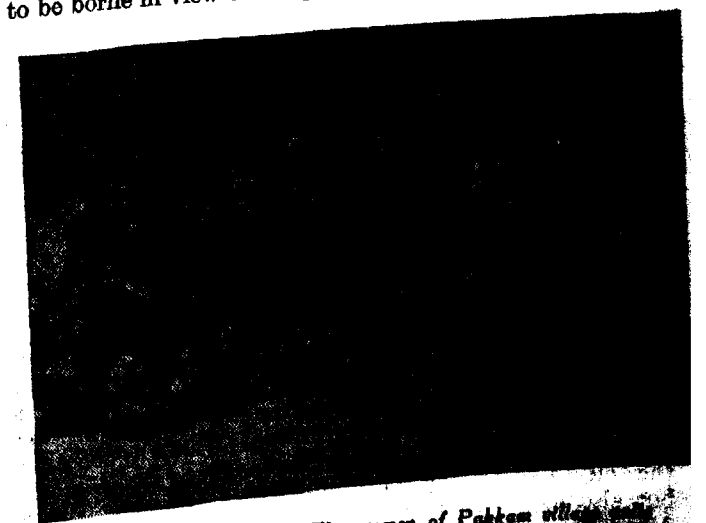
Six zones comprising the districts as given below were formed in the Government Order referred to above for the purpose of movement of paddy or rice and their products for personal consumption. According to the Government Order no landholder can transport paddy or rice or their products for personal consumption from any place within the limits of a zone to any place outside the zone, except under and in accordance with the terms and conditions of a permit issued by the Collector of the district concerned or any officer authorised by him. A landholder applying for a permit for the first time to transport paddy or rice should give the particulars and certificates specified in Schedule II to the Government Order mentioned above and also attach to the application a statement certified by the Village Munsif, Revenue Inspector, Tahsildar or other Revenue authority having jurisdiction over the area, specifying the number of adults and children residing with him and actually dependant on him. An

applicant who is already a permit-holder need not attach such a statement to the application for the renewal of permit, but he should specify in his application his permit number, the quantity of paddy/rice proposed to be imported, the period for which the import relates and the person to whom the permit should be issued.

Number of the Zone.	District.
I	East Godavari, Visakhapatnam and Srikulam.
II	West Godavari, Krishna, Nellore, Madras City, Chingleput, Chittoor and North Arcot.
III	Guntur, Anantapur, Bellary, Cuddapah and Kurnool.
IV	Tanjore, South Arcot, Tirunelveli, Ramanathapuram, Madurai, Coimbatore, Salem and Tiruchirappalli.
V	South Kanara (excluding Hosdrug sub-taluk).
VI	Malabar, the Nilgiris and the Hosdrug sub-taluk of South Kanara.

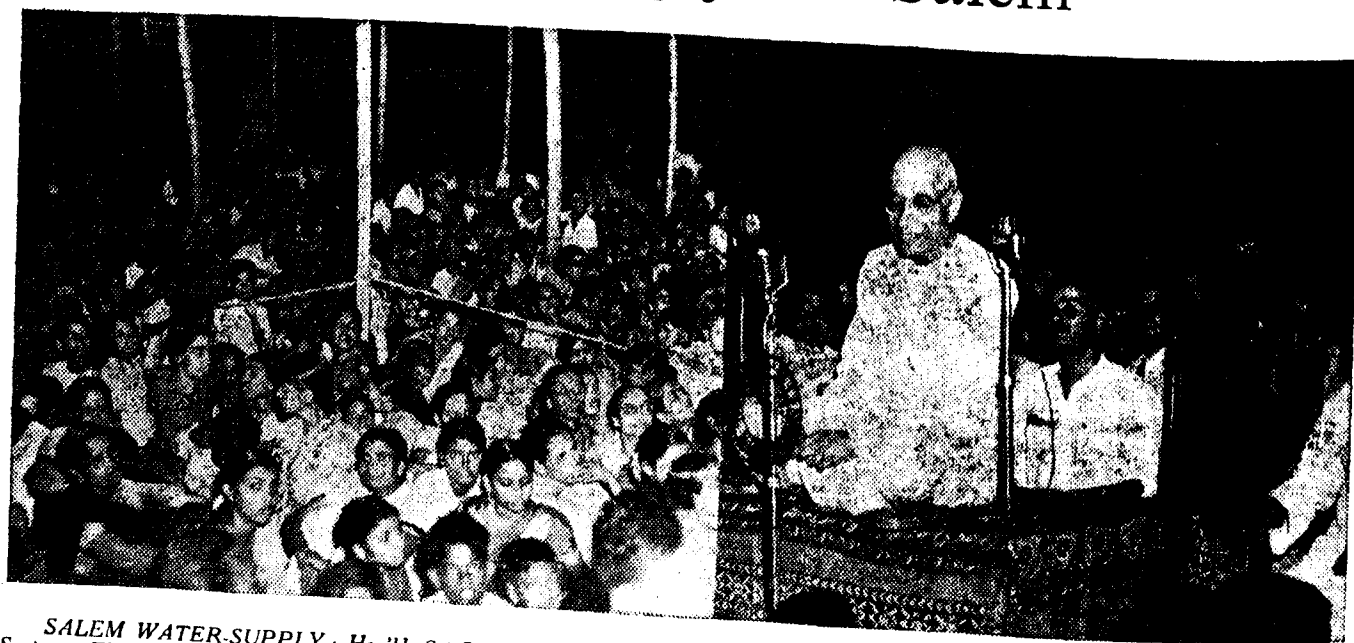
No permit will be given for any period exceeding six months at a time.

No permit is necessary for a landholder to transport paddy or rice for personal consumption from a surplus district to a deficit district in the same zone. Similarly no permit is necessary for transport from one deficit district to another in the same zone, provided the stuff is moved by road. If, however, rail movement is required, the landholder should apply to the Collector of the district where he owns lands, giving necessary particulars about the lands owned by him, the strength of the family, the period and the quantity for which the permit is required. After necessary verification the Collector will issue a permit for the transport of the applicant's requirements by rail, provided he is satisfied that alternative means of transport by road or canal will not be possible or economical. The Railway authorities will book the consignment only on production of this permit. This inconvenience has to be borne in view of the general interest.



SOCIAL SERVICE: The women of Pakkam village to plan and allocate social service work both for welfare and the uplift of the village in general.

Water Supply for Salem



SALEM WATER-SUPPLY: Hon'ble Sri C. Rajagopalachari, Chief Minister of Madras, recently inaugurated the Salem Water-Supply System. The scheme, though more than 20 years old, was completed only recently, and cost Rs. 40 lakhs. Salem will now get its water-supply from the Cauvery at Mettur.



PRECIOUS WATER: At Hasthinampatti, the Chief Minister offered token gifts of the Cauvery water to the women in the audience, who sang a song specially composed for the occasion by the Poet Laureate Sri N. Ramalingam Pillai. The Chief Minister advised the people: "Water is precious. Use it as you would your hard-earned money."

President's Award to Musicians

By Sri C. RAMASUBBAN

Following the Central Government's decision to make four awards every year to distinguished Indian musicians in the four categories, namely, Hindustani (Vocal), Hindustani (Instrumental), Carnatic Music (Vocal) and Carnatic Music (Instrumental), the award in the third and fourth categories this year are in favour of Sri Ariyakudi Ramanuja Iyengar and Sri Karaikudi Sambasiva Iyer, respectively. The award consists of a prize of Rs. 1,000 in cash and a shawl. A special function was held at "Rashtrapathi Bhawan" on March 29, 1952, when the awards were made to the two Vidwans by President Rajendra Prasad.

Karaikudi Sambasiva Iyer

Sri Karaikudi Sambasiva Iyer is about 65 years old and a native of Thirugokarnam in the Ramanathapuram District. His late brother Karaikudi Subbarama Iyer was a Vainika Vidwan of considerable repute and the two brothers invariably played duet, with the younger (Sambasiva Iyer) always contenting himself to play behind in support of the elder, whom he acknowledged to be his superior. The death of Sri Subbarama Iyer was so great a shock to Sri Sambasiva Iyer that for some considerable time he gave up playing to audiences, and it was feared that the retreat was of a permanent nature. Time, however, helped the younger brother to recover from the anguish and he consented to accept engagements at the All-India Radio at whose stations in Tiruchirappalli and Madras he can be heard broadcasting at regular intervals. Sri Sambasiva Iyer visited Mysore and Travancore, the Rulers of which States honoured him. He has now settled in Madras where he is easily accessible to lovers of music.

Sri Sambasiva Iyer is, in private life, an austere and orthodox Brahman. Simple in habits and religious by temperament, he is always willing to help rising musicians in all possible ways. He has consistently maintained a high standard in accepting engagements, and as his renderings on the Veena are of the "highbrow" type, music lovers with an ear only for the pleasing type of Carnatic music are not likely to be very familiar with his technique.

The Technique of Veena

The Veena is an extremely difficult instrument to master, although it lends itself to limitless possibilities in the exposition of Carnatic music. In handling the instrument, there have been two ways, (1) the Andhra way of holding it vertically, and (2) the Tamil and Carnatic way of holding it horizontally. Sri Subbarama Iyer usually played on the instrument holding it vertically. Sri Sambasiva Iyer, however, adopts the horizontal way. In the words of an ardent admirer of his art, Sri Sambasiva Iyer's technique is essentially masculine, vigorous and ancient. In any case, it would be correct to say that his musical renderings on the instrument are of the authentic and pure type. In *thanam*, *pallavi* and *Samagana*, he renders the instrument superb and makes use of it with full grace and embellishments; the transient shakes which are styled "*rekhy*" are of frequent occurrence, while



VEENA: Sri Karaikudi Sambasiva Iyer

he is an adept in causing vibrations in the pitch by the least differences of pressure upon the frets. The capabilities of the instrument reach considerable heights in his hands, while the tempo of his renderings is always maintained at scintillating pace.

The honour conferred on Sri Sambasiva Iyer is very well merited. That he is an outstanding representative of the orthodox, incorruptible and pure tradition in Carnatic music is acknowledged by all music lovers in Madras.

Ariyakudi Ramanuja Iyengar

Sri Ariyakudi Ramanuja Iyengar will be 62 next May. He learnt music from Ramanathapuram Srinivasa Iyengar, better known as Poochi Iyengar, a Vidwan of outstanding repute, whose technique was synonymous with the quintessence of vocal Carnatic music. Sri Ramanuja Iyengar started his career even in his 20th year and had the rare honour at that early age of singing to vast critical audiences in Tanjore, Tiruchirappalli, Madurai and Ramanathapuram Districts, where musical tradition was at its height 30 to 40 years ago. The highest honours available to a Vidwan in Tamil Nad have been conferred on him years ago, and besides being a Sangeetha Kalanidhi of the Madras Music Academy, he also enjoys the enviable title of Sangeetha Ratnakara conferred on him by the public of Madras State. He has all the social graces which go to make a musician acceptable in any society, an excellent sense of humour, capacity to reel off anecdotes and spicy jokes, and a consistent desire to please patrons of music in all possible ways. It would be correct to state that no performance of his was ever a flop even on days when he was not in the best of health. That, of course, was due to the gift of an excellent voice, full and rich in texture, staying power and that indefinable quality called "*karvai*".

It is extremely difficult to find the apt words in English to define the great merits in the technique of a vocal musician—terms like full-throated, resonant, rich, melodious, do not fit in with the descriptive epithets which are

South Arcot Lignite

By DR. C. V. S. RATNAM, PH.D., Member, Experts Committee, Lignite Investigation

Part IV. Petrol from Lignite

The large deposits of lignite in South Arcot in the Madras State can be a source of petroleum products among which are petrol, diesel oils, waxes, hydrocarbon gases, phenols, acids, lubricants and the like. This possibility has been there ever since these lignite deposits came under active investigation by the Government of Madras. The proved lignite deposits in South Arcot extend over an area of 100 square miles and contain an estimated 2,000 million tons. The quality of this lignite is comparable to any that is obtained elsewhere in the world.

Nature has not been kind to our country with regard to petroleum supplies, which have become so essential for modern life, industry and civilization. The known petroleum wells are only in Assam and Punjab States and the Indian contribution to the world production of petroleum in 1947 is 1.9 million barrels, a meagre 0.06 per cent in the total world production of 3,022 million barrels. The United States of America having the highest standard of living in the world produced 1,856 million barrels, nearly 63 per cent of world production and in 1950 this country produced more than 2,000 million barrels of petroleum. The known and proved world resources in petroleum are limited, especially when compared to coal. Our own proved coal resources are nowhere near it. This is so in the case of the U.S.A. which produces and has in reserve the largest amounts of petroleum and coal in the world.

The total available coal supplies are estimated at three trillion tons (48 per cent of known world resources) and the petroleum reserves are put around 26.8 million barrels (about 50 per cent of world reserves) in 1949. At the present rate of production of more than two billion barrels per year, these reserves are not estimated to last long, if not supplemented by the huge coal and oil shale reserves. Vigorous research is now going on in the U.S.A. for evolving efficient and economic methods for obtaining petroleum products from coal.

Pioneering Work in Germany

Germany was the pioneer in the field of producing oil from coal. Germany like India is poor in petroleum reserves but it has large lignite deposits which were put to various uses in that country. This was possible because of the large amount of research work and attention paid to these deposits in Germany. Germany evolved two basic methods for producing oil from coal: (1) Bergius or direct hydrogenation process, and (2) Fischer-Tropsch or Synthine process. These processes were later on adopted in England, France, Italy and other European countries.

As practised in Germany and elsewhere in Europe, these methods did not prove economical from the American point of view. Natural petroleum was not available in good quantities in these European countries and during war emergency cost was no consideration. This was not so in the U.S.A. Plenty of natural petroleum was available and the oil industry not only supplied U.S. requirements but also met a large part of petroleum demands of the Allied Nations during the World War II. No question of

producing expensive oil from coal arose in that country. But the U.S. Government realised that they could not indefinitely depend upon the natural petroleum reserves. In fact, this country became a net importer of oil in 1948. In 1944, the United States Congress passed the Synthetic Liquid Fuels Act and appropriated to the U.S. Bureau of Mines 30 million dollars (nearly 15 crores of rupees) to conduct laboratory research and development work necessary to determine the best demonstration plant design and conditions of operation for producing oil from coal, oil shale and agricultural waste products. Since that time, the U.S. Bureau of Mines established the best equipped laboratories, pilot plants and demonstration units in the world to investigate on this problem, and these researches make the original German methods almost obsolete. The grant was raised to 60 million dollars since.

The United States of America has nearly 600 billion tons of lignite (20 per cent of its known coal reserves) and hence lignite was included in the investigations of the Bureau of Mines on producing oil from coal. The results obtained by them are of significant importance to us not only in the initial reduction of capital costs for the establishment of this industry and its economic operations, but also in that that North Dakota lignite, very similar to our lignite, was included in their investigation.

Two Important Processes

The two most important processes for converting coal and lignite into petroleum products are briefly described below. These two processes are complementary to each other rather than competitive:—

(1) "Bergius Process" or "Direct Hydrogenation Process".—Coal (free from ash as far as possible) is crushed, dried and pulverised. A heavy mineral oil (this is generally obtained in the process itself) and catalyst, usually iron and thin compounds, are mixed with coal and a paste results. This coal and oil paste is sent into converters where it is made to react with hydrogen under pressures between 3,000 to 10,000 pounds per square inch and temperatures, between 300° to 500°C. The hydrogen is obtained from the coal itself. The resulting liquid and gaseous products are further processed to yield fuels varying from high octane aviation gasoline to Bunker "C" fuel oils for ships and industrial use. The by-products in this process are phenols for plastics, "creosote" for wood preservation, solvents for paints and hydrocarbon gases useful as fuel.

(2) "Fischer-Tropsch" or "Synthine Process".—Coal is first converted into a synthesis gas, consisting mainly of carbon monoxide and hydrogen. Large amount of research work is now being conducted in various countries on the efficient production of synthesis gas because the cost of synthesis gas is said to amount to 60 per cent of the cost of synthetic fuel by this process. The synthesis gas is passed over a catalyst, usually an iron or cobalt compound, under pressures varying from 300 to 600 pounds per square inch and temperatures up to 600°F. The resulting products are suitably processed to yield a good grade petrol for automobiles or a good diesel

oil. The by-products include waxes, alcohols, aliphatics, acids and hydrocarbons.

Capital Expenditure

The U.S. Bureau of Mines after intensive investigation and economic study, calculated the amount of capital expenditure necessary for constructing synthetic liquid fuel plants with coal or lignite as basic raw material. They have also arrived at the price of petrol manufactured by this process with lignite as the raw material. One important feature of these processes is the high capital investment required for establishing these industries. It is estimated that a plant must produce at least 10,000 barrels a day (a barrel is 42 gallons) of finished products such as petrol and heating oil for economic operation. A plant of this size requires an initial investment of 80 million dollars or nearly 40 crores of rupees. Considering the fact that India produced from its oil wells only 1.9 million barrels in 1947, a plant of this size will materially contribute to the existing internal supplies of petroleum products in the country and substantially stabilise their supply under any emergency. The raw materials required for such a plant are about 7,000 tons of lignite, 15 million cubic feet of water and 75 million cubic feet of oxygen per day. For erecting such a plant about 50,000 tons of steel and steel equipment would be necessary.

As calculated by the U.S. Bureau of Mines, the cost of synthetic petrol per gallon using lignite as raw material (at Rs. 10 per ton of lignite) is around 14 to 18 cents or 11 to 15 annas. This includes three per cent return on the capital. As calculated by a representative of the Standard Oil Company (New Jersey) the petrol made by synthetic process with coal or lignite as the starting material, will be available to the consumer at Rs. 1-8-0 per gallon. This does not compare very favourably with the existing petrol prices in the U.S.A. but compares well with the existing prices of Rs. 2-11-0 per gallon in India.

Award in Oil Companies' Dispute

In G.O. Ms. No. 6256, Development, dated 21st December 1951, the disputes between the managements of the three companies, namely, Burmah-Shell Oil Company, Standard Vacuum Oil Company and Caltex (India) Limited, Madras, and their workers employed in their installations, on four issues were referred for adjudication to the Industrial Tribunal, Madras. Now the Tribunal has passed an Award which is briefly as follows:—

I. *Scales of Wages*.—The Tribunal has fixed wages and dearness allowances as well as incremental scales for daily rated workers and monthly-rated workers in all grades (vide paragraphs 13 and 16 of the Award).

II. *Bonus for 1950*.—The workers are entitled to bonus equivalent to three months average basic wages for the year 1950. One-third of the bonus shall be credited to Provident Fund account of the workers concerned and the remaining two-thirds shall be paid to them in cash within three months of the publication of the Award, deducting the bonus already paid for 1950. If some of the workers have ceased to be in the service of the Companies after 1950, the bonus due to them for 1950 will be paid on their claiming the amount within three months of the publication of the award. Such of those workers as were

As indicated, the establishment of a factory of this nature requires, according to Indian standards, large capital foreign machinery and technical know-how.

Lignite is suitable both for the Bergius Process and for the Fischer-Tropsch Process. Indeed, it is superior to other coals in case of hydrogenation, and percentage of conversion and in the case of gasification.

Project for South Arcot

The South Arcot lignite deposits have enough reserves of raw materials, lignite and water, for the establishment of a plant of this nature. A development of this sort which requires large capital, much technical know-how and imported plant and machinery demands careful examination. The Government of Madras and the Expert Committee on Lignite Investigation considered this question and they feel that this development must follow the establishment of an economic mining operation of lignite at Neyveli and after meeting the expanding fuel and power requirements both in the industrial and domestic sectors in the Madras State. The projected establishment of three oil refineries in India (one in Madras State) may seem to indicate that a synthetic liquid fuel plant is not an immediate necessity. Considering the world situation and that these refineries have to depend upon imported crude, the wisdom of erecting a synthetic liquid fuel plant is clearly indicated. Recently, the Government of India authorised Koppers Co. of U.S.A. to design a synthetic liquid fuel plant for India and the proposals of this Company are now under the consideration of the Government.

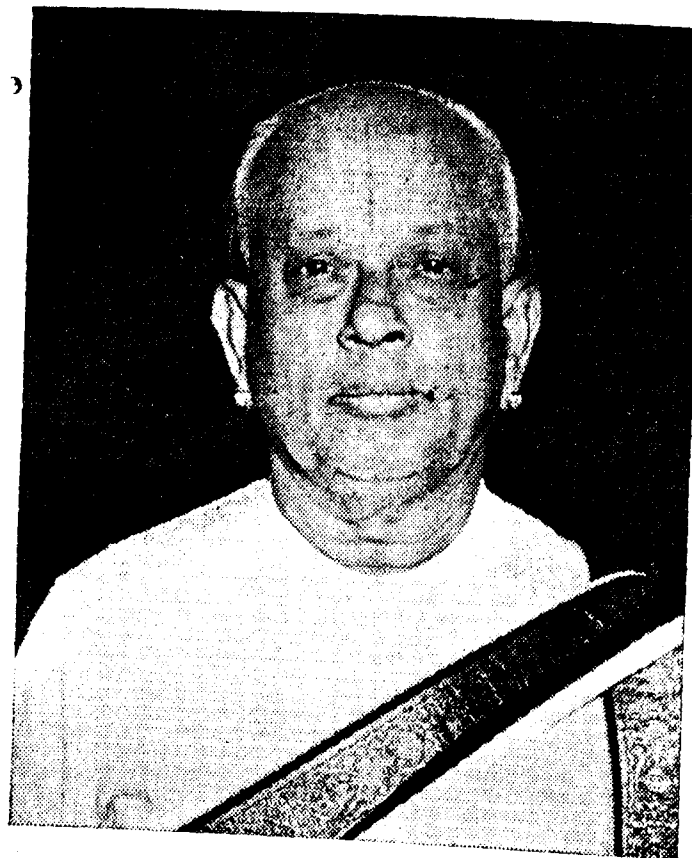
Once it is established, after the proposed pilot plant investigation at Neyveli, that South Arcot lignite can be mined successfully and economically, the area may prove quite suitable for the establishment of a synthetic liquid fuel industry.

(To be continued)

in service for only a portion of the year will get a proportionate share of the bonus for the period of service put in by them in 1950. But the payment of bonus to every one will be subject to the condition that he has not been dismissed for misconduct involving financial loss to the company concerned.

III. *Retirement Benefit Schemes*.—A gratuity scheme will be introduced in the three Companies on the lines of the one granted to the Burmah-Shell workers by the Industrial Tribunal at Bombay or introduced by the Burmah-Shell at Madras, whichever is preferred by the workers. The scheme will be available to all the workers as such. The scheme will be available to those who are not eligible for pension additional benefit to those who are eligible but scheme, but as a substitute to those who are eligible but unable to get any pension by reason of death or disability before retirement or termination of service for causes other than dismissal for misconduct before the pensionable period. The Standard Vacuum Oil Co., and Caltex (India) Ltd., will be at liberty to make such alterations in their schemes for provident fund and pension as they may deem necessary in view of this Award.

IV. *Increased Dearness Allowance or House Rent Allowance*.—The demand for higher dearness allowance or rent allowance in the absence of any housing scheme for the three Companies has been rejected.



VOCAL : Sri Ariyakudi Ramanuja Iyengar

CHILDREN'S ART : The Governor of Madras opened the Children's Art Exhibition in Madras, when entries for the Shankar's Weekly competition were put on display. Shankar (in dark coat), the famous cartoonist, is also seen in the picture.

PRIZE PAINTINGS : A few of the outstanding works at the Children's Art Exhibition. Entries were received from all over the world.



used in Tamil for describing a man's voice. Sri Ariyakudi Ramanuja Iyengar has that indefinable quality in his voice which makes it intensely musical; he infuses into it the richness and pleasing quality that make it scintillating to vast audiences; he reaches the very top notes with ease and stays there for long periods, making the auditorium full of music. Likewise, he reaches the lowest notes with equal ease. As for his sense of time, "kalapramanam," it is artistic beyond measure. It is as true in his renderings in slow tempo as in the fast, and when his tempo is fast he has never been known to skid over the notes or leave them blurred. In singing Ragas, he is extremely clever in emphasising just the individual shades that go to build up the finer aspects of each raga. This cleverness of his is exemplified in his treatment of both the Gana Ragas as of the less ostentatious ones.

Sri Ramanuja Iyengar is probably the oldest among present day vocalists in Carnatic music and has enjoyed top-ranking status for several years. It is in the fitness of things that the Government of India should have chosen to honour him this year. Music lovers in Madras State have reason to be greatly pleased with the wise choice implied in the two awards.



Central Tobacco Committee

The 12th Meeting of the Indian Central Tobacco Committee was held at Madras on March 31, 1952 under the Chairmanship of Sardar Datar Singh, Additional Secretary, Ministry of Food and Agriculture. Among those present were Sri K. N. Kaul, Joint Secretary, Ministry of Commerce and Industry, Sri C. Krishnan, Collector of Central Excise, Madras, Sri M. S. Sivaraman, Director of Agriculture, Madras, Dr. T. G. Shirname, the Agricultural Marketing Adviser to the Government of India, the Director of Agriculture and the Director of Industries and Commerce, Mysore, certain Members of the Parliament and State Legislature and prominent tobacco traders.

Opening the proceedings of the meeting, Sardar Datar Singh outlined the progress made by the Committee during the year under review. He paid tribute to the success of the periodicals published by the Central Tobacco Committee. He referred to the popularity of the monthly journal of the Committee not only in India but also abroad, because foreign marketers were utilising its pages for advertising and its circulation in U.K. and on the Continent was increasing.

Research Stations

Referring to research, Sardar Datar Singh said: "Our research stations are continuing their experiments on a variety of problems intended to improve the quality of the produce and the economic cultivation of tobacco. Encouraging results obtained so far are being confirmed on the farmer's fields. The most economical way of suppressing the unwanted shoots to improve the quality of the leaf, optimum dose of fertilisers, proper rotation and evolution of high quality cigar wrapper tobacco, are some of the outstanding researches being carried out at the various research stations. Practical demonstrations on the improved methods of handling and curing leaves were conducted at Tadikonda and Ongole."

Continuing, he referred to the work of the National Chemical Laboratory, Poona, which has already evolved a method for the economic extraction of nicotine from tobacco waste on commercial basis. "This will effect," he added, "considerable saving of foreign exchange and utilisation of tobacco waste in the country to the tune of many lakhs of rupees." He called the attention of Indian industrialists to these researches so that they might set up factories for nicotine extractions.

Marketing of Indian Tobacco

Speaking about marketing, Sardar Datar Singh said: "On the marketing side, the Committee's recommendations on the improvement of marketing within the country are under consideration by the State Governments. Auction sales of tobacco have also been introduced for Mangalagiri area by the Government of Madras from this season, and the provisions of the Madras Commercial Crops Market Act have been extended to Tirupur to include tobacco. The Secretary visited Hyderabad and Bombay at the State Government's request to advise them on problems of tobacco. The Bombay Government have taken steps to constitute regional tobacco advisory committees for Charotar and Nipani areas to tackle local marketing problems."

"As regards exports of Indian tobacco, there has been a steady upward trend during the past four years. The exports during 1951 by sea and air alone amounted to 116 million lb. worth about Rs. 16.4 crores, compared with 94 million lb. worth about Rs. 14.7 crores in 1950. Hongkong and Russia showed very great interest in Indian tobacco in 1951. Australia, China, Japan, etc., seem to be interested in our tobacco and enquiries have already been received. The tobacco imports, mainly from dollar areas, have on the other hand declined."

"A good portion of accumulated stocks lying at Continental ports has been cleared by the Sales Officer during his visit to certain Continental countries after his participation in the World Tobacco Congress held at Amsterdam in September 1951. The Sales Officer has made some concrete suggestions for improving our market abroad and these deserve your careful consideration."

Referring to the financial aspects of the Committee's work, he reminded the meeting that the Government of India had not been able for obvious reasons to give grants for three years. The construction of farm buildings for the Central Tobacco Research Institute being essential is under way at an estimated cost of Rs. 5 lakhs. The importance of wrapper tobacco for cigar industry of India cannot be over-emphasised and possibilities of starting the Research Station are being explored in consultation with the Government of West Bengal. "Under these circumstances, the Government of India will be requested to restore the grant and we hope the grant will be continued from this year."

Sardar Datar Singh explained why the proposal to start the redrying plant could not materialise this year. Sufficient steps have been taken to expedite setting it up. The object of the plant is to help the growers, small traders and exporters who do not possess proper facilities for redrying their tobacco in time and at reasonable rates.

Recommendations of the Committee

The Committee decided to transfer to the Government of India the scheme of quality control of tobacco intended for exports and to speed up the erection of its redrying plant at Guntur. For this purpose, an Engineer has been elected. It was also decided to publish a comprehensive Tobacco Directory useful to the traders and growers alike. The Committee urged the Government of India to increase its annual grant and appointed a sub-committee to formulate the Committee's plan of work relating to the improvement of tobacco production and marketing in the order of priority of tobacco production and marketing in the order of priority for the next five years.

It was also decided to draw up the details of the quality and quantity of tobacco available for export for forwarding to the Commerce Ministry for inclusion in their Trade Agreements with foreign Governments. To fix the required percentage of moisture in the leaf, the Committee recommended to the redrying owners to provide moisture testing apparatus in their factories.

Electricity: Review for July 1952

Review of electricity work done during July 1952 is given below:—

Machkund Hydro-Electric Scheme.—Land acquisition proceedings were continued and lands remain to be handed over to this Department. The work on Lamtaput-Machkund headworks road was completed, including all bridges and culverts. Formation of Soguru-Jalaput road was completed and metalling done for a length of six miles. Construction of culverts and road dams was progressing. The construction of permanent buildings at Onukudelli was nearing completion. Construction of temporary buildings at Jalaput were in full swing and those at Chichempet have been already completed; 47.8 per cent of excavation at diversion dam and 41.5 per cent masonry for main dam were completed. Excavation as well as concreting for the flume channel was in progress, and 66.10 per cent of the whole work was over. Foundation excavation for tunnel pond dam was nearing completion and 17.1 per cent of masonry for main dam and 13.7 per cent of bucket and apron concreting were completed. Concreting the final invert for pressure tunnel and filling concrete for surge shaft side walls were progressing. Concreting of flume tunnel (sides and arch) was 73 per cent over.

Concreting of pipe tunnel is in progress. Laying of haulage track was completed up to anchor No. 1. Grading valve house levelling transformer yard, excavation for powerhouse and tail race were in various stages of progress. Excavation for foundation for Jalaput dam was progressing. Heavy machinery received at Visakhapatnam were being transported to site. Monsoon was in full swing practically throughout the month. Total labour force during the month was 4,044.

S.S.L.C. Examination: Selection System Revived

The Government have ordered that the system of the selection of candidates for the S.S.L.C. examination in March by a written test in the VI Form should again be introduced in the high schools in the State.

There will be detentions, as a result of the annual examinations at the IV and V Form stages also. A not-too-strict standard will be prescribed for the test held in the VI Form for the selection of candidates for the S.S.L.C. examination as well as for promotion from IV and V Forms, so as to allow students, who are not up to the required standard, to make up, if possible, for their past lack of diligence. In addition to the written tests a system of external oral tests will be introduced, the results of which will cover the deficiencies of the candidates in the written examinations.

These orders will be given effect to from the S.S.L.C. examination for 1953.

Moyar Hydro-Electric Scheme.—All civil works from headworks to powerhouse have been completed. The first 12,000 K.W. unit was commissioned in April 1952. Erection of 2nd and 3rd units and the balance of works on switchgear were progressing. Erection of the II penstock line was completed, and line tested satisfactorily. Work on III penstock line was nearing completion.

Pykara III Stage Extensions.—At the Pykara dam site construction of masonry for wing wall and dam main structure and concreting for R.C.C. core wall were continued. Penstock line has been completed. Concreting of differential surge tank was also completed. Erection of steel structures for the Singara Powerhouse Extensions will be taken up shortly.

Madurai Thermal Scheme.—Flooring concrete has almost been completed in cooling pond works for 10,000 K.W. unit. Balance of works in cooling pond, erection of form work, tying reinforcements and concreting in pedestal portion of turbine foundation of the 10,000 K.W. set and foundation of transformer plinth for 12,500 KVA. transformer were progressing. Boiler and turbine materials were being received and stacked carefully at site.

South Kanara Extensions.—Levelling for the 33 KV line has almost been completed. Alignment was being done in certain reaches.

Tungabhadra Hydro-Electric Scheme.—All trial pits along the Low Pressure Pipeline and centre line of the forebay bund were deepened and test pits dug for investigating the nature of the soil. Survey was conducted to assess the quantity of plastic soil available in bed of Kamalapuram tank and to find out alternative sources.

Detailed survey for routing the several lines from dam site was conducted and proposals were made out taking into consideration the realignment of the P.W.D. high level canal. Profiles and pole schedules connected to the alignments for Cuddapah-Kodur line were under scrutiny. The same were ready for Gooty-Anantapur line. Profiles and tower schedules for the other reaches were being finalised. Tree and land schedules were prepared for 31 miles, thus making 259 miles so far. Revised proposals for locating some of the substations were made out and were under scrutiny in the field.

Madras Plant Extensions.—One of the 80,000 lb./hr. boilers under the scheme was commissioned in May, 1952, and continues in satisfactory service.

Erection of steel work for power station was 98 per cent completed. Superstructure of main building was 80 per cent over. Superstructure of office and control block was 80 per cent completed. Work on railway sidings was 70 per cent over. About 70 per cent of work on erection of boilers Nos. 2 and 3 were done. Erection of transformers, C.W. pumps, turbo alternator switchgear were in various stages of progress. Work on pump-house and substation near cooling tower was 30 per cent completed.

Vijayawada and Visakhapatnam Power House Extensions.—Vijayawada.—Works on overhead tank and II raw water well were progressing. Revetment for pump-house and control house was in progress. Steel superstructure and masonry work in control and repair houses were progressing.

Visakhapatnam.—Foundation for VI boiler was taken up and was progressing. Dismantling of floor and concrete and ash pit wall was in progress. Masonry work for the extension was under progress. Fabrication of steel work was progressing.

Nellore Thermal Scheme.—Work on staff quarters at Gudur was continued. Work on substation structures at Nellore and Gudur was in an advance stage of progress.

Operation Branch

Hydro areas.—The water condition improved during the month and as a result all the cuts in consumption have been withdrawn from 15th July 1952. Peak load restrictions for L.T. loads, staggering of mill holidays and recess hours and ban on new industrial services, however, continued to remain.

The hydro systems continued to run in parallel with the Madras Electricity System. The number of units generated, peak load and the services connected during the month in the three hydro systems were as follows:—

Name of System.	System peak load in K.W.	Generation in millions of units.	Service connected.		
			Agricultural.	Industrial.	Domestic.
Pykara ..	41,400	19.26 plus 7.68*	58	2	228
Mettur ..	42,200	14.90	67	..	99
Papanasam ..	20,500	13.07 plus 0.36*	19	..	195

* 7.68 million units were generated at Moyar Powerhouse, the peak load being 12,600 KW.

† 0.36 million units were generated at Madurai Thermal Station with a peak load of 3,800 KW.

During the month a batch of 60 International delegates to Rabis Conference visited Pykara Powerhouse on 20th July 1952.

Do You Know?

About 40,000 workmen and 7,000 donkeys are at present employed on the Bhakra Dam Project. This labour force is likely to increase during the next working season.

At the end of June 1952, 39.7 million people were under statutory rationing and 75.2 millions under other types of controlled distribution. The figures for the corresponding period last year are 46 millions and 68.2 millions, respectively.

In 1950-51, Indian Railways carried 1,280 million passengers and 91 million tons of freight.

India has 93 scheduled and 428 non-scheduled banks with assets totalling Rs. 1,064.94 crores, which is about one-seventh of India's total national income.

For the first half of 1952, salt production in India totalled 605 lakhs maunds as compared to 550 lakhs maunds during the corresponding period in 1951.

Thermal Areas and Ceded Districts.—The Madras System was able to avail itself of some relief from hydro systems due to the improved water condition in the latter.

The peak load, generation and the number of services connected up during the month in the several areas were as follows:—

Name of System.	System peak load in K.W.	Generation in millions of units.	Service connected.		
			Agricultural.	Industrial.	Domestic.
1 Madras ..	28,300	11.295	31	37	198
2 Vijayavada—					
Steam ..	8,847	3.984	26	2	118
Diesel ..	460	0.007	..	..	..
3 Visakhapatnam—					
Steam ..	3,800	1.484	1	4	97
Diesel ..	1,200	0.097	..	..	..
4 Kakinada ..	800	0.009	3	4	105
5 Rajahmundry ..	580	0.028	..	..	..
6 Srikakulam ..	104	0.017	..	..	7
7 Ongole ..	96	0.021	..	..	16
8 Narasannapeta ..	15	0.003	..	..	2
9 Nellore ..	900	0.326	1	4	17
10 Prodatpur ..	102	0.022	..	..	3
11 Kurnool ..	310	0.101	..	3	27
12 Anantapur ..	175	0.048	..	1	20
13 Cuddapah ..	205	0.067	..	..	19
14 Nandyal ..	140	0.026	..	4	31
15 Tadpatri ..	65	0.013	..	..	5
Power purchased from Mysore.					
Hindupur ..	233	0.079	2	..	6
Ceded Districts ..	2,940	1.217	10	2	109

In the Madras Electricity System 70 D.C. services with an approximate connected load of 99.9 K.Ws. were changed over to A.C. supply on a voluntary basis.

During the month 27 extensions were sanctioned by the Chief Operation Engineers and Chief Engineer at an estimated total cost of Rs. 7,73,445.

During 1950, India produced 50 million square feet of plywood, of which 41 million square feet were used for tea chests.

Out of every 3,000 persons in India, only seven pay either income-tax or super-tax. The total income-tax and super-tax assessed during 1950-51 amount to Rs. 180.04 crores.

Indian textile mills reached the record production of 422.4 million yards of cloth in July 1952. During the same month in 1951, the production was 350.68 million yards.

The Indian Telephone Factory at Bangalore produces 25,000 telephones a year. By December 1953, its capacity will be 50,000 telephones and 30,000 automatic exchange lines.

The Central Government pays Rs. 60 crores a year as dearness allowance to its employees. Of this, employees with a basic salary of less than Rs. 50 a month get Rs. 40 crores a year.

Since Independence, over 16,000 post offices have been opened in the villages. This is 90 per cent of rural post offices in existence on August 15, 1947.

India and the Tourist Trade

South-East Asia abounds in places of historical and cultural interest to foreign visitors. As tourism is today one of the major industries in most countries of the world—an important source of foreign exchange and a vital instrument for promoting goodwill and understanding between nations—it is natural that India should take an active interest in developing her own travel trade.

India has an immense wealth of attractions, with a happy blend of antiquity and modernity to offer, an extensive store of ancient art and culture, numerous monumental relics on which is chronicled the story of her civilisation through the ages, a host of industrial centres and seats of learning, and an infinite variety of natural scenery and flora and fauna which would draw the admiration of any traveller from abroad. There is no dearth of beauty-spots and pleasure resorts and opportunities are not lacking for individual tastes, such as big game hunting, boating and picnicking. The weather is delightful in all parts of the country for some months, and in others all the year round.

The Government of India are paying considerable attention to giving an impetus to developing tourism, particularly to attracting foreign visitors. Their broad objective is to organise publicity in foreign countries and to ensure that visitors from abroad are provided all possible comfort during their sojourn in India.

Government Organisation

The Central Government have accordingly set up a tourist traffic organisation under the Ministry of Transport. Regional tourist offices have been established in important cities like Delhi, Bombay, Calcutta and Madras. In addition, the State Governments of the Punjab, U.P., Rajasthan, Mysore, Travancore-Cochin, Hyderabad, Orissa and Jammu and Kashmir have each placed at the disposal of the Government of India an honorary regional tourist officer with a view to ensuring satisfactory liaison. Thus,

India has now a well-knit network of tourist offices working in close collaboration with the State Governments, travel agents, hoteliers and carriers. With a view to encouraging tourist traffic from America, Government have decided to open a tourist bureau in New York.

Besides furnishing all the necessary information about amenities to tourists and rendering them any special assistance they may require in obtaining visas and permits, the Regional Tourist Officers of the Central Government help in supplementing the task of recognised travel agencies. They are also entrusted with the responsibility of ensuring that tourist facilities are improved and brought up to the requisite standard. Advisory committees are now being gradually attached to them to assist them in their day-to-day work.

Relaxation of Regulations

With the help of the Central Tourist Traffic Advisory Committees, an organisation consisting of representatives of the Central Government, the State Governments and other trades directly interested in the promotion of tourist traffic, the Transport Ministry, in co-operation with the Central Ministries and the State Governments concerned, has been able to arrange relaxation of various governmental regulations regarding simplification of registration and customs formalities and currency exchange.

All overseas tourists are now provided with an 'Introduction Card' which enables them to seek the help of Government officials in getting essential facilities. The Railway Administration have provided air-conditioned coaches on most of the main railway routes. Comfortable tourist cars are also made available on demand.

There are at present fairly good western-style hotels in almost all the principal cities and towns in India. With a view to improving the standard of hotels, Government have encouraged the formation of regional associations of

KODAI: The restful serenity of the Lake at Kodakanal has an enternal appeal for visitors seeking a quiet vacation



Bharathi's Songs

The Government understand that the songs of the late C. Subramanya Bharathi, the Tamil poet, are being reproduced in cinema films and on gramophone records without the prior permission of Government, despite the fact that the copyright in respect of the works of the poet has been acquired by the Madras Government. The Government wish to make it clear that normally there will be no difficulty in obtaining such permission, subject to the payment of royalty to the Government at the following rates:—

Rs. 200 for the reproduction of one song in a cinema film; and 2½ per cent of the sale price of a gramophone record which reproduces a song.

Similarly, publishers of text-books for schools or others who desire to include any poem, or extract from the works of the poet in their publications, will ordinarily be permitted to include the matter in their publications on payment of a royalty of annas four for a line, subject to a minimum of Rs. 5 for each poem or extract. But prior permission should be obtained from Government in each case.

Those desirous of obtaining the permission of the Government for reproduction of the songs or other works of the poet, or extracts from them, should apply to the Secretary to the Government of Madras, Education Department, Fort St. George.

a matter of honour that India has been selected as the venue of the first meeting of this Commission.

hotels and restaurants. Leading hotels have agreed to make priority reservations, while the State Governments have thrown open their dak bungalows and rest houses at tourist centres for the use of foreign travellers on payment of the usual rent.

Publicity Literature

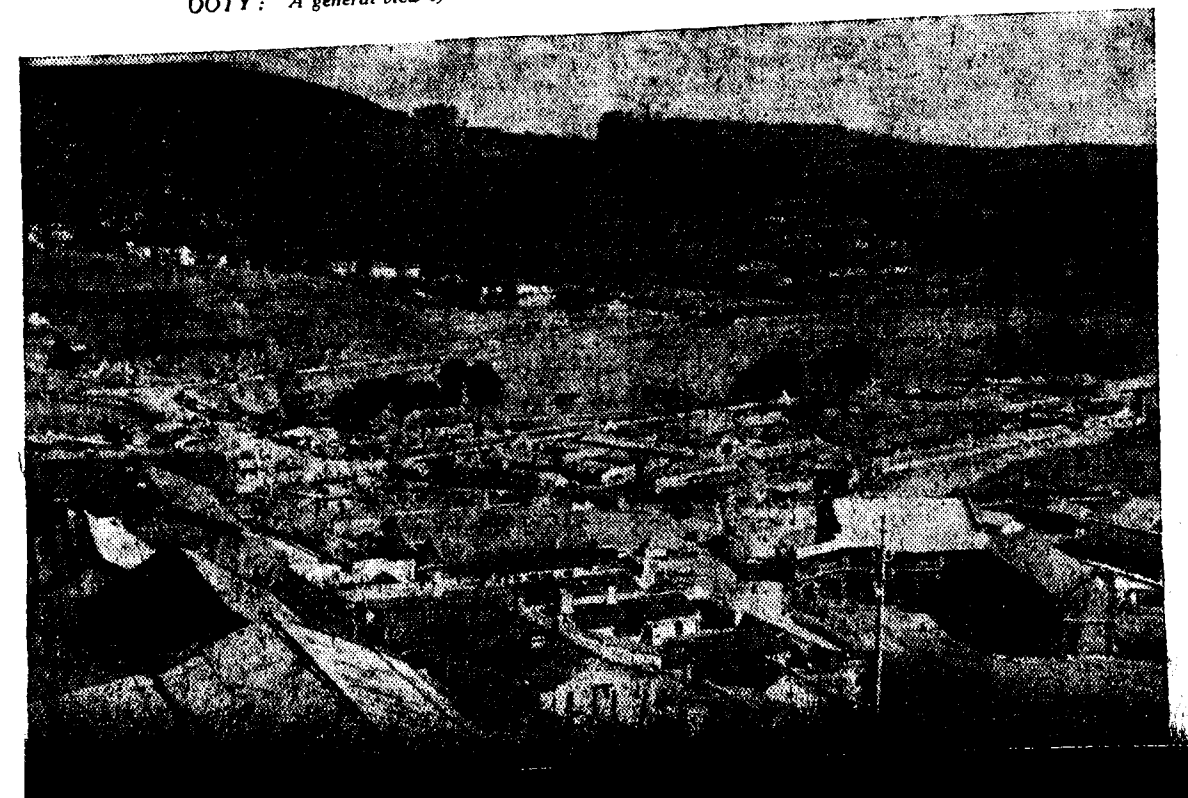
A booklet entitled *India—Tourist Information*, regional guides on Kashmir, Hyderabad and Travancore-Cochin and an illustrated *Handbook of India* have been published. Folders and posters on key tourist centres have also been brought out, while shikar and shopping guides are under print. A pictorial map of India has been especially prepared and its copies circulated abroad.

Arrangements have been made for the production of suitable travel films on India in colour for non-commercial distribution abroad, and some of these have already been released.

The influx of tourists to India has been very encouraging indeed. A large number of tourists, among them well-known writers, poets, journalists, professors, technical experts and leaders of opinion, have been to India from all corners of the world, not only for holidaying or sight-seeing but also to study our culture and way of life, to meet the common man and exchange views with the intelligentsia. The luxury liners *Coronia* and *Stella Polaris* brought to India large parties of Americans on a pleasure cruise last year as well as this season.

It was in 1950 that India joined the International Union of Official Travel Organisations, which is a non-governmental body with a consultative status with the U.N.O. Indian delegates to the various sessions of ECAFE and IUOTO have played a notable part in the setting up of the Asian and Far Eastern Regional Commission on the lines of similar commissions for Europe and Africa. It is

OOTY: A general view of Ootacamund, one of the premier hill stations in Madras State



The Minimum Wages Act

By SRI C. G. REDDI, I.A.S., Commissioner of Labour, Madras.

The Minimum Wages Act, 1948 (XI of 1948) came into force on 15th March 1948. Its main purpose is to secure to workers of certain industries in which labour is not organised, a minimum wage for the working day or month as the case may be. For this purpose, scheduled industries are divided into two broad categories, the first part of the schedule covering 12 employments and the second employments relating to agriculture. As required by the Act as amended, minimum rates of wages were fixed by the Government of this State for all employments in Part I of the Schedule, except lac manufacture to which the Act does not apply so far as the Madras State is concerned, on or before the target date 31st March 1952. Investigations are proceeding which will enable Government to fix minimum wages as and when considered necessary, for employment in agriculture also, in accordance with the amended Act, before the target date 31st December 1953.

The list of employments in Parts I and II of the Schedule are shown in Appendix I.

The minimum rates of wages fixed by Government for these employments are shown in the Appendix II. (1, 2, 3a, 4, 5, 6, 7, 8 and 10). They are now in force.

It may be noted that the Minimum Wages Act, 1948, applies not only to regular employees working on the premises of the factory or establishment, but also to all workers in the specified employments to whom any articles or materials are given out by another person to be made up, cleaned, washed, altered, ornamented, finished or repaired, adapted or otherwise processed for sale, for the purpose of the trade or business of that other person. Employers are bound by law to pay every employee engaged by

them in any of these employments, wages not less than the minimum rate of wages fixed for that class of employee for that particular employment. The Act therefore applies to out-work or home-work given out directly or indirectly by the employers in connection with any scheduled employment.

Where an employee is paid less than the minimum rate of wages fixed for that class of work done by him the employee himself or any legal practitioner, or any official of a registered trade union authorised in writing to act on this behalf, can file a claim before the Industrial Tribunal having jurisdiction over the area, with reference to Section 20 of the Act.

All Labour Officers, Regional Inspectors and Inspectors of Factories, and Assistant Inspectors of Labour have been appointed as Inspectors for the purpose of this Act. They have power to inspect all establishments covered by this Act, examine relevant books and registers, and see that its provisions are duly complied with. Both employers and employees may contact these officers for any assistance or clarification or any point relating to the enforcement of this Act. Minimum wages are usually fixed as so much per day and sometimes, as so much per month, usually of 26 working days.

With a view to ensure proper and effective enforcement the Minimum Wages Act, 1948, empowers the State Government—

(a) to fix the number of hours of work which shall constitute a normal working day exclusive of one or more specified rest intervals and similarly, to fix the limit for the total weekly hours.

(b) to provide for a compulsory day of rest in every period of seven days which shall be allowed to all employees or to any specified class of employees, in an establishment.

(c) to provide for payment of wages for work done on a day of rest at a specified rate; and

(d) lastly, to provide for payment of overtime wages for work done beyond the normal working hours and within the stipulated limits fixed for such overtime. The relevant Madras Minimum Wages Rules are still in the draft stage. They will be published in the *Fort St. George Gazette* after they are finalised. Pending such publication, the normal working day may be taken as an aggregate working period of 8 hours for adults and 4½ hours for children, exclusive of the rest interval. Overtime wages at twice the ordinary rate will accrue in the case of adults only, after 9 hours work per day or 48 hours per week.

APPENDIX I.

(See Sections 2 (g) and 27 of Minimum Wages Act.)

Part I.

1. Employment in any woollen carpet making or shawl weaving establishment.
2. Employment in any rice mill, flour mill or dhall mill.

APPENDIX II.

1. EMPLOYMENT IN WOOLLEN CARPET-MAKING AND SHAWL-WEAVING ESTABLISHMENT

G.O. No. 710, Development, dated 25th February 1952.

All-inclusive minimum rates of wages.

Class of work.	West Godavari and Krishna Districts.		North Arcot District.	
	I. PILE CARPET-MAKING.			
A. Home work—				
(a) Carding—all kinds of wool	Re. 0-5-0 per lb. (combines rates for carding and spinning)		Re. 0-5-0 per 7½ lb.	
(b) Spinning—all kinds of wool	[(a) and (b) Rs. 2-5-6 per 7½ lb.]		Rs. 1-4-0 per 7½ lb.	
(c) Twisting cotton yarn	Rs. 1-4-0 per 10 lb.		[(a) and (b) Rs. 1-9-0 per 7½ lb.]	
(d) Hanking woollen yarn	* Re. 0-1-3 per 4 lb.		Re. 0-14-0 per 10 lb.	
(e) Knotting cotton yarn	Re. 0-1-0 per lb.			
B. Factory work—				
(f) Carding	Nil.		Feeder mazdoor Re. 1 per day.	
(g) Cotton Twisting	4/4s. Rs. 1-4-0 per 10 lb.		Other mazdoors Re. 0-12-0 per day.	
(h) Dyeing *	6/6s. Rs. 1-8-0 per 10 lb.		Unskilled worker Re. 1 per day.	
† Grade I	Rs. 1-6-0 per day		Re. 1 per day.	
Grade II	Re. 1 per day		Rs. 0-10-0 per day. Monthly-paid worker Rs. 30 per mensem.	
(i) Weaving Single knot system—			Maistri Rs. 30 per mensem.	
4½ threads per inch	Rs. 35 per mensem.			
Double knot system—	Rs. 58 per mensem.			
4½ threads per inch	Rs. 63 per mensem.			
3 threads per inch	Rs. 5-8-0 per sq. yd.			
4 threads per inch	Rs. 4-8-0 per sq. yd.			
			Rs. 2 per sq. yd.	
			Rs. 3 per sq. yd.	

* No separate rate covered by the spinning rate.

† Classification into grades I and II is based on physical capacity, skill, efficiency and outturn of work.



TRANSPORT WORKERS: Sri C. Rajagopalachari, Chief Minister, addressed a gathering of workers of the Government Transport Department at the Transport Lines recently. The Chief Minister announced six concessions to workers, including the payment of gratuity to workers on retirement, increased pay for night duty, supply of good khaki uniforms, and putting of workers now on daily wages after a certain period of service on regular monthly basis.

Drought Battle in Cyprus

Of the 450,000 inhabitants of Cyprus, some 355,000 live in rural areas. Most of them are agriculturists and agriculture depends on irrigation. Because of the physical features of the country it is necessary to irrigate all lands used for cultivation. The indiscriminate destruction of wood lands led to increased erosion and lessened the water conservancy of the areas. The flow in the rivers became more spasmodic and seasonal rains have lost their usefulness in preventing droughts.

In 1939, the Water-supply and Irrigation Department was formed. More than a quarter million pounds are being spent by the Government on bringing badly-eroded lands back into cultivation, road repairs, anti-flood constructions and tree-plantings.

These pictures show what is being done in a typical village, Palekythro near Kythrea, where nearly £7,000 are being spent on a relief scheme which will make possible the flood water irrigation of about 234 acres of land this season.

Along the bed of the river, a tributary of the Pedieos, the Water-Supply and Irrigation Department is building a 150 feet masonry spillway six feet high with earth embankments on either side. The in-take channel is designed to carry 4,000,000 gallons of water a day into the surrounding distribution system of earth channels.

Another 66 acres of land, now a chain of useless gulleys, will also be made fertile by this scheme.

This combined irrigation and soil conservation project is providing work for men from neighbouring villages who are speeding up their efforts, realising what it will mean to them.



CLOSE-UP OF THE DAM WALL: The 150 feet dam wall at Palekythro, near Kythrea, part of a scheme which the Cyprus Government is carrying out to combat the drought damage.



DIVERTING THE WINTER RAIN: Cyprus is still suffering from the effects of its most serious drought for 20 years. This picture shows work going on at a dam near Kythrea, where a Government irrigation and soil conservation project is expected to divert the winter's rain on to surrounding eroded land and restore its fertility.

Irrigation Works Sanctioned

During the week ending April 5, 1952, the Government have sanctioned at an estimated cost of Rs. 16,98,000 for works or Rs. 17,15,257 inclusive of direct and indirect charges, the scheme for the formation of a reservoir on the Vattamalai stream near Vattamalai Hill temple, situated a little to the west of Dharapuram-Kangayam road between the 39th and 40th milestones, in Dharapuram Taluk, Coimbatore District.

The reservoir is expected to impound 90 million cubic feet of water by 1½ fillings. Two channels will take off from the two tower-head sluices at either end of the dam to irrigate 450 acres of cotton and 450 acres of millets both in Dharapuram Taluk. The scheme, besides increasing food production of fodder crop, will raise the level of the water table in the surrounding areas of deepening wells, running gruel kitchens, providing famine relief works, etc. The scheme has been ordered to be taken up for execution immediately, in view of the conditions in the district.

The Government have also sanctioned the immediate execution of the earth work relating to the canal portion of the Lower Sagileru Project, Badvel Taluk, Cuddapah District, as a famine relief measure.

Minimum Wages In Mica Works

The Government have specified the minimum rates of wages for different classes of employees in any Mica works. The rates will come into effect from March 26, 1952. The employees covered by these orders are those working in the Mica Mining Section, the daily paid temporary employees in the Mica Factories Section and the monthly paid employees in the Mica Mining and Factories Sections.

Rehabilitation of Rayalaseema

By SRI B. JOOGAPPA, M.A., I.A.S., Development Commissioner, Rayalaseema Development Board.

The five central Deccan districts, viz., Anantapur, Bellary, Chittoor, Cuddapah and Kurnool, well known as the Rayalaseema after the Rayas of the Vizianagaram Empire, which extended up to Visakhapatnam in the north and Madurai in the south and attained in the 15th century unique splendour and glory during the reign of Krishnadeva Raya the Great, whose capital and court at Vizianagaram (Hampi) attracted many foreign travellers and historians who found and hailed this country as a land of plenty and prosperity under the great Rayas, is now a backward tract and a famine zone due to political upheavals and wars, vicissitudes of times and seasons, decay and dereliction of irrigation sources, ravages of periodic famines and consequent distress, dependency and despair of the people. Even to this day, however, the famous and sacred shrines of Srisailem, Hampi, Virupaksham, Ahobilam, Kalahasti and Tirupathi in the Rayalaseema attract large crowds of pilgrims from all over India.

The authors of the Gazetteers have rightly observed that the ryots of Rayalaseema, before they emerge from one famine are engulfed by another. Owing to uncertain monsoons and inadequate rainfall, decay and dereliction of tanks and irrigation sources and want of adequate protective irrigation works, this area is subject to periodical visitations of famine. During the last quarter of the century, there has been on an average a famine for every third or fourth year, a fact which is conclusive evidence of the deplorable conditions of the tract. The expenditure incurred on Famine Relief works in the past has gone up to several crores. The loss sustained by the people should be much more and beyond estimate. To arrest these distressing conditions, to afford protection and rehabilitate the agriculturists to develop the inexhaustible mineral wealth and to develop large and small scale industries, an Economic Development Advisory Board was constituted by the Government in 1941 as recommended by the Famine Code Revision Committee.

As the achievements of this Advisory Board with its limitations were not substantial, the Rayalaseema Development Board was constituted in 1949 with the Hon'ble Minister in charge of Rayalaseema Development as Chairman and Heads of Departments, officials, Legislators, and non-officials as Members and a Development Commissioner, appointed as its Secretary, to examine and co-ordinate several schemes for the rapid development of Rayalaseema. The Rayalaseema Development Board has endeavoured to do its utmost for the development of irrigation projects, large scale and small scale industries, Electric Power, etc., on which I shall briefly dwell hereafter. The term of the Board was for two years in the first instance. The Government have since extended the life of the Board for a further period of three years.

Broadcast talk on the 5th April 1952 from the All India Radio, Madras, on "Development Schemes and Relief Measures in Rayalaseema", by Sri B. Joogappa, M.A., I.A.S., Development Commissioner, Rayalaseema Development Board, Madras.

up to 1952 as this Board has a continuing responsibility till the people of this area are rehabilitated on sound economic lines and brought on a level with the rest of the State.

The Members of the Board are:—

1. Sri B. Ananthachari, Hospet.
2. Sri T. Subramaniam, President, District Congress Committee, Bellary.
3. Sri Kallur Subba Rao, Hindupur.
4. Sri P. Lakshmayya, Anantapur.
5. Sri N. Venkatasubbaiah, Nandyal.
6. Sri M. Subba Reddi, Nandyal.
7. Sri K. B. Narayana Reddi, Proddatur.
8. Sri P. Parthasarathi, Kodur.
9. Sri R. Nadamuni Reddi, Narasingapuram, Chittoor.
10. Sri T. K. T. Veeraraghavachar, Chittoor.
11. Sri R. Suryanarayana Rao, Madras.
12. Late Sri T. A. Ramalingam Chettiar, Coimbatore.
13. Sri Kala Venkata Rao, Ex-Secretary, All India Congress Committee.
14. The Superintending Engineer, Anantapur.
15. The Registrar of Co-operative Societies.
16. The Director of Industries and Commerce.
17. The Director of Agriculture.
18. Development Commissioner as its Secretary.

The Board held nine meetings till now. I shall now give a brief account of the work done by the Board.

Irrigation Projects.—The Board has concentrated its attention chiefly on Irrigation Projects. The people of Rayalaseema have been agitating for the early execution of all the conceivable Irrigation Projects, repair of tanks and supply channels. The Board has examined all the schemes which have been sent up by the Members and the public and have recommended the execution of such schemes as are beneficial and feasible.

Tungabhadra Project.—The Tungabhadra Project which is likely to be completed by 1953 is the biggest in Rayalaseema and is estimated to cost Rs. 17 crores. The Low Level Canal of this Project will irrigate an area of 58,000 acres of wet lands and 1,92,000 acres of dry lands in the districts of Bellary and Kurnool. As this Project has been designed with a High Level Sluice which is under construction, this Board urged upon the Government to give top priority and include in the Five-Year Plan the High Level Canal Scheme to receive water for wet crops in Bellary and Anantapur districts. The Tungabhadra Project when it comes into beneficial use, with its Low Level and High Level Canals will give adequate protection to the people from famine and will also provide them with cheap electric power, as this Project will develop to start with 23,500 K.W. reaching finally 45,000 K.W. of power.

Pennar-Kumudavathi Project.—The Pennar-Kumudavathi Project which was under contemplation for a long time has been sanctioned at a cost of Rs. 19,60,000. It will augment supply to rainfed tanks in Hindupur taluk and will irrigate 3,130 acres.

LABOUR

These are the rates paid to master-weavers. In the case of private establishments, the above contract rates cover the process of dyeing and hanking/done in the houses of the master weavers and in all cases warping of beams has to be done by the master-weaver himself as part of the contract work.

* Classification into grades I and II is based on physical capacity, skill, efficiency and outturn of work.

II. DRUGGET MANUFACTURE.

Salem District. North Arcot District.

(i) Cleaning, sorting, washing and drying of raw wool. Factory work: Time rates:	Grade I Rs. 1-4-0 per day ..	....
	Grade II Re. 0-12-0 per day ..	....
(ii) Blending, carding and dyeing: Time rates:	* Grade I Re. 1-4-0 per day.	
	Grade II Re. 0-12-0 per day.	

Monthly paid workers: Rs. 30 per mensem.

Carding only:	 Piece rate:	
	Re. 0-1-9	per 7½ lb.
Dyeing	Time rate:	
	Rs. 30-0-0	per mensem.
Expert dyer	Rs. 60	per mensem.

(iii) Spinning:		
Plain or coloured wool, coarse yarn.	Re. 0-0-9 per lb.	....
Drugget yarn	Re. 0-1-0 per lb.	Re. 0-5-0 for 7½ lb.
Special quality yarn ..	Re. 0-2-0 per lb.	....

(iv) Weaving:		
Plain druggets	Re. 0-14-0 per sq. yd.	....
Druggets with borders.	Re. 0-15-0 per sq. yd.	....
Druggets with border and design	Re. 1-0-0 per sq. yd.	....
6 Ply warp	Re. 0-12-0 per sq. yd.	....
8 Ply warp	Re. 0-14-0 per sq. yd.	....

* Classification into Grades I and II is based on physical capacity, skill, efficiency and outturn of work.

III. CUMBLAY WEAVING.

Kurnool, Bellary and Anantapur Districts.

(i) Carding and spinning put together. Home work:	Rs. 2 per 2½ lb. of wool.
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Kurnool, Bellary and Anantapur Districts.

(ii) Carding only done ..	Rs. 3 per maund of 25 lb.
(iii) Cleaning, carding and spinning all together done in co-operative societies	Rs. 5 per 10 lb. of wool.

(iv) Weaving done in co-operative societies.	Size.	Rate.
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25" × 45"	RS. A. P.
32" × 72"	0 9 0
50" × 80"	1 2 0
	1 11 0

IV. MANUFACTURE OF COARSE FLOOR RUGS.

Salem District.

Preliminary processes as for coarse yarn shown under item II Salem District.

Weaving—	Size.	Rate.
	3' × 6'	0 6 0 per piece.
	4' × 6'	0 7 0 per piece.
	4' × 7'	0 8 0 per piece.

2. EMPLOYMENT IN ANY RICE MILL, FLOUR MILL OR DHALL MILL.

G.O. Ms. No. 4112, Development, dated 9th October 1952.

Class of employees.	Minimum rate of daily wages.
(1)	(2)

Amalis or Kata mazdoor ..	1 4 0
Bag stitchers	1 4 0
Bag weigher	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

3-a. EMPLOYMENT IN ANY SCENTED AND CHEWING TOBACCO MANUFACTORY.

* G.O. Ms. No. 1368, Development dated 31st March 1952.

Class of work.	All inclusive minimum wages.
(1)	(2)
	RS. A. P.
1. Sorting and grading of tobacco	0 12 0 per day.
2. Cutting tobacco into bits	0 14 0 per day.
	22 12 0 per mensem.
3. Jaggery Boiler Attendant	0 12 0 per day.
4. Processing of scented tobacco	0 14 0 per day.
	22 12 0 per mensem.
5. Sorting and sizing of plantain bark ..	0 14 0 per day.
	22 12 0 per mensem.
6. Packeting of scented or chewing tobacco ..	0 12 0 ½, ¾, 3 anna packets.
	19 8 0 or 0 14 0 bigger packets.
	22 12 0
7. Pasting labels ..	0 9 0 per day.
	15 0 0 per mensem.
8. Packing and bundling.	0 14 0 per day.
	22 12 0 per mensem.
9. Maistries or supervisors	40 0 0 per mensem.
10. Clerks	35 0 0 per mensem.
11. Watchmen	0 14 0 per day.
	22 12 0 per mensem.
12. Lorry or van driver ..	40 0 0 per mensem.
13. Lorry or van cleaner.	22 8 0 per mensem.
14. Miscellaneous and casual workers ..	0 12 0 per day.
	19 8 0 per mensem.
15. Learners	0 8 0 per day.
	13 0 0 per mensem.
16. Office boys	0 8 0 per day.
	13 0 0 per mensem.
	0 12 0 per day.
	19 8 0 per mensem.

NOTE.—(1) Day means an aggregated working period of eight hours between 6 a.m. and 7 p.m.
(2) Piece-rated workers if any should get a guaranteed minimum time rate of Rs. 12 for an eight-hour day.

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4. EMPLOYMENT IN ANY PLANTATION.

G.O. Press No. 1186, Development, dated 20th March 1952.

Class of employees.	All-inclusive minimum daily wages.
(1)	(2)
	RS. A. P.
Grade I	1 5 0
Grade II	1 0 0
Children	0 10 6

Classification into Grades I and II is based on physical capacity, skill, efficiency and outturn of work.

5. EMPLOYMENT IN ANY OIL MILL.

G.O. Ms. No. 4079, Development, dated 7th October 1950.

Class of employees.	Minimum rates of daily wages.
(1)	(2)

	RS. A. P.
Carpenters	1 8 0
Cake carriers	1 0 0
Mazdoor	1 0 0
Electricians	1 10 0
Engine Drivers	1 12 0
Expeller Maistries ..	1 12 0
Firemen	1 4 0
Fitters	1 4 0
Filtermen	1 2 0
Oilers	1 2 0
Pressmen	1 4 0
Sweepers	0 12 0
Watchmen	1 0 0

6. EMPLOYMENT UNDER ANY LOCAL AUTHORITY.

G.O. No. 1355, Development, dated 29th March 1952.

Class of employees.	All-inclusive of minimum rate of wages.
(1)	(2)

	RS. A. P.
Grades I and II	25 0 0 per mensem
Grades III, IV and V.	40 0 0 per mensem

Categories of employees under the grades mentioned above and employed under local bodies.

1. Corporation of Madras.

10 Gardeners.	11 Servers.
11 Servers.	12 Maid servants.
12 Maid servants.	13 Switchers.
13 Switchers.	14 Kerosene Lighters.
14 Kerosene Lighters.	15 Joiners.
15 Joiners.	16 Syringers.
16 Syringers.	17 Operators.
17 Operators.	18 Bar.
18 Bar.	



RAYALASEEMA RELIEF: H.E. Sri Sri Prakasa, Governor of Madras, addresses the meeting convened by the Sheriff of Madras to start the Madras State Famine Relief Fund, to relieve distress in stricken Rayalaseema

Upper Pennar Project.—The Upper Pennar Project sanctioned at a cost of Rs. 84 lakhs to irrigate about 6,000 acres in Dharmavaram and Kalyandrug taluks of Anantapur district is in rapid progress.

Bhairavanthippa Project.—It has been sanctioned at a cost of Rs. 82 lakhs to irrigate 8,000 acres in Kalyandrug and Rayadurg taluks. I visited the project site and pressed for its early execution. The foundation stone for this Project was laid by Sri M. Bhaktavatsalam, former Minister for Public Works on 28th December 1951 when there was a mammoth gathering of the eager and enthusiastic ryots of the area, over which Sri H. Sitharama Reddi presided.

Lower Saligileru Project.—The Board recommended the immediate sanction and execution of the Lower Saligileru Project in Cuddapah district as a Famine Relief work, and this has been accepted by Government. This will help to relieve the distress among the labouring class in Badvel taluk. The scheme envisages the supply of water to Badvel and nine other tanks, providing irrigation facilities to 3,000 acres.

Gandikottah Project.—The Board has also recommended the immediate sanction and execution of the Gandikottah Project, Swarnamukhi Project, Kalyani Reservoir Scheme, Bheemanadi Reservoir, etc. At the instance of this Board, the Government have sanctioned Small Tank Schemes for the reclamation of small tanks with an ayacut of below 25 acres in the Rayalaseema area.

Agriculture.—The schemes for the purchase of 40 tractors and allied equipment and the establishment of a Tractor Workshop at Bellary for the speedy development of the Tungabhadra Project, and the schemes to offset the labour shortage by mechanisation and for the

reclamation of weed-infested lands recommended by the Board are under Government's consideration.

Soil Conservation Scheme.—The Soil Conservation Scheme by Contour Bunding which will increase production by 25 per cent is under execution over an area of 4,800 acres in Alur, Nagari and Guntakal centres. The Board has further recommended the extension of the Scheme to the other areas as this is quite suitable for being taken up as Famine Relief work.

One hundred and forty-two oil engines and 25 motors pumpsets have been sanctioned and 53 tractors with matched implements are working in ploughing and levelling operations, under the G.M.F. Scheme. The Fruit Canning Factory at Kodur will commence production; arrangements have been made for the supply of an Electrical Generator.

Afforestation.—All the areas which are liable for sand dunes on the banks of Hagari have now been planted. Similar plantations on the banks of Pennar are now in progress. The Board's proposals to raise village forests on the river banks on assessed and unassessed lands not fit for cultivation for food crops are under Government's consideration.

Animal Husbandry.—The establishment of the Key Village Scheme in a few centres for the improvement of milch and drought cattle is in progress. The Board's proposals for developing the Sheep Farm at Kurakuppi into a combined Cattle and Dairy Farm, and the establishment of a Livestock Farm at Nandyal in Kurnool district, are under Government's consideration. The establishment of a Cattle Farm at Munidram in Chittoor district, are under consideration. The establishment of a serve Chittoor, Salem and North Arcot will be taken up for consideration as a Part II Scheme for 1953-54.

Madras State Famine Relief Fund

The existence of acute distress in some of the districts of the Madras State, particularly in Rayalaseema, consequent on the failure of the monsoon for the last five years, is too well known to require any further publicity. Government are doing their utmost to relieve the distress, but in addition to this, it is necessary to mobilise all available private philanthropy so that Government assistance may be supplemented by private charity. It was with this object in view that the Sheriff of Madras convened a public meeting on the 27th March 1952, at which His Excellency the Governor of Madras presided. An influential committee of non-officials and officials has been formed to collect donations and so far a sum of Rs. 2,31,931-2-0 has been collected. Donations are being received every day and it is proposed to publish a daily list of collections in the Press.

The Secretary and Treasurer of the Imperial Bank of India, Madras, is the Honorary Treasurer of the Fund and all the donations intended for the Madras State Famine Relief Fund may be made payable to "The Honorary Treasurer, Madras State Famine Relief Fund at the Imperial Bank of India, First Line Beach, Madras."

It is desired to bring prominently to the notice of philanthropic citizens that the Government of India have acceded to the request of the Madras Government and exempted all contributions that may be made to the Madras State Famine Relief Fund from payment of income-tax. Receipts for all donations will be furnished by the Honorary Treasurer and any correspondence in connexion with the Fund will be attended to by the Secretary who is also Deputy Secretary, Revenue Department, Government of Madras.

It is intended that donations received should be utilised on all ameliorative objects supplementary to the works undertaken by the Government in the famine affected areas. Steps are being taken to form District Committees in the mofussil with the Collector as Chairman.

Remission of Land Revenue in Pudukottai

The Government have sanctioned wet remission, on the scales indicated below, for Fasli 1361 in the taluks of Alangudi, Tirumayam and Kolathur in Pudukottai Division of Tiruchirappalli District, which have been affected by adverse seasonal conditions:—

Full remission for wet lands with an outturn of four annas and below; no remission for wet lands with an outturn of above four annas.

All wet lands, on which, owing to inadequacy of water, a successful dry crop has been raised, will be eligible for the remission of the difference between the wet and dry assessment. Wet lands left waste owing to lack of supply in the irrigation sources, are eligible for full remission, except for manual wastes, in reckoning which, however, the three previous faslies would be excluded.

Current wastes on dry lands, i.e., lands which are not mamul wastes, will also be eligible for remission. The Government have also directed that the collection of loan instalments and summary recovery of loans in all the three affected taluks of Alangudi, Tirumayam and Kolathur in Pudukottai Division be postponed to Fasli 1362.

Anantapur to Gooty, Anantapur to Dharmavaram, Adoni to Yemmiganur, Cuddapah to Kodur, Kottur to Harpanahalli for the supply of power from the Tungabhadra Hydro-Electric Scheme are under progress.

Industries.—The Hon'ble Pandit Jawaharlal Nehru, Prime Minister of India, laid the foundation stone of the Madras Co-operative Spinning Mills, Ltd., at Guntakkal on the 26th December 1951, which is the only co-operative spinning mill in India. The Board has recommended the establishment of paint and lithophone factories in Guntakkal and Vempalli as State concerns and the establishment of a cement factory in Kurnool District which is sponsored by Sri V. Ramakrishna, I.C.S. (Retired).

LABOUR

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Grade II.

- 1 Cleaners (Motor).
- 2 Peons.
- 3 Guides (Swimming bath).
- 4 Duffadar.
- 5 Harakaras.
- 6 Fitters.
- 7 Blacksmith.
- 8 Driller.
- 9 Turner.
- 10 Carpenter.
- 11 Engraver.
- 12 Moulders.
- 13 Hammerman.
- 14 Welders.
- 15 Mechanics.
- 16 Tinkers.
- 17 Rivetter.
- 18 Painters.
- 19 Furnace-man.
- 20 Bricklayer.
- 21 Attenders.
- 22 Caretakers.
- 23 Fisherman.
- 24 Ward attendants.
- 25 Pumpman.
- 26 Drivers (Mech. Eng.).
- 27 Mutchi.
- 28 Weighmen.
- 29 Women Guards.
- 30 Sergeants.
- 31 Animal Keepers.
- 32 Fireman.
- 33 Drivers (rubbish cart).
- 34 Breakers.
- 35 Turncocks.
- 36 Night Patrol.
- 37 Mates painter joiner.
- 38 Helpers.
- 39 Blueprinters.
- 40 Warders.
- 41 Ferro painters.
- 42 Assistant Superintendent (Health).
- 43 Lighting Inspectors.
- 44 Reference Supplies.
- 45 Attendance Checkers.
- 46 Jumpers.

Grade III.

- 1 Time-keeper.
- 2 Incinerator (Health).
- 3 Mahouts.
- 4 Tax Collectors (Health, Water Works and Revenue).
- 5 Rent Collectors (Works).
- 6 Jamedar (General).
- 7 Groundsman (Works).
- 8 Overseers (Stegomiah), Assistant Overseers (Works and Water Works).
- 9 Teachers (lower grade).
- 10 Conservancy Inspectors (Health).

Grade IV.

- 1 Maistri (Special Works, Water Works and Electrical).
- 2 Assistant Pumpers (Special Works).
- 3 Steam disinfectors (Health).
- 4 Wireman (Health, Electrical and Education).
- 5 Jaggala Player (Electrical).
- 6 Compounder (Health, Works).
- 7 Nursery School Supervisor.
- 8 Technician (Health).
- 9 Tracers (Works, Special Works and Electrical).
- 10 Process-servers (Special Works, etc.).
- 11 Instructors (Playground).
- 12 Manual Training Inspectors.
- 13 Swimming Pool Instructors.
- 14 Drawing Master.
- 15 Matron.
- 16 Vaccination Inspectors.

Grade V.

- 1 Overseers (Health Works, Water Works, Special Works).
- 2 Drivers (Lorry, Car).
- 3 Writers.
- 4 Shroffs.
- 5 Clerks.
- 6 Clerk-typists.
- 7 Storekeeper.
- 8 Store-checker.
- 9 Typists.
- 10 Shorthand typists.
- 11 Computer.
- 12 Telephone operators.
- 13 Drummer.
- 14 Electrician.
- 15 Malaria Supervisors.
- 16 Surveyor.
- 17 Drill Teacher.
- 18 Midwives.
- 19 Music Mistress.
- 20 Teachers (Secondary Grade).

II. Municipalities and Mettur Township.

Grade I.

- 1 Sweepers.
- 2 Scavengers and Thotis.
- 3 Cleaners (Public Health).
- 4 Cart-drivers (Public Health).
- 5 Tranchers.
- 6 Rubbish-pickers.
- 7 Gang Mazdoors.
- 8 Anti-malaria Mazdoors.
- 9 Lighters.
- 10 Mazdoors.
- 11 Gardeners.
- 12 Watchmen.
- 13 Avenue Mazdoors.
- 14 Hammerman, Grade II, Cleaner, Helper for carpenters, Fitter, Mazdoors, Turner helper and Tyre-retreading helper.
- 15 Bellow boys.
- 16 Cooks.
- 17 Park chits.
- 18 Bull-keepers.
- 19 Boatman.
- 20 Ayahs.
- 21 Nursing orderlies (un-qualified).
- 22 Rat-catchers.
- 23 Watchmen.
- 24 Conductress.
- 25 Dhobi.
- 26 Sweepers in Schools.
- 27 Temple priest.
- 28 Elementary School Attendants.
- 29 Lascars.
- 30 Camel boy.
- 31 Meat carrier.
- 32 Delivery boy (dairy farm).
- 33 Calf boy (dairy farm).
- 34 Dispensary servant.
- 35 Lorry Cleaners.
- 36 Travellers bungalow and choultry cook.
- 37 Cooks in Medical Institutions.
- 38 Gracior.
- 39 Pumpman.
- 40 Caretaker.
- 41 Masalchi.
- 42 Tom-tom-wallah.
- 43 Boy peon.
- 44 Valvem n.
- 45 Paper boy and Punkah-puller.

Grade II.

- 1 Chainman.
- 2 Oilmen, Oilers, Oil-cum-cleaners, Oil cleaners).
- 3 Cleaners, Water Works Mazdoors.
- 4 Helpers, Motor cleaners, Switcher and Cleaner.
- 5 P.W. Maistry.
- 6 Firemen or Cleaner.
- 7 Compounder (Indigenous—Grade II).
- 8 Library and Laboratory Attenders.
- 9 Librarian.
- 10 Head gardener.
- 11 Butler.
- 12 Turncocks.
- 13 Switchboard Operator (Water Works).
- 14 Oiler and Powerhouse Mazdoor (Electrical).
- 15 Nursing Orderlies (qualified).
- 16 Burial Ground Registrars.
- 17 Laboratory attendants.
- 18 Market accountant and market supervisors and lighting superintendents.
- 19 T.B. and choultries municipal accountant.
- 20 Malaria and sanitary maistri.
- 21 Vehicle Inspectors.
- 22 W.W. Watchman.
- 23 Sewage Farm Maistry.
- 24 Headworks fitter.
- 25 Peons.
- 26 Attenders.
- 27 Duffadar.
- 28 Telephone Operators.
- 29 Moulder.
- 30 Sewage gauge reader.
- 31 Drain Maistry.
- 32 Painter.
- 33 Clock-repairer.
- 34 Market Maistry.
- 35 Swimming Instructors.
- 36 Cattle Depot Superintendents.
- 37 Tinker.
- 38 Dog-watcher.
- 39 Grass-cutter (Dairy farm).
- 40 Milkman (Dairy farm).
- 41 Salesman (Dairy farm).
- 42 Dairy boy (Dairy farm).
- 43 Broom boy (Dairy farm).
- 44 Compost Maistri.
- 45 Borewell attendants.

- 46 T.B. Matty.
- 47 Forest Guard.
- 48 Manager (Chatram).
- 49 Ward Maistry.
- 50 Mechanic helper.
- 51 Hammerman (Grade I).
- 52 Sundry fitter.
- 53 Mechanic Helpers.
- 54 Fitters.
- 55 Fitter mate (Mettur Township).

Grade III.

- 1 Blacksmith, Grade II, Carpenter, Painter, Tyre-retreading Plant operators, Mill-wright Fitter, Grade I.
- 2 Switchboard operator, Instrument repairer, Wireman, Foreman, Linemen and Meter cleaners.
- 3 Tracer.
- 4 Tubewell mechanics.
- 5 Pipeline fitter.
- 6 Bill collectors.
- 7 Lower elementary grade teachers.
- 8 Craft Inspectors qualified by III Form standard.
- 9 Music Instructors (Un-trained).
- 10 Prevocational Instructors.
- 11 Lascar (Vypia Ferry).
- 12 Ferry ticket checkers.
- 13 Compounders (Indigenous Grade I).
- 14 Compounders (Rural Medical Institutions).
- 15 Higher elementary grade teachers.
- 16 Untrained teachers.
- 17 Headworks fitter, Grade II (Water Works).
- 18 Encroachment Inspector.
- 19 Field assistant.

Grade IV.

- 1 Road-roller driver.
- 2 Electrician, (II Grade W.S.).
- 3 Maternity Assistants.
- 4 Compounders (Allopathic).
- 5 Lorry driver.
- 6 Filter bed operators and headworks fitter, Grade I.
- 7 Water Works Driver (III Grade).
- 8 Physical Training Instructors.
- 9 Pundits and Munshis.
- 10 Manual training instructors, Grade II.
- 11 Gurka Watcher.
- 12 Jetty Maistries.
- 13 Syrangs.
- 14 Tap Inspectors.
- 15 Hindustani Teachers.
- 16 Meter Mechanic.
- 17 Electrician and Driver (Electrical).
- 18 Laboratory assistants and technicians.
- 19 Mechanics, Radio and Line Operators and skilled servants (P.H.).
- 20 Laboratory Assistants (Malaria).
- 21 Mechanic Foreman, Turner, Grade II.
- 22 Blacksmith, Grade I, Carpenter - cum - Core maker and Pattern maker.
- 23 Physical Training Instructors, Grade II.
- 24 Craft Instructors (Higher Grade).
- 25 Music Instructors, Grade II.
- 26 Librarian in secondary schools.
- 27 Librarian without training.

Grade V.

- 1 Draughtsman.
- 2 Clerks.
- 3 Commercial, Weaving and Carpentry Instructors.
- 4 Y.M.C.A. Physical Training Instructors.
- 5 Typists.
- 6 Shorthand typists.
- 7 Engraving Instructors.
- 8 Revenue Inspectors.
- 9 Water Works Driver, II Grade.
- 10 Health Assistants.
- 11 Electricians, I Grade.
- 12 Electricity Accountants in smaller municipalities.
- 13 Licence Inspectors without Sanitary Inspector's qualification.

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- 14 Town Planning Surveyor and Building Draughtsman.
- 15 Secondary Grade Teachers.
- 16 Physical Training Instructors, First Grade.
- 17 Physical Training Instructors, Second Grade.
- 18 Hindustani Teachers, Craft Instructors (Secondary grade).
- 19 Hindustani Teachers, S.S.L.C.
- 20 Music Instructor, Grade I.
- 21 Drawing Masters, Grades I and II.
- 22 Manual training instructors, Grade I.
- 23 Market Superintendent.

III. Panchayat Boards.

Grade I.

- 1 Sweepers.
- 2 Scavengers.
- 3 Cleaners.
- 4 Cart drivers.
- 5 Malaria Mazdoors.
- 6 Drain flusher.
- 7 Trenching ground-keeper.
- 8 Waterman.
- 9 Lighters (ordinary).
- 10 Gardeners.
- 11 Bull-keepers.
- 12 Gang mazdoors.
- 13 Watchman.
- 14 Switchman.
- 15 Masalchi.
- 16 Cattle Depot Superintendents.

Grade II.

- 1 Ayah.
- 2 P.W. Maistry.
- 3 Tubewell repairer.
- 4 Attenders.
- 5 Bill collectors (in Panchayats with an income of Rs. 3,000 to 5,000).
- 6 Oiler, Powerhouse Mazdoor and helper.
- 7 Peons (Office and Library).
- 8 Librarians.
- 9 Library attender.
- 10 Turncocks, oilman.
- 11 Fitter.

Grade III.

- 1 Clerks (in Panchayat Boards with an income of Rs. 3,000 to 5,000).
- 2 Store clerk.
- 3 Bill collectors in Panchayats with an income of over Rs. 5,000.
- 4 Clerk-cum-Bill Collector.
- 5 Field Assistants.
- 6 Lower Grade trained Teachers.

Grade IV.

- 1 Clerks in Panchayats with an income of above Rs. 5,000.
- 2 Switchboard operators.
- 3 Maternity assistants.
- 4 Mechanics.
- 5 Pipeline fitter.
- 6 Engine driver.
- 7 Higher Grade trained Teachers.

Grade V.

- 1 Electricity accountant.
- 2 Clerk with special qualifications.
- 3 Line Inspectors.
- 4 Driver (Electrical).
- 5 Laboratory Assistants (Malaria).
- 6 Electricians.
- 7 Driver and Fitter (Water Works).
- 8 Overseer (Water Works).
- 9 Revenue Inspector.
- 10 Sanitary Inspector in Panchayat Boards with an income of Rs. 20,000 to Rs. 40,000.
- 11 Secondary Grade trained teachers.
- 12 Health Assistants.

PROGRAMMES

An Oil Technological Institution has been established at Anantapur to impart training and carry out research in Oil Technology.

A certificate Course in Automobile Servicing has been introduced at the instance of this Board in the Rayalaseema Polytechnic, Bellary. For the development of Cottage Industries, the Board has recommended the starting of six peripatetic spinning and weaving parties to develop cottage wool industries and also the introduction of Sir M. Visveswarayya's Industrialisation Scheme.

The Board has also urged that more land colonisation scheme in the Rayalaseema should be taken up. At the instance of the Board, one of the Community Project Centres under the Indo-American Programme has been allotted to the Cuddapah-Kurnool Canal Zone, for the integrated development of the area at a cost of one crore of rupees.

Famine Relief.—It is most unfortunate that there has been a failure of both the monsoons in the fifth year in succession in the Rayalaseema excepting Bellary District. The Collectors submitted special reports for granting remission and starting Departmental Works, etc. The Members of the Board of Revenue, after inspection of the affected areas, recommended grant of remissions on liberal scale, grant of takkavi loans, subsistence loans, fodder loans, and also the sanction of minor irrigation, R.W.S. Tank Improvement Schemes, District Board and Post-War Road Works to provide employment to the labourers. Accompanying the First Member, Board of Revenue, I have also toured the famine affected areas. Government have granted a remission of about 19 lakhs of rupees in the four districts of Cuddapah, Anantapur, Kurnool and Chittoor and collection of instalments of takkavi loans. Government have also ordered the postponement of recovery of subsidies granted for wells.

The Hon'ble Sri K. M. Munshi accompanied by Sri H. Sitharama Reddi and Sri J. L. P. Roche Victoria, visited some of the affected villages. His Excellency the Governor of Madras, no sooner had he assumed his high office, toured the affected areas to gain a firsthand knowledge of the distress and as you all know, the Madras State Famine Relief Fund was constituted at the Sheriff's Meeting held on 27th March 1952 over which His Excellency presided and exhorted the public to render immediate help to the distressed people. The people of Rayalaseema are very grateful to His Excellency and the Government for having taken all possible steps to mitigate the suffering of the famine stricken people and to provide employment to the labourers.

It is roughly estimated that the cost of these Famine Relief measures may go up to six crores of rupees. So far, the Government have sanctioned 40 lakhs of rupees under takkavi loans, 8½ lakhs under subsistence loans, 6 lakhs for interest free loans for the improvement of irrigation wells, 19 lakhs under rural water-supply, Rs. 30,74,000 for gruel centres. Full grants have been given to the District Boards for taking up road works. Special staff of Assistant Engineers and Supervisors for the execution of these works has been sanctioned for each district. Special Tahsildars and Revenue Inspectors have been sanctioned for the speedy distribution of takkavi and subsistence loans. A good number of irrigation works such as repairs to supply channels, M.I. Tanks, village roads, road works etc., have been taken up to provide labour for the

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unemployed. At present more than 40,000 persons are employed on all these works. The Government have authorised the Collectors to sanction the execution of any other work as and when necessary in anticipation of Government orders. Order have been issued to see that the minimum average daily wages is not less than Re. 1 per man and annas 12 per woman and continuous employment is provided.

Gruel Centres have been started wherever necessary to provide *Amballi* (gruel) for old destitutes, children, etc. There are more than 500 Gruel Centres and the average daily attendance is over 10,000 per day.

As scarcity of drinking water is very acute in some villages, all wells in the villages are being deepened. Eighteen lorries have been supplying water in drums to the villages where drinking water is not available. The Government of India have deputed Army Engineers to survey the possibilities of digging new wells and to deepen the existing wells in this area.

Fodder.—The scarcity of fodder is very acute in some areas; 1,500 tons of hillgrass is being transported to the affected areas and fodder depots have been opened in central villages. To purchase 1,000 tons of paddy straw, a special officer has been sent to East Godavari for despatching it quickly. Hillgrass has already been moved to some of the affected areas and is being sold to the ryots at subsidised rates. Reserved forests have been thrown open in all these areas for grazing. In Chittoor District about 10,000 cattle have been permitted to be penned at the pentas in the reserved forests. Government have sanctioned 6,000 rupees for the repairs of cattle water pentas.

Government have authorised the Collector of Bellary to constitute committees for the collection of free gifts of fodder and grains for transporting them to the affected areas. Similar instructions are being issued to the Collectors of delta districts also. The people of Rayalaseema are very grateful to the public organisations and social service associations for having organised famine relief measures in addition to Government relief measures. In the face of deepening calamity of famine, I exhort the people of Rayalaseema to develop their united strength of self-help to fight and end this famine once and for all by pooling and bending their energies and forming themselves into Voluntary Corps of Land Armies for reclaiming waste lands, repairing and developing irrigation sources and agriculture. Let us earnestly pray and fervently hope that Providence will soon bless these famine-stricken areas with His Divine Grace of torrential and timely rains and that irrigation projects, major and minor which are under construction and repair, will soon come into beneficial use and that this will be the last famine in the State. Jai Hind!

(By Courtesy A.I.R., Madras)

Tanning Pits For Chucklers

The Government have sanctioned the proposal to provide tannery pits to the chucklers free of cost, wherever necessary, as in the case of house-sites. The site will be located at a distance of four furlongs from the village and selected in consultation with the health authorities. The area of each pit will ordinarily be 40 feet by 20 feet for five tanners.

H.E. THE GOVERNOR TOURS RAYALASEEMA

H.E. Sri Prakasa recently toured the stricken areas of Rayalaseema. Highlights of his inspection are presented below.

Left: 1. H.E. the Governor inspects a well in Marsapet, Rayachoti Taluk (Cuddapah District). 2. A fodder depot at Chilapantha near Lepakshi, Hindupur Taluk (Anantapur District). 3. H.E. meets villagers. 4. The Kunali Canal in Tadpatri Taluk, a famine relief work.

Right: 1 and 2. A gruel centre at Guvvalacheruvu, Rayachoti Taluk (Cuddapah District). 3. A famine relief work in progress.



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IV. District Boards.

Grade I.

1 Gardeners.	17 Charcoal man.
2 Thoti or scavenger.	18 Dhobi.
3 Sweepers.	19 Ayahs.
4 Masalchi.	20 Nursing Orderlies (un-qualified).
5 Menials.	21 Watchman.
6 Waterman.	22 Conductress.
7 Mazdoors.	23 Temple patter.
8 Avenue mazdoors.	24 Market and ferry maistri.
9 Cooks.	25 Chatram headman.
10 Ward boy.	26 Manyam.
11 Lighters.	27 Nirgetti.
12 Cleaners.	28 Agricultural maistri.
13 Dispensary servants.	29 Pukka puller.
14 Rat catchers.	
15 D.D.T. Mazdoors.	
16 Village guides.	

Grade II.

1 Compounders (Indigenous).	7 Library and Laboratory attenders.
2 Attenders.	8 Chatram hukdar.
3 Peons.	9 Maistries.
4 Bill collectors.	10 Warden.
5 Duffadar.	11 Turncock.
6 Librarian.	

Grade III.

1 Vaccinators.	4 Lower Elementary Grade Teachers.
2 Thana karnam.	5 Higher Elementary Grade Teachers.
3 Water Works Drivers.	

Grade IV.

1 Compounders (Allopathic).	7 Urdu munshis.
2 Maternity assistants.	8 Tamil Pandits.
3 Lorry Driver.	9 Manual Training Instructors (Grade II).
4 Mechanics.	10 Music instructors (Grade II).
5 Physical Training Instructors.	11 Librarians in secondary schools.
6 Hindi Pandits.	

Grade V.

1 Clerks, Typists, Stenotypists.	4 Secondary Grade Teachers.
2 Commercial Instructors.	5 Health Assistants.
3 Senior Grade Librarian in Secondary Schools.	

7 and 8. EMPLOYMENT ON ROAD CONSTRUCTION OR IN BUILDING OPERATIONS AND IN STONE BREAKING OR STONE CRUSHING.
G.O. No. (P). 1028, Development Department, dated 12th March 1952.

Class of employees.	All inclusive minimum daily rates of wages.
(1)	(2)
1. Unskilled employees—	RS. A. P.
* Grade I	1 4 0
Grade II	0 13 0
2. Skilled employees	2 8 0
* Classification into Grades I and II is based on physical capacity, skill, efficiency and outturn of work.	

9. EMPLOYMENT IN STONE BREAKING OR STONE CRUSHING CARRIED ON IN MINES.
G.O. Press No. 1093, Development, dated 15th March 1952.

Class of employees.	All inclusive minimum daily rates of wages.
	RS. A. P.
Unskilled workers—	
* Grade I	1 6 0
Grade II	0 15 0
Children	0 12 0
Semi-skilled workers	2 0 0
Skilled workers	2 8 0
* Classification into Grades I and II is based on physical capacity, skill, efficiency and outturn of work.	

10. EMPLOYMENT IN ANY MICA WORKS.
G.O. Press No. 1054, Development, dated the 13th March 1952.

Class of employees.	All inclusive minimum daily rates of wages.
(1)	(2)
	RS. A. P.
I. Mica Mining Section.	
1 Jumper Mazdoor Machine and hand.	2 0 0
2 Mine or Blasting Maistries	2 0 0
3 Mica Maistries	1 6 0
4 (i) Muck and Mica Mazdoors	1 6 0
(ii) Removal of Mazdoors	1 2 0
5 Cutters—	
I Grade	1 8 0
II Grade	1 4 0
III Grade	1 0 0
6 Dressers and Sorters—	
I Grade	1 8 0
II Grade	1 4 0
III Grade	1 0 0
7 Surface unskilled Mazdoors including hard and waste round cutters.	1 0 0
8 Blacksmiths	2 0 0
9 Fitters	2 0 0
10 Engine or Compressor (Drivers) (Certificate holders).	3 0 0
Engine or Compressor, Drivers (Non-holders of a Certificate).	2 0 0

II. Mica Factories Section.

(a) Daily paid Temporary Employees.

Class of employees.	RS. A. P.
1 Resorters and Dressers—	
I Grade	1 6 0
II Grade	1 2 0
2 Maistries	1 6 0
3 Splitters—	
(a) Bookform and Condensers	0 8 0 per lb.
Classes 4 and 5.	
(b) Bookform and Condensers	0 9 0 "
Classes 5½ and 6.	
(c) (i) Dust loose	0 5 0 "
(ii) Ordinary loose	0 4 0 "
4 Unskilled workers.	1 4 0 "

III. Monthly paid employees in Mica Mining and Factories Sections.

	Basic wages per mensem.	Cost of living allowance per mensem.
	RS.	RS.
Watchmen	15	18
Office boy	18	18
Clerks	35	18
Typists	40	20

11. EMPLOYMENT IN PUBLIC MOTOR TRANSPORT.

G.O. Press No. 1334, Development, dated the 29th March 1952.

Class of employees.	Minimum rates of basic wages per mensem.
(1)	(2)
	RS. A. P.
1 Drivers	40 0 0
2 Conductors	30 0 0
3 Mechanics	75 0 0
4 Assistant Mechanics	50 0 0
5 Fitters	40 0 0
6 Assistant Fitters	30 0 0
7 Electricians	40 0 0
8 Inspectors	35 0 0
9 Clerks	35 0 0
10 Hammermen	25 0 0
11 Greasers	30 0 0
12 Peons	18 0 0
13 Scavengers	10 0 0
14 Sweepers	10 0 0
15 Watchmen	10 0 0
16 Skilled Workers—	
(a) Blacksmiths, Carpenters, Tinkers, Liners, Tyremen, Turners and the like	30 0 0
(b) Welders, Tailors, Moulders, Battery-men, Vulcanisers, Spray Painters and Painters	1 8 0 per day or 39 0 0 per mensem.
17 Unskilled workers	20 0 0 per mensem.
Cleaners (special and stand) Charcoalmen, Helpers, Mazdoors, and the like.	
18 Conductor learners for a period of three months.	22 8 0 per mensem. (all inclusive).
19 Lubricating Assistant	16 0 0
20 Cleaners (ordinary)	15 0 0
21 Apprentices for the first six months.	13 0 0 per mensem. (all inclusive).
For the next six months.	19 8 0 (all inclusive)

Unless otherwise indicated against any of the foregoing items, the categories of employees mentioned above shall

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be paid a minimum cost of living allowance at the following rates:—

Basic wage.	Cost of living allowance per mensem.
	RS. A. P.
1 Employees on basic wage not exceeding Rs. 20 per mensem.	18 0 0
2 Employees on basic wage exceeding Rs. 20 but below Rs. 40 per mensem.	19 0 0
3 Employees on basic wage of Rs. 40 per mensem.	21 0 0
4 Employees on basic wage exceeding Rs. 40 but not exceeding Rs. 60 per mensem.	22 0 0
5 Employees on basic wage exceeding Rs. 60 but not exceeding Rs. 100.	24 0 0

12. EMPLOYMENT IN TANNERIES AND LEATHER MANUFACTORIES.

G.O. Press No. 3910, Development, dated 30th August 1951.

Part I.—Tanneries-cum-leather manufactories.

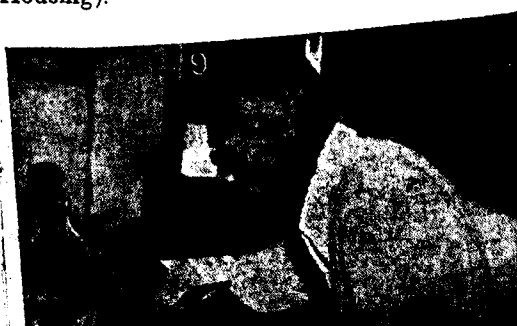
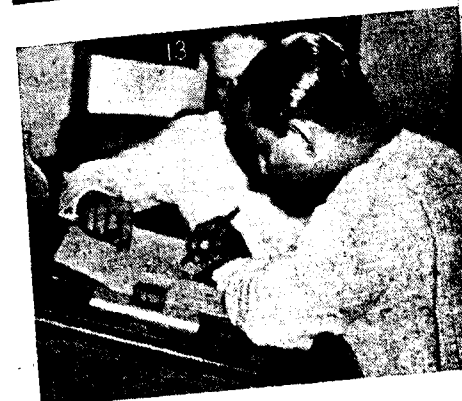
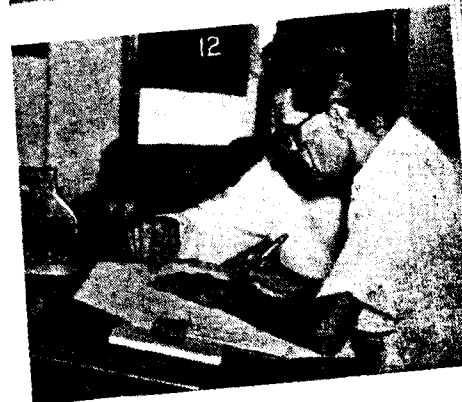
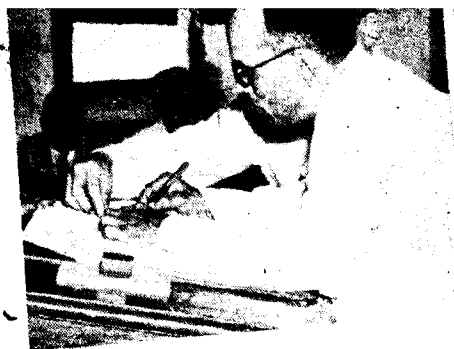
Class of employees.	Minimum rate of wages.
	RS. A. P.
Lime yard.	
1 Helpers	0 10 0 per day.
2 Fleshers	
3 Scudders	0 12 0 per day.
4 Goat-skin knifers	
Tanning and Dyeing Department.	
1 Helpers	0 10 0 per day.
2 Drum boys	
3 Shavers	1 0 0 per day.
4 Splitters	
5 Shaving learners	0 10 0 per day.
6 Samming helpers	
Setting Department.	
1 Helpers	
2 Setting machine operators.	0 10 0 per day.
3 Hand Setters	
Staking Department.	
1 Helpers	
2 Dusters	0 10 0 per day.
3 Stakers	
Straining Department.	
1 Helpers	0 10 0 per day.
2 Strainers	
Finishing Department.	
1 Helpers	0 10 0 per day.
2 Seasoners	
3 Sprayers	
Finishing Machinery Department.	
1 Helpers	
2 Buffin, Machine operators.	
3 Emery wheel operators	
4 Glacing M/S. operators (Cow)	0 10 0 per day.
5 Trimmers	
6 Press machine operators	
7 Hand Ironers	
8 Boarders	
9 Glacing machine operators. (glace kid)	0 14 0 per day.



NEW MINISTRY TAKES OVER

Sri C. Rajagopalachari heads the new 15-member Cabinet in Madras State. The new Ministers are seen here standing, with H. E. the Governor and the Chief Minister sitting. From left to right: Sriyuts K. Venkataswami Naidu, K. P. Kuttikrishnan Nair, N. Sankara Reddi, M. A. Manickavelu Naicker, Dr. R. Naganna Goud, Raja Dr. M. V. Krishna Rao, A. B. Shetty.

THE SWEARING-IN: (1) (Top inset) Sri C. Rajagopalachari (Public and Police); (2) A. B. Shetty (Health); (3) C. Subramaniam (Food and Finance); (4) K. Venkataswami Naidu (Religious Endowments); (5) N. Ranga Reddi (Public Works); (6) Dr. M. V. Krishna Rao (Education, Information and Harijan Uplift); (7) V. C. Palaniswami Gounder (Prohibition); (8) Dr. U. Krishna Rao (Industries and Labour); (9) Dr. R. Naganna Goud (Agriculture); (10) N. Sankara Reddi (Local Administration); (11) M. A. Manickavelu Naicker (Land Revenue); (12) K. P. Kuttikrishnan Nair (Law); (13) Raja Sri Shanmuga Rajeswara Sethupathi (House Rent Control); (14) S. B. P. Pattabhirama Rao (Rural Welfare); (15) D. Sanjeevayya (Co-operation and Housing).



LABOUR

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MADRAS INFORMATION

Class of employees.	Minimum rate of wages.
	RS. A. P.
Foundry Department.	
1 Helpers	0 10 0 per day.
2 Fitters	0 12 0 Do.
3 Drivers	1 0 0 Do.
4 Masons	0 14 0 Do.
5 Carpenters	0 14 0 Do.
6 Fitters and Driver learners.	0 10 0 Do.
Barkyard Department.	
1 Beimers	0 10 0 per day.
2 Setters	
General.	
1 Mistries	30 0 0 per mensem.
2 Clerks	30 0 0 Do.
3 Watchman	25 0 0 Do.

Part II.—Other tanneries.

- 1 Piece-rate workers .. Ann's ten per every unit of work done.

N.B.—Quantum of unit will depend on the custom and usage in the largest number of tanneries in the locality for the same or similar kind of work. No piece-rate worker should be paid less than a guaranteed time-rate of ann's ten per day with a minimum cost of living allowance of annas eleven per day.

- 2 Adolescent workers .. Rs. 15 per month or annas eight per day.
- 3 Turning of skins and .. Re. 0-1-6 per every unit hides in limepits or bark-pits.

N.B.—Quantum of unit will depend on the custom and usage in the largest number of tanneries in the locality for the same or similar kind of work. Number of pits should not be the basis for the unit.

- 4 Casual workers Re. 1-0-0 per day inclusive of cost of living allowance.



PRIZE-WINNER: Sri C. Seshagiri Setty of Narayanadevarakere (Bellary District) who was declared second in the District and Taluk Crop Yield Competition. He grew 6,490 lb. of S.R. 26 B paddy in tank-fed saline area.

Part III.—Cost of living allowances.

Unless otherwise indicated against any of the foregoing items, all workers specified in Parts I and II above, shall be paid cost of living allowance as follows:—

Wages per month.	Cost of living allowance per month.
	RS. A. P.
1 For wages not exceeding Rs. 20 ..	Rs. 18 0 0
2 For wages exceeding Rs. 20 ..	Rs. 19 0 0

TAKING CARE OF TRACTORS DO'S AND DONT'S FOR OPERATING STAFF

"A HANDBOOK OF INSTRUCTIONS FOR THE OPERATION, CARE AND MAINTENANCE OF TRACTORS AND TRACTOR-OPERATED MACHINERY"

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MOUNT ROAD, MADRAS

FORESTRY

47

MADRAS INFORMATION

Timber for Sports Goods

Ever since Partition, the Indian sports goods industry has suffered from the lack of a suitable timber. Sialkot, famous for its sports goods, was lost to Pakistan and Indian craftsmen and manufacturers who migrated to India settled down in Jullundur, Batala, Dehra Dun, Meerut, Agra, Delhi and other places, and have been trying to resuscitate the industry.

Timber for the manufacture of sports goods needs special qualities. It must be light in weight, strong, pliable, tough, capable of great shock resistance, able to take good polish or stain and preferably light in colour. Ash timber is used for the purpose in Europe and America.

Indian mulberry which was found useful at once took the place of ash and became the standard sports goods timber of undivided India, rivaling ash. The entire timber demand was met by supplies from the large Chhanga Manga and Lahore mulberry plantations in the West Punjab, with the industry itself concentrated in Sialkot. Hockey sticks, tennis and badminton rackets and cricket bats and stumps were also made of mulberry. A large number of unfinished tennis rackets also used to be exported from India before World War II.

Survey of Properties of Timber

With all these places falling in Pakistan, the sports goods industry suffered a severe setback, and finding timber in India fulfilling all the required conditions presented a difficult problem. Fortunately, mulberry plantations had also been raised in the States of Uttar Pradesh, Assam and the Andamans. The experiments undertaken to carry out a preliminary survey of the properties of timber produced in these areas are described in a leaflet published by the Forest Research Institute, Dehra Dun.

The report gives the results of initial tests in the Bahraich, Etawah, Ramnagar and Saharanpur divisions of Uttar Pradesh where mulberry plantations are turning out timber. Although the trees are still very young, being only about 15 years of age, they grow fairly fast and have attained an average girth of over 40 inches at breast height and an average total height of 37 feet.

The tests were conducted to find the quality of timber in order to determine if these plantations produced suitable material for meeting the requirements of the industry in India and whether more should be grown. Similar tests were carried out on another species of mulberry occurring in Assam and the Andamans.

Comparative Strength

Comparing the strength of Uttar Pradesh mulberry with that of the West Punjab from Chhanga Manga and ash, it has been found that the specific gravity and weight of seasoned timber of mulberry and ash are practically similar. The bending strength of mulberry from Uttar Pradesh is somewhat lower, but this is due to timber being turned out from young plantations and could be expected to improve with age. The elasticity of mulberry is considerably lower than that of ash, showing that the former is more pliable. The impact strength of Uttar Pradesh mulberry is, however, considerably higher than that of ash and mulberry from the two plantations in Pakistan. As high impact strength in relation to weight constitutes an important function of timber suitable for the

sports goods industry, mulberry plantations in Uttar Pradesh seem to be doing very well, producing high quality timber.

Andaman timber appears to be only 16 years of age, but has attained a good size, namely, an average girth of 48 inches and an average height of 40 feet. The timber from Assam, which is also fast grown, shows somewhat lower impact strength, but is as strong as ash timber in other respects. The species of mulberry from the Andamans compares favourably with that from Uttar Pradesh and the Punjab.

The cultivation of mulberry in this sub-continent can be traced back to antiquity. It was then, as now, grown mainly as a food crop for silk worms. Mulberry plantations for the production of timber are comparatively of recent origin, the West Punjab plantations being probably the first of the type. Now, as a result of representations by displaced sports goods manufacturers, the growing of mulberry has also been taken up in other parts of India, besides Uttar Pradesh.

The mulberry species is found to be an important tree crop both for forest plantations and for the village economy of rural India and may be raised on a larger scale in favourable localities.

Financial Assistance to Displaced Students

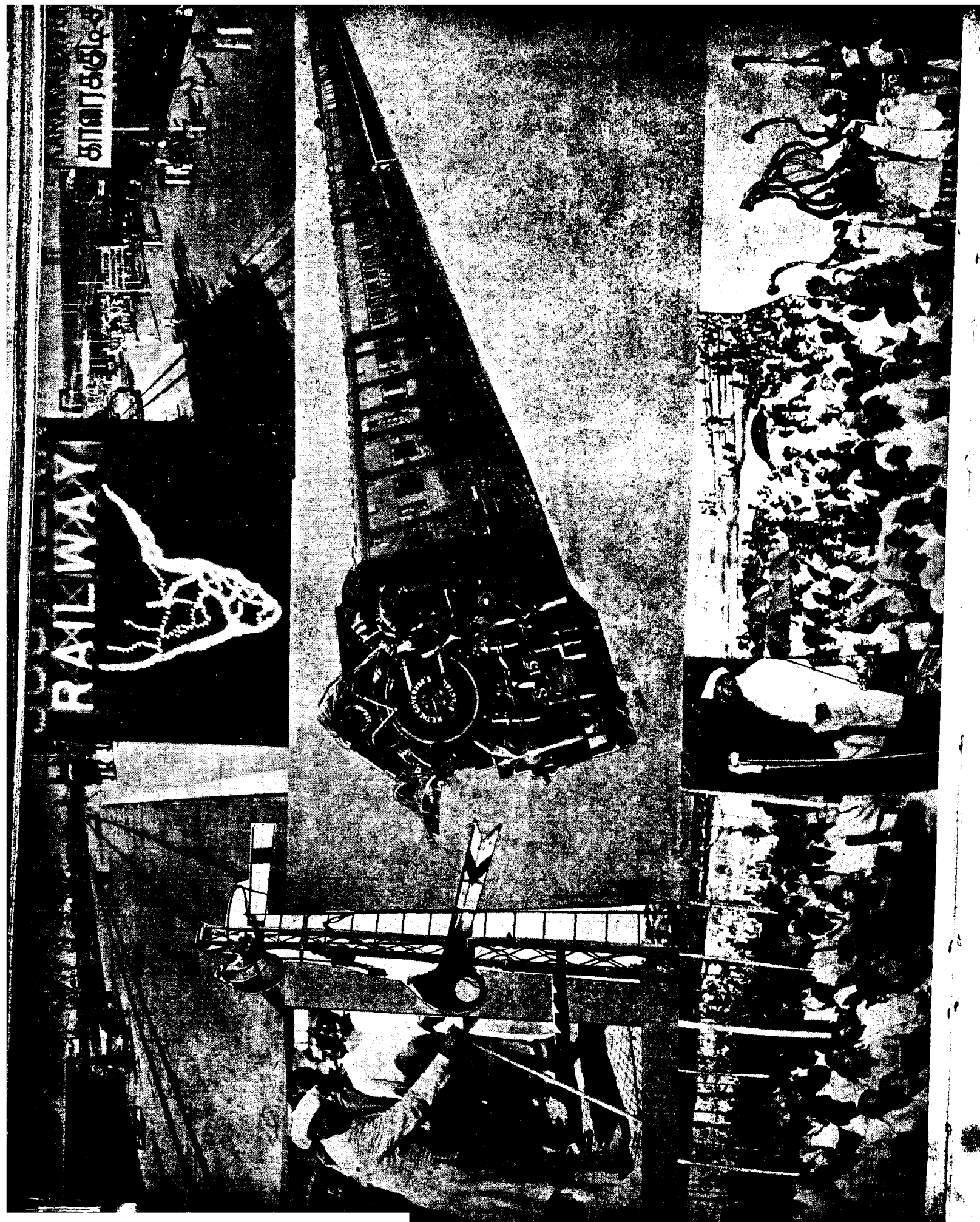
The Government of India have notified that the rate of stipends for the Non-Muslim displaced students, studying for both the Overseer Certificate Examinations and Diploma in Civil Engineering, should be Rs. 40 per mensem regardless of the length of the courses, provided only that it is pursued at a recognised institution, and that the students pursuing the courses of study, who have been receiving stipends at a rate exceeding Rs. 40 per mensem, will now be paid at the revised rate of Rs. 40 per mensem with effect from the current academic session; but the amounts already drawn by them in excess of the reduced rate, will not be recovered from them.

These orders have been passed in modification of the previous orders under which the rate of stipends for the displaced students, studying for Overseer Certificate Examination, was fixed at Rs. 40 per mensem, and for the course of Diploma in Engineering at Rs. 50 per mensem.

CORRECTION.

In the article *Basic Education is National Learning* by Dr. M. D. Paul, Deputy Director of Public Instruction, (published in the October issue of *Madras Information*), under the sub-heading 'Child's Own Experiences' appears the sentence, "We start with the child from where he is and teach him through the preconceived ideas and plans of the teacher or of the Inspecting Officer".

A line has been omitted here by mistake, and the correct sentence should be: "We start with the child from where he is and teach him through the experiences of his immediate surroundings and not through the preconceived ideas and plans of the teacher or of the Inspecting Officer".



TRANSPORT

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MADRAS INFORMATION

Symbol of New Spirit of Service

The construction of the Arantangi-Karaikudi Railway Line, though admittedly a modest effort, is, nevertheless, a symbol of the new awareness which seeks to make the railway serve defined social needs more aptly than it had ever done in the past. This point was stressed by Sri K. R. Ramanujam, General Manager, Southern Railway, in his speech at Arantangi on 29th March 1952, requesting His Excellency Shri Sri Prakasa, Governor of Madras, to declare the Arantangi-Karaikudi Line open.

Sri K. R. Ramanujam observed while calling upon the Governor to declare the Arantangi-Karaikudi Railway open, that it was not a very glamorous episode in the history of the Railway. For sheer romance of railway construction and the vital place they occupy in the national economy, there are worthier competitors in the field such as the Assam Railway link and Chittaranjan. In comparison with these achievements of renaissance India, the Arantangi-Karaikudi Railway is a very modest effort. Hardly 18 miles in length and with no great engineering feat to boast of, it is almost dwarfed, in the physical scale of its conception, by the many railway enterprises of the post-war era. Nevertheless, it is a symbol of the new awareness which seeks to make the railway serve defined social needs more aptly than it has ever done in the past.

The Arantangi-Karaikudi Railway is exactly 17.07 miles in length. There is already a rail route from Arantangi to Karaikudi in existence, made up of different sections of the Main and Branch lines totalling 196 miles. The new line thus closes a small gap and completes a triangle one vertex of which has, for several years, been truncated from the base, owing to historic accidents of railway ownership and construction.

Revised Policy Behind Undertaking

Railway undertakings are predominantly commercial in outlook and new lines are not embarked upon unless there are prospects of remunerating reasonably the capital invested. Sir Edward Benthall, the last Member of the Viceroy's Council in charge of Transport, outlining the post-war policy of transport in this country, said: "There is no sense in building a Railway if a road would do the work equally effectively, or unless for very good reasons, in building both in competition for a traffic which would be carried by one or the other." The implication of this statement was that in the post-war years the construction of additional main and branch lines was not expected to be spectacular and that the criterion of profitability would apply to all new projects perhaps more rigorously than ever. The policy he enunciated was the offspring of the Government of 1945.

With the advent of independence a fresh epoch commenced in the history of our country. Our leaders have rightly insisted that with the inception of the new order they cannot be unmindful of the heavy responsibility that rests on their shoulders in giving a proper lead in the revision of old policies and enunciation of new policies and their implementation.

Having successfully triumphed over the deterioration in equipment and operation due to the war and the

unprecedented difficulties and damage during the post-partition period, the Railway are now well on the road of rehabilitation and expansion. We are moving rapidly towards the attainment and maintenance of a progressive standard of operative efficiency and public service. We are fully conscious of our new role to function as a fit instrument of such social transformation as is willed by the public through their chosen organs of the Government.

Quick Transport of Food

The Arantangi-Karaikudi Railway requires to be considered in the new context. During the years 1946-50, the necessity for this short link was keenly felt due to the need for quick transit of food from the surplus regions to the deficit areas in this part of the Madras State. An investigation into the traffic prospects of the line made on previous occasions definitely indicated that viewed as a commercial undertaking, it would not be remunerative, but as an amenity in the general scheme of national rehabilitation it might find a place. The food emergency in recent years spotlighted the necessity for a quick outlet from the rice-growing areas of the Tanjore District to the deficit pockets in Ramanathapuram District and elsewhere. The problem of food having become paramount in 1949, the question of providing the new Arantangi-Karaikudi Link had to be reconsidered as a part of social policy.

Sri C. Rajagopalachari in the message which he issued to the nation as Governor-General on the occasion of the second anniversary of Independence, said that food was our immediate and most important national programme. He cited a verse from our ancient scriptures: *"Annam bahu Kurveeta Tadavritam"*—Let us dedicate ourselves to the increased production of food. Complementary to increased production is the quick transit of food from surplus to deficit areas. We might add to the Vedic injunction and say: "Let us dedicate ourselves to the quick transport of food". It was in the highest national interest, therefore, that all means were to be made available for overcoming the shortage of food. The sanctioning of the Arantangi-Karaikudi Project by the Government on March 27, 1950, was to help to bring food to a region that was agriculturally resourceless and which, without speedy communications, was frequently susceptible to famine. It is the result of the new awareness of social responsibility which inheres in modern railway administration.

Picture on the opposite page:

NEW RAILWAY LINK

H.E. the Governor of Madras recently inaugurated the new railway line between Arantangi and Karaikudi. The line is 17 miles long and cost Rs. 42 lakhs.

The British Artisan at Work

RURAL CRAFTS

By NORMAN WYMER

Oxford University Press, Bharat Buildings,
Mount Road, Madras.

Price Rs. 4-1-0.

Page 127.

This fascinating little book is one of a series dealing with the English countryside; the companion volumes deal with the village, the market town, farms and fields, the garden, care of farm animals, farm livestock, farm tools and machinery, fields and hedgerows, woods and forests.

It is pleasantly exhilarating to learn that in Industrialised Britain a 4,000-year old tradition in craftsmanship is continued unbroken, though "threatened and reduced," the cult of workmanship kept alive by the pride and devotion of village artisans. Far from being a mere picturesque link with the pre-Machine Age past, rural crafts play a vital role in British village economy. The author declares: "There is no difficulty in finding work for the craftsmen; the problem is to find craftsmen for the work."

Illustrating his text with excellent photographs, Wymer takes us round on a tour of the countryside, to peep into the workshops of "rude mechanicals." We see how the artisans work, making baskets, hurdles, fences, wheels, boats, cricket bats, ladders; bricks and pottery, stone walls and slate roofs; thatching of cottages; the plaiting of rush carpets; leather tanning, saddles and shoe making; wool stapling, spinning and weaving, handwoven carpets; blacksmithy, farriery and wrought-iron work. In a useful appendix the author explains how young people interested in any one of these crafts can contact some of the more important crafts associations to join as an apprentice prior to taking up a craft as a career.

A book to be recommended to every rural reconstruction worker.

—S.

A GUIDE TO INDIAN FISHES

The Directorate of Marketing and Inspection, Ministry of Food and Agriculture, has issued a reprint of their earlier publication "Preliminary Guide to Indian fishes, fisheries, methods of fishing and curing."

There was much confusion caused by the multitude of names of fishes in Indian languages current in different parts of the country. Special names were sometimes given to the same species at different stages of its growth and development.

This publication divides several varieties of Indian fishes into well-defined groups. This 'Dictionary' is primarily intended for the layman and instead of minute scientific descriptions, it provides a catalogue of important characteristics, distinctive markings, peculiarities of shape and other data to enable ordinary people to recognise different types of fishes. Besides a diagram of each of the varieties described, the Guide contains information about the principal Indian fisheries and is illustrated with a number of plates. It incorporates such modifications as have been found necessary consequent on Partition.

COFFEE HUSK CAN REPLACE CHICORY

Coffee husk can be used with advantage in place of chicory, according to the results of the investigations conducted at the Central Food Technological Research Institute, Mysore.

India produces about 20,000 tons of coffee annually, a major portion of which is used for domestic consumption. Coffee husk which constitutes 30-40 per cent of the whole berry is generally used as manure or as fuel; 10,000 cwt. of chicory are imported by India every year for the preparation of French coffee. French coffee is preferred by some people to straight coffee beverage, chiefly because the blend gives a stronger brew.

Except for the fatty portion and the aromatic principles of the bean, coffee husk has been found to be similar to coffee bean in many respects. Trials with Robusta husk and Arabica husk indicated that the latter is better for blending purposes. Blends containing up to 30 per cent of roasted husk were acceptable.

The September issue of the *Journal of Scientific and Industrial Research* carries a full report of the investigations.

IMPROVING SERVICE CONDITIONS OF SCHOOL TEACHERS

Improvement of pay scales and conditions of service of school teachers, in so far as financially feasible within the resources of each State, is basic to the success of the whole project of educational development which India wants to work out, states the publication entitled "Scales of Pay of Primary and Secondary School Teachers in States in India, 1951" issued by the Ministry of Education, Government of India.

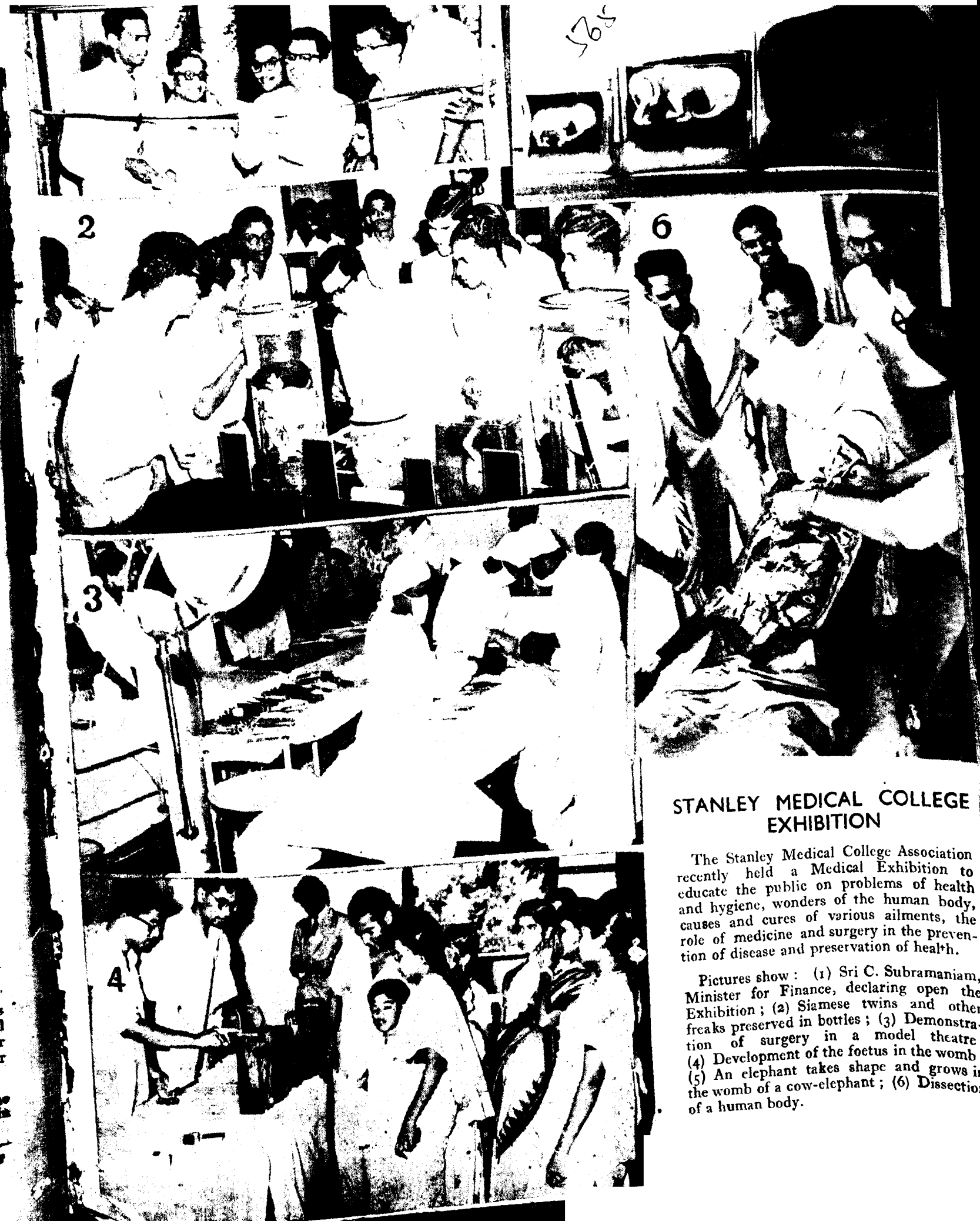
The publication gives the scales of pay prescribed for teachers in primary, middle and high schools in various States under different types of management. It brings out clearly the great variations in the salary scales of teachers working in Government, local boards and private schools. It also draws attention to the wide disparity in pay as well as allowances prevalent in different States.

The publication recommends to the State Governments to urge upon the local boards the advisability of adopting such scales of pay or approved scales of pay approximating Government scales, as far as financially possible, and that that should be regarded as one of the conditions for grants-in-aid to private institutions.

Higher scales of pay are recommended for head-teachers of schools as the headship of a school involves special responsibility and as such it should carry a higher salary or an additional allowance which should be substantial rather than nominal.

To have an idea of the salaries of teachers in some of the foreign countries, the publication gives scales of pay in the United Kingdom, Burma and Australia.

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STANLEY MEDICAL COLLEGE EXHIBITION

The Stanley Medical College Association recently held a Medical Exhibition to educate the public on problems of health and hygiene, wonders of the human body, causes and cures of various ailments, the role of medicine and surgery in the prevention of disease and preservation of health.

Pictures show: (1) Sri C. Subramaniam, Minister for Finance, declaring open the Exhibition; (2) Siamese twins and other freaks preserved in bottles; (3) Demonstration of surgery in a model theatre; (4) Development of the foetus in the womb; (5) An elephant takes shape and grows in the womb of a cow-elephant; (6) Dissection of a human body.

TRANSPORT

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Statistical Details

Here are a few details pertaining to the construction of this Railway—

Its length is 17.07 miles.
The gauge is the usual Metre Gauge, viz., 3' 3 1/3".
The capital cost involved is Rs. 42 lakhs.
The total quantity of steel work—330 tons.
The total earthwork for banks—12 1/2 million cubic feet.
The total earthwork in cutting—2 1/2 million cubic feet.
The total concrete—142,000 cubic feet.
Masonry work—200,000 cubic feet.

The Railway will serve a population of 50,000 and is expected to yield about a million ton miles of traffic per annum. With the opening of this link a much felt need of the public of Tanjore, Tiruchirappalli and Ramanathapuram Districts has been fulfilled and this transport facility, particularly in regard to food, will go a long way towards the betterment of conditions of the population in this area. Valaramanickam, Periakottai and Kandamur-Puduvayal villages and the surrounding hamlets stand to develop considerably from the opening of this line. In addition, the link provides an alternative main line route between Madras and Ceylon; the distance from Madras to Dhanushkodi via this route being only 410 1/2 miles as against 425 1/2 miles via Mayavaram and Tiruchirappalli.

This 17-mile Railway link which was opened by His Excellency Shri Sri Prakasa, Governor of Madras, on March 29, 1952, is the first section of railway to be constructed in South India after the termination of the Second World War, the last to be constructed in the Southern Railway being the Sagara-Talguppa line (ex-M.S. Railway) over a distance of 9.5 miles, in November 1950.

The railway distance between Arantangi and Karaikudi before the opening of the line was 196 miles, the route traversing Tiruvarur, Tanjore and Tiruchirappalli. The present link which short-circuits this long distance, provides direct communication from Tanjore to Ramanathapuram District passing through a portion of Tiruchirappalli

NEW LINK : Gaily decorated, the Governor's Special passes through a resplendent arch, inaugurating the new railway link between Arantangi and Karaikudi



MADRAS INFORMATION

District. The need to connect Arantangi with some near centre in Ramanathapuram District had been felt as early as in 1924, when a survey was conducted for an Arantangi-Manamadura line. In 1939, a fresh survey was made to connect Arantangi with Karaikudi, but the traffic survey did not at that time hold out any prospect of remunerative traffic.

It was the serious food shortage during and after World War II that underlined the imperative need for quick transport and for a direct link from the surplus areas of the Cauvery basin to the comparatively unfertile deficit pockets of Ramanathapuram District. Also with the coming of independence it was the general welfare of the people of the area rather than the commercial objective which came to actuate the policy of the Railway Administration.

Construction Details

The work of constructing the Arantangi-Karaikudi link was sanctioned in March 1950 and the final location survey was completed by July 1950. The foundation for the first pier of the Vellar Bridge, the longest bridge on this section, was laid on September 5, 1950. The entire work of construction was completed early in April.

The section measures 17.07 miles in length and is laid with 50 lb. bull head rails on cast iron pot sleepers. There are two crossing sections, Valaramanickam and Kandanoor-Puduvayal. There are also two flag stations, Idaiyar and Periyakottai. The two major bridges on the section are one across the Vellar consisting of nine 60-foot spans and the other across the Pambar consisting of six 40-foot spans, built on well-foundations. The project has cost approximately Rs. 42 lakhs.

Apart from the advantages which are sure to result from the provision of a direct link between Tanjore and Ramanathapuram Districts, it is hoped that the construction of this link will lead to the economic development of this sparsely populated area. The link also provides an alternative main line route between Madras and Dhanushkodi.

CO-OPERATION

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MADRAS INFORMATION

Multipurpose Co-operative

The Denduluru Multipurpose Co-operative Society No. 2856 Denduluru, West Godavari District, was registered as a credit society in the year 1918 and started working from 29th November 1918. The Society was converted into a full-pledged multipurpose co-operative society on 26th October 1948 when the Society's by-laws were amended *en bloc*. Its area of operations includes Denduluru village and three hamlets, whose population number 7,000. The Society has enlisted 643 members with a paid-up share capital of Rs. 15,987.

The maximum credit limit of the Society is Rs. 1,50,000 and the borrowings include fixed deposits from members and non-members and thrift deposits amounting to Rs. 29,897. Loans from the Eluru Co-operative Central Bank S.T. Rs. 40,950, L.T. Rs. 39,114 and cash credits, special and ordinary, Rs. 2,130. The Society is also granted a special interest-free loan of Rs. 4,750 of which Rs. 2,034 is outstanding. With the Reserve Fund of Rs. 11,948 the Society's working capital comes to Rs. 1,30,112 as against a sum of Rs. 1,19,212 working capital at the end of 1950-51. Loans have been issued for members to the extent of Rs. 75,268 under short-term loans for agricultural purposes and Rs. 40,005 under long-term loans for redemption of prior debts and for reclamation of lands. The total number of loans amounted to Rs. 1,15,273 and was issued to 450 members as against Rs. 99,030 at the close of 1950-51.

The investments of the Society are Rs. 24,397, and these include Reserve Fund investment of Rs. 10,739 both in National Savings Certificates and deposits in Central Bank, share capital invested in other co-operative institutions Rs. 9,305, and value of stocks amounting to Rs. 4,353.

The Society is managed by a Panchayat consisting of five members elected once in two years, and has an establishment consisting of two clerks and an attender on a monthly recurring expenditure of Rs. 155.

The Society undertakes various multipurpose activities for the benefit of its members and non-members. Its by-laws have been amended so as to include the entire Denduluru Firka for distributing agricultural implements and manures. The business transacted in agricultural implements and manures is given below :—

	1950-51.		1951-52 (29th February 1952).	
	Pur- chases.	Sales.	Pur- chases.	Sales.
Agricultural imple- ments.	19,428	21,063	8,483	6,061
Manures	10,635	10,684	7,024	6,889

The Society is dealing in production and distribution of pure Vegetable oils, Gingelly and Coconut oils, and there is increasing demand for these articles required for domestic

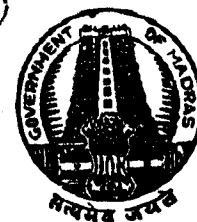
use. The Society is also selling medium varieties in mill cloth, silk and woollen fabrics. Purchases and sales in respect of these items are furnished below :—

	1950-51.		1951-52 (upto 29th February 1952).	
	Pur- chases.	Sales.	Pur- chases.	Sales.
Mill cloths and silks, etc.	7,080	6,478	1,498	2,000
Gingelly oil	1,015	1,040	447	427
Gingelly cake	..	276	..	190
Coconut oil	345	378	376	488
Coconut cake.. ..	..	26	..	62
Kerosene oil	925	898	..	128

The Society hired a tractor from the Agricultural Department and arranged for ploughing of waste lands of nearly 1,700 acres available in the village. The tractor worked during the period 28th November 1950 to 18th July 1951 and ploughed 457 acres of dry land belonging to 62 ryots. A sum of Rs. 4,570 was collected and paid to the Agricultural Department towards hire charges. Very recently Government have sanctioned a special concession rate of Rs. 6-4-0 per acre for ploughing the remaining extent of waste lands as against Rs. 10 scheduled rate in their G.O. No. 6, dated 4th January 1952. The Society is now taking steps to do propaganda and get all the waste lands ploughed during this season.

The Society has also been selected to work the Village Industries Development Scheme under Rural Reconstruction as per G.O. No. 133, dated 10th February 1951 (Rural Welfare), and commenced supply of raw material to artisans pursuing to different occupations in the Firka, with effect from 1st May 1951. The Government have placed at the disposal of the Society an interest free advance of Rs. 40,000 for purchase of raw material, besides free grants to maintain a clerk on Rs. 50 per month, to hire godowns on rent at Rs. 100 per month and Rs. 500 for purchase of equipment. The Society purchased wood worth Rs. 4,933, leather worth Rs. 18, copra worth Rs. 260 and distributed material to the value of Rs. 2,806. Iron and steel required for making 250 country double-bullock carts, sickles, axes and spades have also been indented for, and allotments are expected to be made shortly.

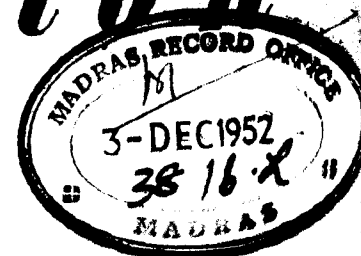
Thus the Society is endeavouring to be of use to its members and non-members in their varied occupations, both in the nature of giving financial assistance, supplying domestic and agricultural requirements and also securing for them technical assistance. The Society earned a net profit of Rs. 1,699 for the year 1950-51 and created a Reserve Fund of Rs. 11,948. The Society has been taking all measures to carry out all suggestions given by distinguished visitors including the Registrar of Co-operative Societies, Madras, the District Collector and other non-officials.



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MADRAS

Information



Resettlement of Ex-Servicemen

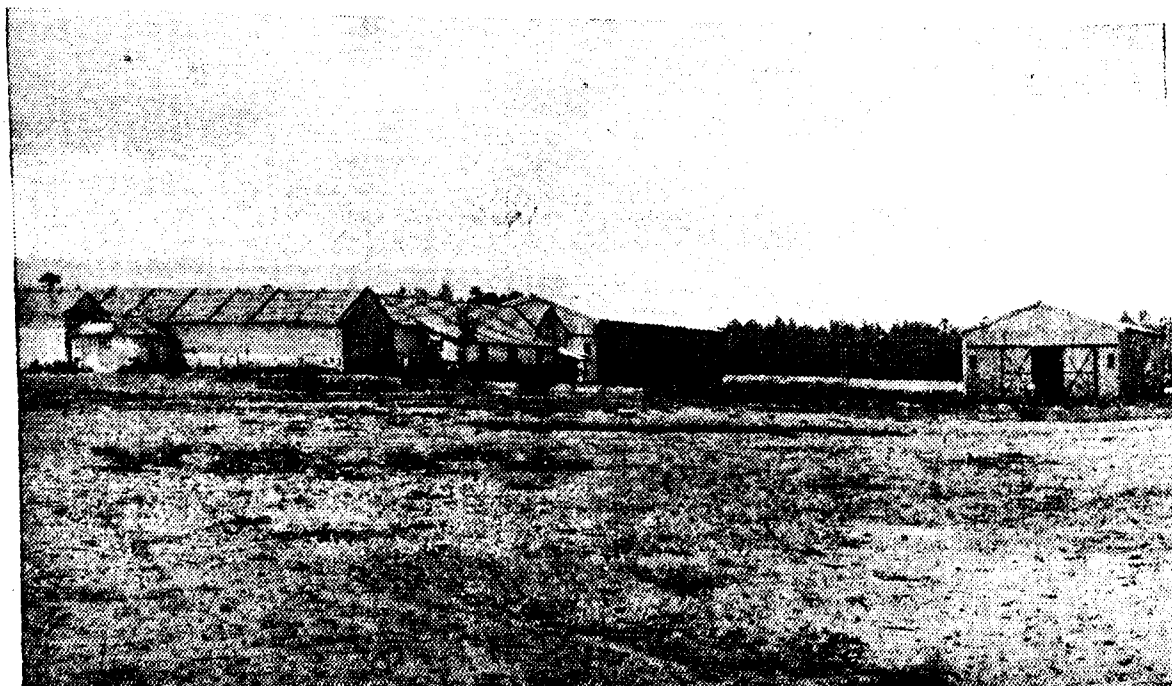
The Reid Co-operative Timber Works, Tiruvottiyur, is one, of many others, established for the resettlement of demobilised Army personnel. It specialises in cabinet making. From the funds made available by Government, it bought a site together with some buildings adjoining the Western India Match Factory in Tiruvottiyur at a cost of Rs. 65,000. It undertakes manufacture of standard articles required by Government offices and public institutions as well as household furniture. It endeavours to ensure fine finish and workmanship and to give satisfaction to its customers. It uses high quality wood. Articles worth Rs. 22,436 were manufactured during the half-year ended 31st December 1951 and finished products to the value of Rs. 25,033 were disposed of. Recently the workshop manufactured and supplied a laboratory research table to the Veterinary Biological Research Institute at Ranipet, which can be seen in the photograph. The table needed great technical skill and though it was the workshop's first attempt in the manufacture of articles of that type it executed the order to the satisfaction of the authorities. Many City offices are now extending their support and patronage to the workshop. The authorities of the workshop are grateful to them.

(Community Projects—Continued from page 6.)

Rs. 38 crores, out of which the rupee expenditure is expected to be about Rs. 34 crores and the dollar expenditure which will be mostly in the form of capital goods and equipment, about Rs. 4 crores. The financing of the projects will be largely in the nature of long-term loans to the State Governments for self-financing projects.

The Central contribution will be taken out of the Indo-American Technical Co-operation Fund recently established under an agreement with the Government of the U.S.A. in which the American Government had promised to make a contribution of \$ 50 millions to be made available to India by the 30th of June 1952.

THE REID WORKSHOP : A general view of the Reid Co-operative Timber Workshop for Ex-Servicemen, Tiruvottiyur



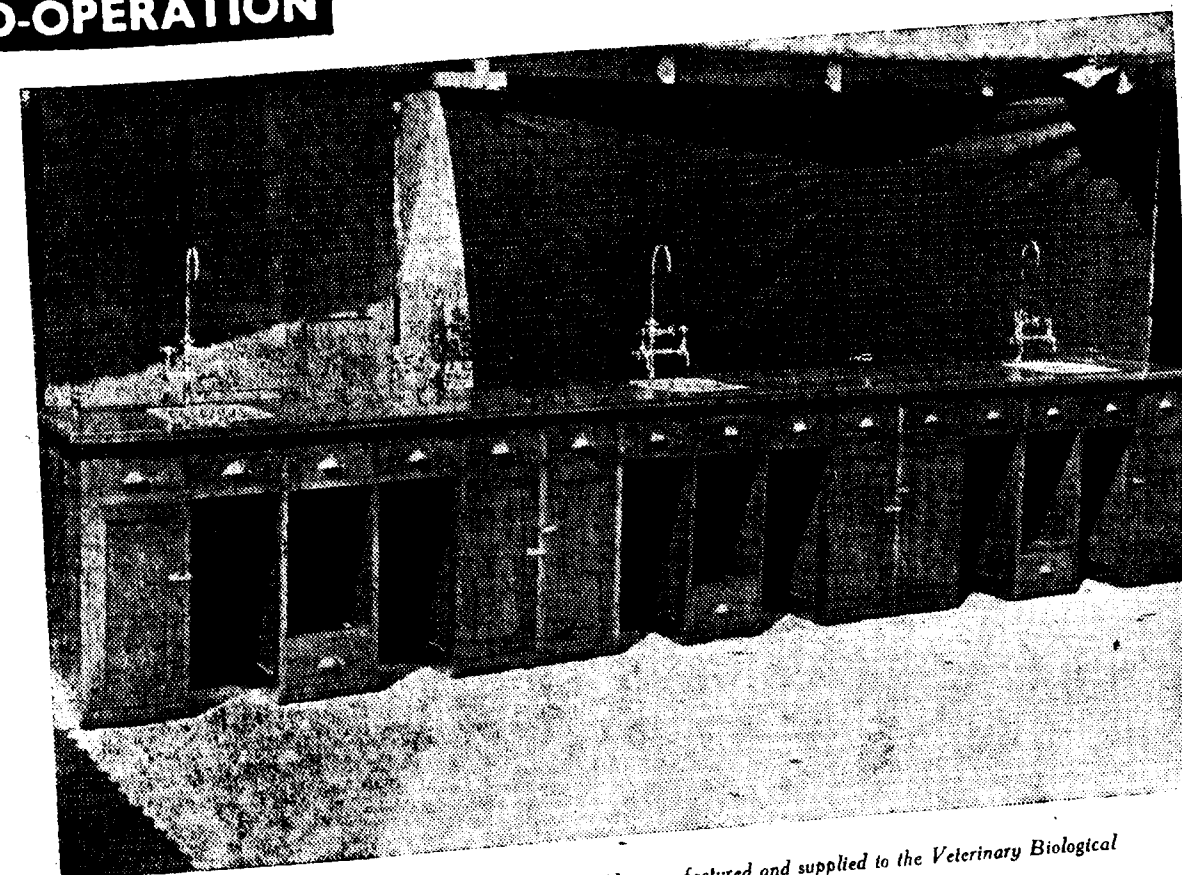
Palm Trees in Poromboke Lands for Co-operatives

The Government have agreed to give on lease the palm trees on Government poromboke lands to jaggery manufacturing co-operative societies in the area without public auction and fix the lease amounts that should be paid by them. Under this arrangement, ex-tappers will be able to get the trees for jaggery manufacture on easy terms. The co-operative societies manufacturing jaggery will remit the amount and sub-lease the palm trees and collect the lease amount. Following are the rates fixed by the Government for a year :—

1. Coconut trees : one rupee per tree in all districts except West Coast, Malabar and South Kanara, where three rupees will be charged per tree.
2. Palmyra trees : Eight annas per tree in all districts.
3. Date trees : Two annas per tree in all districts.

Malabar Tenancy Act: Settlement of Fair Rent

The Government have ordered, in pursuance of Rule 3 of the Malabar Tenancy (Determination of Fair Rent and Preparation of Record of Rights) Rules, 1951, a general settlement of fair rents and preparation of record of rights, in respect of every holding, situated in the areas to which the Malabar Tenancy Act, 1929, as amended by the Madras Act XXXIII of 1951, extends and for which fair rent is payable under sections 5 to 7 and 9 to 9-B of that Act.



LAB FURNITURE : Laboratory Research Table manufactured and supplied to the Veterinary Biological Research Institute, Ranipet



CO-OP CARPENTRY : Members at work in the Reid Co-operative Timber Workshop



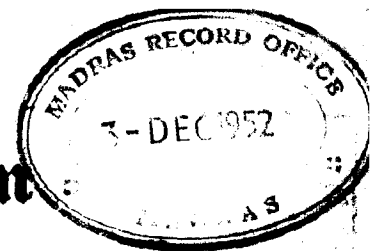
GOODWILL MISSION FROM NIGERIA

The first Goodwill Mission from Nigeria, consisting of two Ministers, Dr. Obafemi Awolowo and Mr. Augustus Meredith Adisaw Akinloye, recently visited Madras. The Mission visited a number of scientific, educational, medical and cultural institutions, factories and agricultural centres.

Photos show: Arrival at the airport (top); Visit to the Madras Veterinary College (second row left); Musical evening at Kalakshetra, Adyar (second row right); At the Shore temple, Mahabalipuram (third row); and at the Theosophical Society Library, Adyar (bottom).

Madras Information

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"WE SEEK TO SERVE AND NOT TO COMPETE"

December 1952

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Electricity for Villages

The Government have sanctioned the extension of supply of electricity from the Mettur System, at an estimated cost of Rs. 4.17 lakhs, to 191 agricultural pumpsets and three industrial loads at Valavanur, Essayanur and Sakkiramallur villages in Wallajah Taluk, North Arcot District.

Sanction has been accorded for the supply of electricity from the Papanasam System to 28 agricultural pumpsets, 166 house service connections and 25 street lights, at an estimated cost of Rs. 1,10,800, at Malaipatti and Kuthiparai villages in Aruppukkottai Taluk, Ramanathapuram District.

The Government have sanctioned the extensions of supply of electricity from the Madras System to nine agricultural pumpsets, at an estimated cost of Rs. 32,000, at Kattavakkam in Kancheepuram Taluk, and for 102 agricultural pumpsets and one industrial load, at an estimated cost of Rs. 2,49,300, at Sittanjeri, Kuruvanjeri, Pinayur, Sattanjaneri and Karumbakkam villages in Kancheepuram Taluk, Chingleput District.

Sanction has also been accorded for the extension of supply of electricity from the Papanasam System to 15 agricultural pumpsets, at an estimated cost of Rs. 38,200, at Ambasamudram village, Periakulam Taluk, Madurai District; to 11 agricultural pumpsets and one industrial load, at an estimated cost of Rs. 39,100, at Thambagoundenpalayam and Arasipalayam villages in Coimbatore Taluk, and to 29 agricultural pumpsets and two industrial loads, at an estimated cost of Rs. 81,400, at Vadavalli, Pugalur, and Karegoundenpalayam villages, Avanashi Taluk, Coimbatore District.

Extension of supply of electricity from the Andhra System has been sanctioned to 17 agricultural pumpsets and one ceramic factory at an estimated cost of Rs. 44,500 at Bhimadole village in West Godavari District.

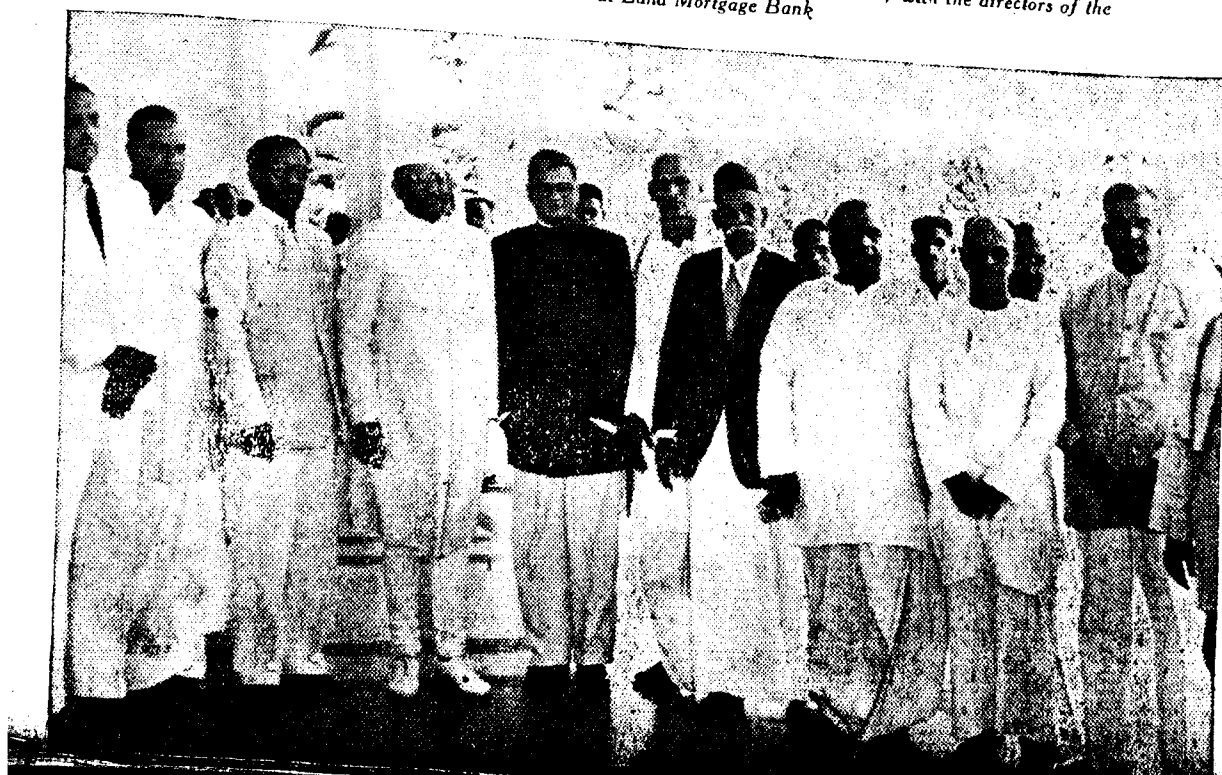
Sanction has been accorded for the extension of supply of electricity from the Rayalaseema System, at an estimated cost of Rs. 1.636 lakhs in the first year, raising to Rs. 2.197 lakhs at the end of five years, for agricultural, industrial, domestic and street lighting purposes at Molagavalli, a village selected for intensive rural reconstruction, in Alur firka, Bellary District.

The Government have sanctioned the following schemes:

Papanasam Electricity System.—(1) Extension of supply of electricity to 11 agricultural pumpsets at Avaniapuram village in Madurai Taluk, Madurai District, at an estimated cost of Rs. 39,680. (2) Extension of supply of electricity to 18 agricultural pumpsets and 28 house service connections at Anaikuttam village in Sattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 49,020. (3) Extension of supply of electricity to 22 agricultural pumpsets and 52 house service connections at Anupankulam, Sundararajapuram and Perapatti villages in Sattur Taluk, Ramanathapuram District. (4) Extension of supply of electricity to 20 agricultural pumpsets and 76 house service connections at Pottalpatti and Mettukundu villages in Sattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 60,200. (5) Extension of supply of electricity to 20 agricultural pumpsets, two industrial loads, 82 house service connections and 22 street lights at Thirukoshtiyur village in Tirupattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 96,300.

Mettur Electricity System.—The Government have sanctioned a scheme for extension of supply of electricity to 15 agricultural pumpsets at Maskalipatti village in Rasipuram Taluk, Salem District, at an estimated cost of Rs. 39,680.

WITH THE DIRECTORS: H. E. Shri Sri Prakasa, Governor of Madras, with the directors of the Madras Central Land Mortgage Bank



Madras Electricity System.—The Government have sanctioned a scheme for extension of supply of electricity to four consumers, two industrial consumers, and one agricultural pumpset in Kodambakkam and Virugambakkam area, at an estimated cost of Rs. 96,600.

Pykara Electricity System.—The Government have sanctioned the following schemes: (1) Extension of supply of electricity to 24 agricultural pumpsets at Ramaswaminickenpatti, Uthamapalayam village, Periyakulam Taluk, Madurai District, at an estimated cost of Rs. 55,600. (2) Extension of supply of electricity to 99 domestic services at Lakshmipuram village, Periyakulam Taluk, Madurai District, at an estimated cost of Rs. 33,300. (3) Extension of supply of electricity to 11 agricultural pumpsets, four domestic services at Madathur, Sankaramanallur village, Udumalpet Taluk, Coimbatore District, at an estimated cost of Rs. 36,700.

Andhra Power System.—The Government have sanctioned a scheme for extension of supply of electricity to three industrial (rice and flour mills) loads, 120 domestic services and 30 street lights at Abhimavaram and Cherukumilli villages, Bhimavaram Taluk, West Godavari District, at an estimated cost of Rs. 75,200.

The Government have sanctioned the following extension schemes:

Madras Electricity System.—A scheme for extending supply of electricity to 60 agricultural pumpsets and five industrial loads at Kadambathur and surrounding villages in Tiruvallur Taluk, Chingleput District, at an estimated cost of Rs. 1,74,650.

Papanasam Electricity System.—A scheme for extending supply of electricity to 17 agricultural pumpsets and 21 house service connections at Papakudi village in Ambasamudram Taluk, Tirunelveli District, at an estimated cost of Rs. 35,300.

Mettur Electricity System.—Extension of supply of electricity to 19 agricultural pumpsets at Tenmathur village in Tiruvannamalai Taluk, North Arcot District, at an estimated cost of Rs. 60,200.

Extension of supply of electricity to 19 agricultural pumpsets, one industrial load at Parangiyur village in Tirukkoyilur Taluk, South Arcot District, at an estimated cost of Rs. 68,400.

Extension of supply of electricity to 61 agricultural pumpsets and two industrial services at Sathambakkam village in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 1,02,600.

Extension of supply of electricity to Vengalapuram and Four Wells area in Tirupattur Taluk, North Arcot District, at an estimated cost of Rs. 64,700.

Andhra Power System.—A proposal for extension of supply of electricity to 177 additional street lights and 32 domestic services at the Samalkot Panchayat area, East Godavari District, at an estimated cost of Rs. 50,000.

Rayalaseema Power System.—A proposal for extension of supply of electricity to seven agricultural pumpsets, three industrial loads, 75 domestic services and 20 street lights at Ujjini village, Bellary District, at an estimated cost of Rs. 73,000.

Guntur District.—Electricity has been made available for domestic, industrial and agricultural purposes in the eight villages of Guntur and Tenali Taluks of Guntur District.

The licensees in this area were not able to undertake this work so far. The State Electricity Department took up the scheme and switched on supply on February 29, 1952, to the villages of Nutaki, Ramachandrapuram, Mellampudi, Thumapudi, Ravendrapadu, Srirangapuram, Pedapalem and Porakalapudi.

The scheme, estimated to cost Rs. 4.5 lakhs, is intended immediately to supply power for 300 agricultural pumpsets,

CONFERENCE OF LAND MORTGAGE BANKS: H. E. Shri Sri Prakasa, Governor of Madras, delivered the opening address at the Twenty-second Conference of Land Mortgage Banks in Madras State, held recently at the Rajaji Hall.





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DEFENCE

3

MADRAS INFORMATION

The Second Line of Defence

By SHRI SRI PRAKASA, Governor of Madras

Fellow-citizens !

Freedom entails heavy responsibilities on all who value it, and desire to retain it. It is indeed a joy to be free ; but the joy would be short-lived and turn to bitter despair and utter frustration, if the Freedom that gives it, is itself lost. Constituted as the world is, it is the path of wisdom to be prepared for all emergencies, for verily to be forewarned is to be fore-armed. Our Freedom is of very recent birth ; and it behoves us all to endeavour our utmost to keep it inviolate in every way and for all time. The Government and the people are not different, but one and the same in a country that has declared itself a Sovereign Democratic Republic, for the Government is as the people make it ; and does only what the people want. No one can, in a set-up like ours, therefore, divest himself of his duty by the State and Society, whether he is a private citizen or Government official.

We as citizens of the land, in whatever sphere of activity we might be engaged, have our own importance in the scheme of things ; and we have all our definite parts to play for the maintenance of the Freedom that we have won. In a world where there is so much conflict, and where unfortunately many an issue is still decided by the successful use of physical force, every nation has to take steps to protect itself both against possible aggression from outside and from disturbance within. Any faltering and failing in this behalf endangers the stability of the State and the safety of the citizens. There is, of course, the regular Army that stands at its posts of duty in different parts of the country and at all strategic points, so that whenever the call should come, whenever the need should arise, it would be available to fulfil its task even if it involves—as it, in the very nature of things, does involve—the supremest sacrifice that man can make, namely, the giving up of his life so that others might be saved.

Role of the Territorial Army

This, however, is obviously not enough. A poor country like ours cannot possibly maintain a huge permanent standing Army commensurate to our needs. The burden will be too heavy. Already there is a feeling in many minds that the amounts put on our Armed Forces is extravagantly high, and that it should be very greatly curtailed, so that nation-building activities might have a chance. These, in their turn, can only prosper when the country is free from all harm. That has got to be assured and ensured before and above everything else. All the same, it is not a practical proposition either, that a very large proportion of the population should take up the profession of arms as their life-long calling. A few may be attracted towards the Army as an avenue for their energies that serves the double purpose of protecting the country and giving the individual an honourable occupation. Vast masses of the people like to spend quiet, peaceful lives, in some civil employment or other ; and still when the Army is limited and the danger great, we have to be prepared for possible emergencies, both in the nature of civil commotion and outside attack. We have all to think of ways and means of being able to augment our Forces whenever need

should arise, without disturbing more than is absolutely necessary, the even tenor of civil life.

The Territorial Army is the via media, the most feasible compromise, so that without putting undue burden on the public exchequer, and without causing any undue disturbance to individual lives, we might be able to raise appreciably large numbers of well-trained people, ready to jump to the rescue of the country and society as need might arise. The Territorial Army is in the nature of a second line of defence in a national emergency, coming to the assistance of the regular Army at moments of danger and difficulty. If such an occasion should arise, the Territorial Army, for one thing, relieves the regular Army of all commitments in regard to internal security. It makes itself responsible for anti-aircraft and coastal defence activities, and also supplies technical units to assist the regular forces when engaged in active war. It should be the object of all persons in whatever profession they might be, who are physically fit, to join this Force ; and by offering to do all they can for the defence of the country, to vindicate the Freedom that is theirs.

Opportunities of Military Training

The Territorial Army is open to all able-bodied persons of 18 to 35 years of age. There must be many a young and middle-aged man who wishes to have opportunities of military training ; he has got it here. The divisions of the Territorial Army are conveniently bifurcated in Provincial and Urban Units, representing rural areas and towns, respectively. This distinction is not made to signify that the men who come from the two areas are in any way different, one from the other ; but because this will facilitate the proper training of those who come from town and from country, according to their needs and temperaments. The Urban Units are required for work of a technical nature, and so if they come from industry and are skilled workers and technicians, they quickly learn to use modern mechanised equipment. Apart from the workmen, if the employer



Workshop Practice

Research Institute for Cottage Industries

The Government have sanctioned the establishment of a Cottage Industries Research Institute, which would be located in the compound of the Industrial Engineering Workshop, Madras.

The Research Institute will mainly concentrate on the development of the following fifteen cottage industries by designing new inventions and appliances, wherever possible, or by suggesting improvements on the existing ones: Carpentry, Blacksmithy, Sheet Metal Work, Bell Metal Work, Light Metal Casting, Fibre Extraction and Rope making, Rice Pounding, Flour Grinding, Oil Pressing, Gur making, Basket and Mat making (rattan and bamboo), Toy making, Cashewnut roasting, Handloom Weaving, Ball thread making and Distillation of essential oils.

The functions of the Institute will be: to make a comprehensive study of the designs, tools and methods, followed here and elsewhere in cottage industries, to adapt and improve upon them, and when necessary, to design new tools and evolve new techniques and processes, to investigate and solve problems relating to heat treatment of materials used in specific cottage industries, and to conduct experiments and research on the mechanical treatment of raw materials used in cottage industries.

This action has been taken on the recommendation of the State Cottage Industries Board that the starting of the Research Institute was a necessity for the development of cottage industries.

two industrial services and a cinema load that have already applied for power.

The Government have sanctioned the following schemes:

Mettur Electricity System.—(1) Extension of supply of electricity to 171 agricultural pumpsets, one flour mill at Pinnaithangal, Agaram, Pudur, Pindithangal and Vellambi villages in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 3,94,600. (2) Extension of supply of electricity to 106 agricultural pumpsets, five industrial services, 99 domestic services at Vadakkadapanthangal, Melvenkatapuram and Kodakkal villages in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 3,26,100.

Andhra Power System.—A scheme for extension of supply of electricity for 244 agricultural services and eight industrial services at Pedavadiapudi, Chinnavadiapudi, Chiluvur and Tummapudi villages, Guntur District, at an estimated cost of Rs. 4,691 lakhs.

Pykara Electricity System.—(1) Extension of supply for a tea factory, and 196 domestic services in Arundale Estate, Ootacamund Taluk, the Nilgiris District, at an estimated cost of Rs. 83,500. (2) Extension of supply of electricity for agricultural purposes at Sinnakkuyil, and Kallapalayam villages, Palladam Taluk, Coimbatore District, at an expenditure of Rs. 36,100.

Rayalaseema Power System.—A scheme for extension of supply of electricity for the mica mines of the Seetharama Fresh Water and Prospecting Pit, Tiruwarla, Gudur area, Nellore District.

Madras Electricity System.—A proposal for extending supply of electricity to 67 agricultural pumpsets, five industrial services and 66 domestic services at Korattur, Padi, Nolaumbur, Mogapper, Adayalambattur and Manur villages in Saidapet Taluk, Chingleput District, at an estimated cost of Rs. 2,55,500.

The Government have sanctioned the following schemes:

Mettur Electricity System.—(1) Extension of supply to 32 agricultural pumpsets and one flour mill at Thurinjapuram village in Tiruvannamalai Taluk, North Arcot District, at an estimated cost of Rs. 92,800. (2) Extension of supply to 22 agricultural pumpsets and two industrial loads at Vengampatti village in Salem Taluk, Salem District, at an estimated cost of Rs. 46,600. (3) Extension of supply to 27 agricultural pumpsets and one industrial load at Namagripet village in Rasipuram Taluk, Salem District, at an estimated cost of Rs. 72,100. (4) Extension of supply to 17 agricultural pumpsets at Errasamudram and Peddanaickenpalayam villages in Attur Taluk, Salem District, at an estimated cost of Rs. 42,000. (5) Extension of supply to 25 agricultural pumpsets, two industrial loads and 19 house service connections at Melapalayam village in Karur Taluk, Tiruchirappalli District, at an estimated cost of Rs. 86,500. (6) Extension of supply to 32 agricultural pumpsets, one existing agricultural load and one industrial load at Lokapuram village in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 83,500. (7) Extension of supply to 22 agricultural pumpsets and one industrial load at Mettupatti and Perumpalayam villages in Salem District, at an estimated cost of Rs. 70,070.

Papanasam Electricity System.—(1) Extension of supply to 28 agricultural pumpsets and 25 house service connections at Sivanandanur, Madathur, etc., villages in Ambasamudram Taluk, Tirunelveli District, at an estimated cost of Rs. 77,200. (2) Extension of supply to 40 agricultural pumpsets at Naranapuram, Alamarathupatti and Poochakapatti villages in Sattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 83,850. (3) Extension of supply to 38 agricultural pumpsets and 88 house service connections at Periaperali village in Sattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 79,500. (4) Extension of supply to 18 agricultural pumpsets and 53 house service connections at Puliyuram village in Aruppukottai Taluk, Ramanathapuram District, at an estimated cost of Rs. 63,060.

Madras Electricity System.—Extension of supply to 142 domestic services at Gandhinagar Colony No. 2, Adyar, at an estimated cost of Rs. 89,800.

Pykara Electricity System.—Extension of supply for agricultural purposes at Thekkalur and Pudupalayam, Avanasli Taluk, Coimbatore District, sanctioning revised estimate for Rs. 1,94,000 and Rs. 1,14,600. Extension of H.T. supply of electricity of 400 K.W. to Bleaching and Printing Factory of the United Bleachers, Limited, Mettupalayam, Coimbatore District, at an expenditure of Rs. 73,000.

Andhra Power System.—Extension of supply of electricity for agricultural and industrial purposes at Kondavaram village, Pithapuram Taluk, East Godavari District, at an expenditure of Rs. 75,400.

Migration and Food

By DR. JULIUS ISAAC

The present unsatisfactory world food situation is partly due to the unequal geographical distribution of the human race. In some countries which are densely populated in relation to the national resources, principally fertile land, at the disposal of the inhabitants, output per head and hence standards of living are extremely low. Other countries, by contrast, are sparsely populated and have large reserves of natural resources which are not fully exploited; in these countries output per head and standards of living are much higher. Moreover, it is precisely in the densely populated countries such as India and China that further rapid population growth is occurring or likely to occur.

In the second group, for instance, in Australia, New Zealand and to some extent in Canada and the U.S., natural increase is much slower and is likely to decline as a result of the further spread of family limitation. Therefore why not move some of these people? Population movements could even out the distribution of human beings over fertile land; 'have-not' nations would gain more than the 'haves' are likely to lose. They could increase total food production, as well as distribute it more equitably, because in new surroundings the work of emigrants from an overcrowded country would be more productive; a Japanese peasant emigrating to California may produce twenty times as much as in his native land. They could raise output per head in the old country by reducing overcrowding.

Even output per head in the new country may benefit from migration if circumstances are favourable; as, for instance, there is a shortage of manpower in California for the type of work the Japanese peasant can do well. Under modern conditions very large transfers would be unlikely to produce such good effects and output per head in California might well be reduced. But, broadly speaking, the great nineteenth and early twentieth century migration from Europe to the new continents of America and Australia did raise productivity in both the sending and receiving countries.

The Factors Involved

Some of the considerations which follow are self-evident, though easily overlooked; others involve value judgments on which it is essential to be clear.

(1) Increasing food production is not an end in itself, but a means of increasing human welfare; the competing claims of other essential human needs have to be taken into account. Similarly, an increase in world food production would be of little value if it were not available to those who need it most. For instance, less than fifteen years ago was 'starvation in the midst of plenty' and an artificial reduction in output. Moreover, many food commodities are not easily interchangeable. Surplus wheat in Canada or surplus meat in the Argentine may not be suitable substitutes for a rice deficit in India.

(2) International trade makes it possible for densely populated countries with little fertile land to reach high

standards of nutrition by exchanging manufactured goods and services for food. However, there may be reasons of a non-economic nature why highly industrialised countries should prefer to produce food which they could import on more favourable terms.

(3) Population is maldistributed within many countries. Thus a conflict has often to be faced between internal movements and national needs on the one hand, and international migration and the need for international equilibrium on the other hand.

(4) In a free society the decision to emigrate is left to the individual. He is normally little concerned with the effect of his migration on the old or the new country. The effects of such movements on the world food situation are thus incidental and not necessarily favourable. It is, however, possible for suitable measures to encourage the outward movement and to give it a desirable direction (assisted migration). Indeed, in theory, adjustment of population to resources could be attained by compulsory population transfers. Such policy, apart from being objectionable on ethical grounds, would be impracticable for reasons given below.

(5) 'Man is of all sorts of luggage the most difficult to transport'. Since Adam Smith made this statement more than 170 years ago the physical difficulties in carrying out migrations have been practically removed. The present shortage of shipping and building material is temporary and in a few years' time it will be technically possible for many hundred thousands of people to go

Food Offences And Punishments Awarded

During the fortnight ending February 15, 1952, 398 cases of prosecutions against food offences were disposed of in the Madras State (except Chittoor District). The accused persons in these cases were people of all classes. Fines, ranging from Re. 1 to Rs. 200 and sentences of imprisonment up to two months were imposed.

Pitchai Servai, a ryot of Tanjore District, was fined Rs. 200 or rigorous imprisonment for three months for illicit transport of paddy. A fine of Rs. 200 or rigorous imprisonment for two months was imposed on Mupparapu Venkata Rao, a cultivator of Annavaram, Krishna District, for failure to deliver surplus paddy.

During the same fortnight, other departmental punishments such as warnings, fines, forfeiture and enhancement of security deposits, suspension or cancellation of retail and wholesale licences, etc., were also awarded to persons, who were dealing in foodgrains, in 204 cases.

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goes in for military training, he would be enabled to lead a disciplined life himself; and by his example inspire others also to be efficient and responsible. As industry unfortunately forms the first target of the enemy's attack in modern warfare, those who are engaged in it should take steps to prepare themselves to defend it even more than others.

Industry apart, every department of national life is important, and every unit of the population has its significance; and all have got to be defended and so all must learn to defend themselves. It is a cruel and shameful fact that unlike wars of old that used to be confined to the combatants themselves while the tiller of the soil drove his plough unmolested in the neighbouring field, and the author wrote his books undisturbed in an adjoining house, today atom bombs destroy whole cities in a trice, killing hundreds of thousands of innocent women, children and old men, who in accordance with the code of honour of the earlier day, enjoyed immunity from all harm. Thus all citizens have necessarily to be always on the alert.

Call to Youth of the Country

The best defence being self-defence and the best form of help being self-help, I fervently hope that the clarion call of the President and our own Chief Minister, inaugurating the Territorial Army Week on November 9, 1952, will meet with ready and enthusiastic response from the men of

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our State; and that all who are entitled to do so will rush to join the good cause. They will receive proper physical training and without causing any interference to their professional work, come for such training only for short periods of the year and at stated and convenient intervals. They will receive emoluments while under training on the same scale as men in the regular Army, grade for grade.

They will learn discipline; they will be indirectly out effectively taught the great and gentle art of leading happy and healthy lives, which will, in turn, enable them to regulate properly and well their own domestic and social situations and surroundings, and will give them that consciousness of self-esteem, self-reliance and self-confidence which alone can make us true citizens of a great and free country; and if, above all this, we are further filled with the fervent faith that we are actively engaged in the nation's defence, and are ever ready for the nation's service, such genuine joy and such justified pride will be ours as will make life worth living. May the appeal that this week stands for, attract tens of thousands of young men in our State of Madras, to join this great voluntary Army, and actively co-operate in the good cause, with all who love liberty and are determined ever to uphold it, unmindful of the price demanded!

Jai Hind!

(A.I.R., Madras)

Your Country Calls You

Join the Territorial Army

The Territorial Army is now three years old. During these three years, this Citizen Army, very much your own, has gained in strength and experience and the units that have been formed have received training which will enable them to take their place, when the time comes, in the country's defence. At ceremonial parades and at State functions, they have already made their mark.

From the very start, the Territorial Army has attracted men from all classes, creeds and communities, and they work together in the utmost harmony. While collectively they have shaped well as units with military training, individually they have added to their skill in and knowledge of various trades, thus improving their prospects in civil life; they have improved in health and the sense of discipline inculcated in them is an asset to them and their country. Whether they have joined as infantrymen or as engineers, signallers, drivers, wireless operators or in any other capacity, the gain immediately is theirs and will be of the country in the future.

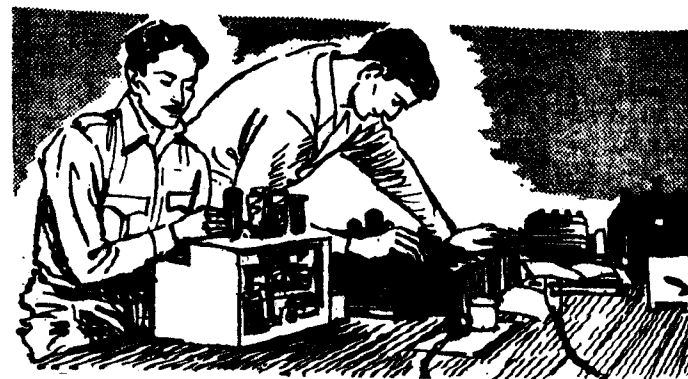
And all that they have learnt or are learning has been in their spare time. For, let us repeat, the Territorial Army does not provide whole-time occupation, but it gives you useful part-time training without interfering with your normal avocations.

A large number of men from cities, towns and villages have joined the Territorial Army, but more are needed. Since the Territorial Army consists of all types of units you can always choose one for which you think you are fitted. Whatever your occupation in civil life, you will find a

Territorial Army unit where your talents can be of value. We cannot all be whole-time soldiers, but we can certainly contribute our spare time to prepare for the defence of our country.

The Role of the Territorial Army

- (1) To relieve the Regular Army of static duties and support the Civil Power if required.
 - (2) To provide coast defence and Anti-Aircraft Units.
 - (3) To provide field formations and units for the Regular Army if and when required.
- If you have time to spare, there could be no better use for it than training in the Territorial Army.



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Age.—All able-bodied persons from unskilled labourers to highly qualified technicians, between the ages of 18 and 35, are eligible for recruitment. The upper age-limit is relaxable in the case of ex-servicemen and civilians possessing technical qualifications.

Service liability.—You will not be required to perform military service beyond the limits of India except under a general or special order of the Central Government.

Recruiting zones.—For the purposes of recruitment, the country has been divided into eight zones. Join one of the units raised in your zone.

Types of units.—If you are a resident of a town or city, join an Urban Unit. If you hail from rural areas, take your place in a Provincial Unit. There is no difference in service conditions. Only the method of training varies so as to suit recruits joining either unit.

Training.—Training in the Territorial Army consists of—

- (a) Recruit Training and Annual Training.
- (b) Voluntary Training on courses of instruction and attachment to Regular Army Units.

Recruit Training.—Provincial Units—30 days annually.

Urban Units—128 hours of drill annually to be undergone in the evening and at week-ends and holidays.

Exemption from Recruit Training may be given to ex-servicemen.

MADRAS INFORMATION



Bridge building

Annual Training.—Every person who has undergone or has been exempted from Recruit Training will undergo Annual Training as follows:—

(a) Provincial Units—For two calendar months annually.

(b) Urban Units—For a minimum of 120 hours of drill up to a maximum of 240 hours of drill per annum.



TERRITORIAL ARMY WEEK: Sri C. Rajagopalachari, Chief Minister of Madras State, recently inaugurated the Third Territorial Army Week in Madras. Major General M. S. Subramanian is explaining the mechanism of an anti-aircraft gun to the Chief Minister.

every year from poor and densely populated areas to wealthy and relatively sparsely populated areas.

But the psychological obstacles to an economically desirable redistribution of population through mass migration have become almost insurmountable. The organisation of mankind in national units has become more rigid. The immigrants, if their language, national or ethnic characteristics differ from those of their new community, are regarded with suspicion or open hostility. If large numbers are involved, there is anxiety lest they form a national minority endangering the traditional way of life and the cultural inheritance of the society receiving them. The economic advantages of immigration to the receiving country have become less obvious and in many cases more doubtful. The 'wide open spaces' of undeveloped fertile land belong largely to the past. Immigrants are now often competitors to established groups in the community, who are apt to organise resistance to immigration and to make life for those who are admitted as uncomfortable as possible. An attempt to enforce immigration under such conditions could not add to human welfare but to the misery of all concerned. The precondition of large scale migration is a climate of opinion favourable to it.

(6) Migration from poor and over-populated countries would be harmful rather than beneficial if the emigrants were only replaced by more rapid population growth in the countries of origin. At the present rate of world population growth it may soon become difficult to provide adequate nutrition for the human race. Movements which are likely to result in an even higher rate of increase must be regarded as undesirable.

Emigration and Asia

The population of Europe had in the nineteenth and early twentieth centuries a safety valve for population pressure by settlement in the empty new continents. This mechanism ceased to operate satisfactorily after 1914 but by that time the need for it had become less urgent. Falling birth rates were preventing excessive increase despite longer expectation of life.

Asia has been less fortunate. Emigration from its populated areas has largely remained within the continent and has been numerically unimportant compared with the populations in the countries of migration.

India, Pakistan, China and Indonesia contain over 900 million people, more than forty per cent of the world's population. These areas have long been subject to what Malthus called 'positive checks' such as malnutrition and famine disease and epidemics, and war.

Efficient methods of family limitation are almost unknown and fertility is high; until recently the standard of living had remained at subsistence level and the positive checks had prevented rapid population increases.

Technical Progress

In the last few decades technical progress has, however, somewhat raised production; with better health services, this has brought about a fall in mortality and hence large population can be further expanded till standards of living in these regions fall again to subsistence level. Indeed, improvements in production and health services

cannot provide a complete solution of the problem. If it were possible to maintain progress in these respects the population in these regions might well double within less than fifty years at standards of living only a little above subsistence level, a prospect which has nothing to recommend it.

We have now to consider whether it is possible to break this vicious circle by mass emigration and to create the conditions which solved Europe's food problem during the period of rapid population a monopoly of the white nations. When in the second half of the nineteenth century immigrants from the Far East began to settle in the U.S.A., Canada and Australia, measures were taken which ended non-white immigration or reduced it to an insignificant proportion of the total inflow. Similar discrimination was gradually introduced in most of the colonial territories of the white powers in Africa, Asia and Oceania.

Asia Offers Few Outlets

Asia has offered a few outlets for the starving masses in China and India as well as for Japan's expanding population. For instance, Chinese and later also Japanese and Korean workers and settlers went by the hundred thousand to under-populated Manchuria. Indians and Chinese went to Malaya, Burma and Indonesia. Under favourable economic and political conditions most of the receiving countries could carry a considerably larger population. Manchuria, with a pre-war population of 35-40 million, could from the standpoint of agriculture alone probably support a population of 100 million and more. Burma, Thailand and French Indo-China, Indonesia, the Philippines and Malaya have sufficient land not now in use or so little in use to make a significant redistribution of population possible. In the case of Indonesia a promising scheme had started before the war for transferring surplus population from Java and Madura to the underdeveloped and less densely populated islands.

Present political conditions in practically the whole of South-East Asia, however, do not conduce to large-scale settlement or to the capital imports which are needed for it.

Plainly, however, these regions can never become an adequate outlet for the crowded millions of India and China. Moreover, their own populations may well grow rapidly. Finally, in the recent past such movements have given rise to racial friction and economic disturbances. On the whole it seems the natives have benefited little from immigration. The same applies to colonial territories. The European powers can defend their restrictive immigration policies in non-self governing territories by arguing that they act as trustees and that the admission of Asiatic immigrants would not conduce to the welfare of the natives. The fact that their standards are often less strict in the case of white immigration may be held against them, but it does not invalidate the argument.

Clash of Interests

The clash of interests would be even obvious if the white nations were to open their doors to Asiatic immigration. Those in favour of such a policy argue as follows: Although the open frontier has disappeared in almost all the new countries, millions more could still be absorbed

and food production could be greatly extended. The claim of the white nations to the lion's share of the world's natural resources is based on power, not on right. Even if large-scale immigration should lead to slightly lower standards of living in the new countries, this sacrifice should be made for the sake of world peace and the welfare of the underprivileged nations.

But there is little evidence, so the argument runs, that mass-immigration, if properly planned, must involve lower standards of living in the receiving countries. Instead of making great efforts to attract immigrants from Europe, which is ageing and relatively well off, the new countries should remove the colour bar and invite settlers from poverty-stricken India and China and over-populated Japan; particularly where there are vast fertile regions which are undeveloped because the climate is not suitable for white settlers.

The Case for Restrictive Attitude

The restrictive attitude is defended on five grounds:—

(1) The volume of immigration which could be absorbed is insignificant in comparison with the number of people needing relief from population pressure.

Against this the Japanese Press, for instance, quoting wartime surveys, claims that New Guinea, populated now by 200,000 natives, could support at least twenty million Japanese. Even if these claims could be substantial and the necessary capital for development were available, it is difficult to see how the political and strategic objection to such schemes could be overcome.

(2) The admission of non-white immigrants, as experience shows, is bound to produce social and racial conflicts which are insoluble. Assimilation of the newcomers and the amalgamation of two entirely different cultural heritages is impossible and undesirable.

(3) The immigrant, because of their high rate of natural increase, would merely produce in the new countries the same over-population and land hunger from which they had tried to escape.

(4) The countries of emigration would not benefit from the emigration of their nationals because population losses through emigration would soon be replaced by gains through falling mortality. The Malthusian positive checks—hunger and disease would soon be in operation again.

(5) The white nations should use their natural resources and superior technical knowledge in a different way. They could make a far greater contribution to the solution of the population problem in the Far East and the same applies to other areas of over-population such as the Middle East and the West Indies—by helping these nations to produce conditions under which there are sustained gains from mortality but under which also such gains are balanced by corresponding losses from falling fertility.

Emigration in World Affairs

What are these conditions and how can they be produced? Here are some of the necessary features:—

Development of industries to support large urban population,

Modernisation and expansion of agriculture,
Promotion of international trade,
Extension of popular education,
Family limitation through birth control,
Better administration and political stability,

Corruption Among Government Servants

During the month of October 1951, corruption among Government servants was brought to notice against 292 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. Corruption was successfully detected in the case of 15 persons and they were suitably punished. Of these, two persons were awarded minor punishments. The names and designations of the 13 persons who were awarded severe punishments are as follows:—

Govindaswami, Head Constable, Madurai Rural District, Achuthan Kutti Nair, Sub-Inspector, Tirunelveli District, Venkataraman, Probationary Sub-Inspector, Coimbatore District, and G. J. Samuel, Fireman Driver (Dismissed); S. Subramanian, Stores Assistant, Electricity Department, M. Madhava Rao, Petty Officer, Excise Department, V. Vaidyanathan, P. A. Munusamy, Manicam, P. Munusamy, Arjunan, and D. William, Prohibition Guards (Removed from service); P. G. Subbiah, Temporary Prohibition Guard (Discharged from service).

During the month of November 1951, corruption among Government servants was brought to notice against 285 persons including those against whom proceedings were pending at the end of the previous month. Of these, five persons were let off as charges against them were not proved. Corruption was successfully detected in the case of 19 persons and they were suitably punished. Of these, five persons were awarded minor punishments. The names and designations of the 14 persons who were awarded severe punishments are as follows:—

K. Iswarudu, Constable, Visakhapatnam District, N. C. Sanjeeva Reddy, Head Constable, Cuddapah District, Guruswamy, Head Constable, Ramanathapuram District, Sheik Moideen, Kalimuthu and Vairavan Chettiar, Constables, Ramanathapuram District, Veerappan and Mohamed Ghouse, Constables, Salem District, Vyapuri Pandaram, Constable, Coimbatore District, Ch. Sambayya, Tahsildar, Guntur District, K. Kodanta Kamath, Revenue Inspector, Sullia, South Kanara District, Muhammed Hussain, Additional First Class Magistrate, Tuticorin (Dismissed); Ch. Venkateswara Rao, Section Officer, Public Works Department, Palacole (compulsorily retired); S. M. Veeranna Thevar, Inspector of Police, Palni Circle (Removed from service).

Proceedings against 261 persons were pending at the end of the month.

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to be completed after working hours in the evenings at week-ends and holidays including an annual camp of not less than four days.

Pay and allowances.—You will receive the same pay and dearness allowance as are given to corresponding ranks of the Regular Army for every day of training or duty. In an Urban Unit, four hours of drill or instruction constitute one day for purposes of pay and allowances.

Clothing.—Other Ranks are issued with free clothing. The clothing will be replaced free of charge, when unserviceable. On commissioning, the Junior Commissioned Officers are given Rs. 200 and the Commissioned Officers Rs. 800 as an outfit allowance.

Rations for J.C.Os. and other Ranks.—When embodied for training, rations are free.

Travelling and conveyance allowance.—Travelling, daily and ration allowances are admissible at the same rates as for the Regular Army.

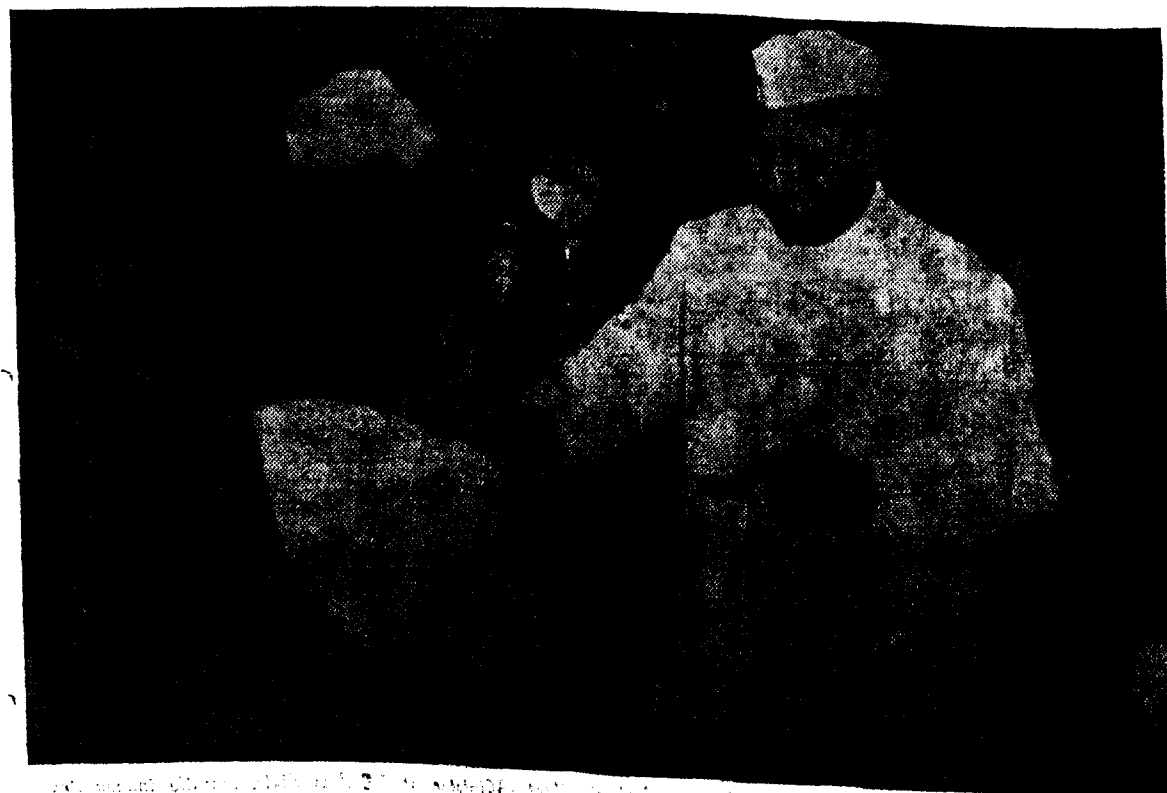
Method of applying (Other Ranks).—Forms for enrolment in the Territorial Army are available from Recruiting Officers throughout India and from Territorial Army Units. The forms for all categories of persons applying for enrolment will be normally completed by either the Unit or Recruiting staff. After the necessary verification, if the applicant is found fit in all respects, a medical examination will be carried out and enrolment completed. For Urban Units only persons residing in the town where the unit is being raised or its vicinity are eligible.

Commissions.—The number of commissions the Territorial Army can offer is necessarily limited. But if you join the Other Ranks, you stand a good chance of attaining a commissioned rank in the Territorial Army or the Regular Army.

Our Aim is Peace But.....

The aim of India's national policy is the maintenance of peace but, at the same time, she cannot ignore the need for efficient defence. There is no time in an emergency to raise and train a large Army. Nor can a large Army be maintained all the time without straining national resources. The obvious alternative is to prepare now and have a reserve. If you join the Territorial Army you help to build up that reserve and—

- * **YOU** serve your country in its hour of need.
- * **YOU** give the Armed Forces much needed support.
- * **YOU** maintain the morale of the people and ensure their security.
- * **YOU** acquire habits of discipline and by your example help to make better citizens.
- * **YOU** get opportunities to improve your technical skill by using up-to-date modern equipment and thus improve your prospects in civil life.
- * **YOU** supplement your income with the Territorial Army pay and allowances which you get in your spare time.



RED-CROSS PUBLICITY: Sri Sri Prakash, Governor of Madras, recently presided over the publicity campaign of the Madras State branch of the Indian Red Cross Society. The picture shows the Governor making his contribution to the hundi collections.

PROHIBITION

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The Course of Alcohol

Here is medical opinion in respect of a particular case. "He has been in England for over six and a half years. He took to alcohol there first as a social habit and had to continue it later as an appetiser. Now without the same he finds his appetite considerably impaired and also he suffers from Insomnia."

It is sad that young people begin with a social habit and end in a state of health when the Doctor has to *prescribe* liquor, thereby condemning the patient to get worse and worse.

C. Rajagopalachari

22-11-1952.

ART EXHIBITION: The Progressive Painters Association recently held their Ninth Annual Exhibition at the School of Arts and Crafts Madras City. Sri C. Rajagopalachari, Chief Minister, who opened the Exhibition, is seen here before Sri Dhanoo's study of Mahatma Gandhi.



Destruction of the caste system and other social obstacles to individual advancement.

As a complement to such a policy of raising standards in densely populated backward countries sparsely, populated underdeveloped regions should also be taken in hand. For instance, irrigation could turn many meagre areas in the Middle East, America, Australia and elsewhere into intensely cultivated territories.

In this setting the contribution of international migration can be seen to be real, though limited.

It would relieve the pressure of population during the initial phase of rising standards and so help to maintain the progress. Thus it would facilitate the transition to lower human fertility in countries of excessive increase.

It would be the means of settling in sparse areas, once developed, with millions of farmers, who ought to be able to exchange much of their production for manufactured goods.

All this is a tall order. Such projects can only be carried out if they are backed by the resources of the advanced Western nations.

Work of International Agencies

The larger part would probably be needed for rehabilitation and development in the countries of population pressure, but the opening up of underdeveloped areas for the settlement of immigrants would also require substantial amounts. Investment of these kinds may be bad policy from the short-term business point of view, yielding no interest and perhaps even lowering consumption in the wealthier countries. In the long run and in terms of international welfare and peace probably no better investment could be thought of. The resources are limited and much painful discrimination between projects will be necessary. Such discrimination would have to take account of the willingness of the beneficiary countries to admit settlers from the distressed areas of rapid growth. For little relief can be expected from international population movements if their volume is still determined on either side, sending or receiving, by national self interest on racial prejudice.

A change of attitude is required, a transformation of outlook. It will not emerge spontaneously, and grave responsibility therefore rests on the various international agencies concerned with Food and People. The problems of migration are dealt with by the International Labour Organisation, by the International Refugee Organisation and by various Councils and Commissions of the United Nations Organisations. The Food and Agricultural Organisation and the World Health Organisation have to cope with the nutritional side of the problem. The International Bank of Reconstruction and Development, the International Trade Organisation and, finally, UNESCO will have important contributions to make. Whether international co-operation organised on this 'functional' basis will be equal to the task of resolving the conflicts which prevent better adjustment between population trends and food production may be a question worth discussing.

Truman's Point Four

Materially, these projects have been raised to practical politics by President Truman's inaugural address of

Relief Measures in Cuddapah District

The Government have sanctioned the execution of 52 road works, costing Rs. 7,92,500, for providing employment to agricultural labourers affected by adverse seasonal conditions in Cuddapah District.

An additional allotment of Rs. 1,94,760 has also been sanctioned by the Government for meeting the expenditure on Rural Water Supply schemes in Cuddapah District.

January, 1949. As his 'fourth point' he proposed 'a bold new programme for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas—our aim should be to help the free peoples of the world to produce more food, more clothing, more materials for housing, and more mechanical power to lighten their burden.'

Finally, in May, 1949, the United Nations published a report setting forth 'a comprehensive plan for an expanded programme of technical assistance for economic development through the United Nations and its specialized agencies, paying due attention to questions of a social nature which directly condition economic development.' The report states 'while it is improbable that migration will be as important in the twentieth century as it was in the nineteenth, it can still make a substantial contribution to underdeveloped countries where the population is relatively sparse. . . . Under modern economic and social conditions successful migration, either for employment or settlement, requires careful technical planning in which international technical assistance can be of great value to the country receiving the migrants and to the country from which they come.'

(Adopted from the booklet *People on the Move* published by the Bureau of Current Affairs, 117, Piccadilly, London, W.1.).

Chief Minister's Appeal

(Continued from page 3)

No violent changes will produce good. By wiping out large masses of people and indoctrinating the remaining citizens for two or three generations we could produce a picture of homogeneous comfort which we could exhibit in photographs and on the silver screen. But this is no good. Means as well as ends should be good.

Indeed, ends are in the hands of God but we are responsible for the rightness of the means we employ. We are not responsible for ends attained, but we are fully responsible for the means we employ.

Brothers and sisters, pray for rain; pray for the poor and distressed in our land. There is no problem in our politics other than the problem of poverty and distress. No man can be happy when people around him are in distress.

(By Courtesy, A. I. R., Madras)-

Agricultural Department in 1950-51

Reviewing the administration of the Agricultural Department for the Fasli year 1950-51, the Government have observed that the work of the Department during the year under review was quite satisfactory, although the continued unfavourable seasonal conditions retarded its activities. The Government have called upon all ranks, from the lowest to the highest in the Department, to put forward their best endeavours in increasing agricultural production and helping the State to achieve economic prosperity.

The following are other salient features of the Government's review:

Food Production.—The main agricultural schemes worked during the year related to mechanised cultivation by tractors and bulldozers, mechanical aids for lift irrigation by supply of oil engines, electric motors, and river pumping installations, supply of manures, improved seeds and iron and steel, propaganda and publicity, and control of pests and diseases of crops. Under the scheme of mechanised cultivation, 268 tractors (136 with bulldozer attachments) were distributed among the several districts for hiring to ryots and an area of 66,720 acres was brought under cultivation by means of these tractors, as against 44,630 acres in the previous year. One thousand seventy-five oil engines and 189 electric motor pumpsets were issued to the ryots under the hire purchase system, which has become very popular, as against 207 oil engines and 49 electric motor pumpsets, issued during the previous year. Under the scheme of distribution of manures, 78,638 tons of ammonium sulphate, 12,203 tons of superphosphate, 95,983 tons of rural compost, and 131,366 tons of urban compost were distributed. Under the scheme of distribution of improved seeds, 8,211 tons of improved paddy seeds were distributed. Three hundred and one tons of improved millet seeds and 720 tons of green manure seeds were distributed.

Cotton Extension Plan.—The additional production achieved during the year is estimated at 47,390 bales, as against the target of 99,390 bales. The cultivation of cotton in the off-season fallows and rice lands in Tanjore District has been popularised.

Agricultural Education.—The total number of applications for admission into the Agricultural Colleges at Coimbatore and Bapatla was 644, as against 471 in the last year. Ten selected ryots were given training for one month in the practical aspects of dairy husbandry.

Agricultural Research.—Though no strikingly new results have been achieved in any field of agricultural research during the year, the work carried on in the different sections has been on the whole satisfactory. In view of the continuing droughts, the need for crop breeders to evolve or select strains which will stand periods of drought or uneven rainfall, cannot be too strongly emphasised.

Agricultural Credit.—The Agricultural Department distributed Rs. 21.97 lakhs as interest-free loans to ryots for the purchase of manures and seeds and Rs. 0.29 lakh for the purchase of agricultural implements. The special scheme for loans for the purchase of ammonium sulphate in intensive cultivation areas greatly benefited the ryots.



FAO CHIEF AT COIMBATORE: Dr. Norris E. Dodd, Director-General of the Food and Agriculture Organisation, recently visited the Paddy Breeding Station at Coimbatore.

Loans to the extent of Rs. 61.36 lakhs were distributed under this scheme.

Distribution of Improved Seeds

The scheme for the distribution of improved seeds to the ryots in the interior villages of West Godavari, Krishna, Tanjore, Tiruchirappalli and Malabar Districts through selected seed farm ryots at the rate of one seed farm ryot per district on payment of a commission of Re. 1 per bag of 125 lb. seeds sold, has been successful and the State Government have ordered that the scheme may be extended to all other districts at the rate of one seed farm ryot for every taluk, instead of for every district. The Director of Agriculture has been requested to select the right type of seed farm ryots for the distribution of improved seeds.

Officers of the Agricultural Department will inspect the seeds distributed by these ryot-distributors to ensure that the seeds are really pure and viable. Necessary testing facilities will be provided in the office of each Agricultural Demonstrator so that the seeds may be tested whenever the ryots want to have a test. It is hoped that the supply of pure and selected seeds will increase the yields of crops and solve our food problem.

FORT ST. GEORGE GAZETTE

NOTIFICATION

Due to increased cost of production, Government have decided to increase the rates of subscription for *Fort St. George Gazette* and its *Parts*. The revised rates of subscription will take effect from 1st January 1953 and will be as shown hereunder:—

Description of the Fort St. George Gazette.	Subscription.			Postage.			Period.
	RS.	A.	P.	RS.	A.	P.	
1. Full Gazette and all supplements including Rules with vernacular supplements in one language (ONE SIDE PRINTED).	25	0	0	1	8	0	Per quarter of any three months beginning from the first of any month, payable in advance.
2. Do. do. (Ordinary)	15	0	0	1	8	0	
3. Gazette with Rules Supplements only	6	0	0	1	0	0	
4. Part I—Containing notifications by Government with all supplements including Rules.	4	0	0	1	0	0	
5. Part I-A—Containing Local and Municipal notifications, with all supplements including Rules.	1	8	0	0	8	0	
6. Part I-B—For Educational matters only with supplements including Rules.	2	8	0	1	0	0	
7. Part II—General notices by all Departments with all supplements including Rules.	3	8	0	1	0	0	
8. Part III—Containing Acts and Bills of the Union Legislature with vernacular supplements in one language only.	1	8	0	0	8	0	
9. Part IV—Containing Acts and Bills of the Madras Legislature with vernacular supplements in one language only.	2	8	0	1	0	0	
10. Rules Supplements (Part I, I-A, I-B and II)	1	0	0	0	8	0	
11. Statistical supplements to Part II	1	0	0	0	8	0	Per annum.
12. Wholesale price-list of commodities	1	4	0	0	6	0	
13. Monthly retail list of commodities	0	6	0	0	3	0	

Note.—(1) The postage for supply of two or more Parts together is limited to the maximum of Rs. 1-8-0 per quarter.
 (2) Revised rates are applicable in the case of existing subscribers only when their present subscriptions lapse.
 (3) New subscribers or those who renew their subscriptions between 1st October and 31st December 1952 will be enrolled at the existing rates for a quarter only and at revised rates thereafter.

RURAL RECONSTRUCTION

New Life in the Village

The Tirumangalam Story

The story is set in an obscure village in Madurai district; little was known or heard of this village—and like other villages, this one was steeped in ignorance, poverty and want—want of material needs and moral strength to get the things they were in need of done by their own efforts. Life in the village went on in the old sullen routine—with an occasional grouse against Fate which did not smile at them, and the Government which is usually blamed for all shortcomings, until one day the village was roused by a hitherto unheard-of experience. A young man, who seemed educated and better off than they were, made his appearance in a peculiar way. He did not wear pants and coat and hat. He was dressed in neat simple clothes. He was not followed by a train of suitcases and a hold-all; he appeared with a broom in hand; and what really first amused, then intrigued and finally interested the astonished villagers was that he used the broom himself. He actually swept the streets; not in that superior, symbolic way; not as a pastime; but seriously, intensely, he handled the broom as an expert sweeper and cleaned the street.

It did not take long for the intelligent villagers to see that the young man was a genuine worker who had come with a noble purpose; they ceased gazing at him in wonder or amusement; they joined him in the work; they knew he had come intent on making the village clean—and they saw what they had failed to see till now—that a clean village was conducive to their own well-being.

They had heard platform speeches on village uplift and once in a way they had also seen a magic lantern show on sanitation. But this was something new. This new type of worker did not get away after a lofty speech. He took the broom and started cleaning the village. He dug compost pits; he did countless other jobs which the villagers had neglected to do themselves. He was not alone in the work; others like him came and joined and shared the work; the villagers now woke up and they too joined in the community service. The new gospel—the harmony of theory and practice—spread. More wells were dug and deepened, roads constructed, bunds erected, with Gramasevaks and villagers working hand in hand. This happened in several villages.

“New Life” Movement

A “new-life” movement spread in the Tirumangalam firka of Madurai district. The Firka Development or Rural Welfare Programme adopted by the Government in the last quarter of 1946 has taken a deep root there. The scheme which was introduced first in 34 centres, was later extended to 50 more centres in 1950 and to another 24 centres in 1952. The Tirumangalam firka now consists of 261 villages including hamlets. The total population of the area comes to 152,062. The firka has now become a model one in the southern area.

Observers have been struck by the amazing change that has taken place in the villages that comprise the Tirumangalam firka. What has contributed to this striking success? After seeing the band of selfless workers at work in Tirumangalam a few answers or guesses can be hazarded.

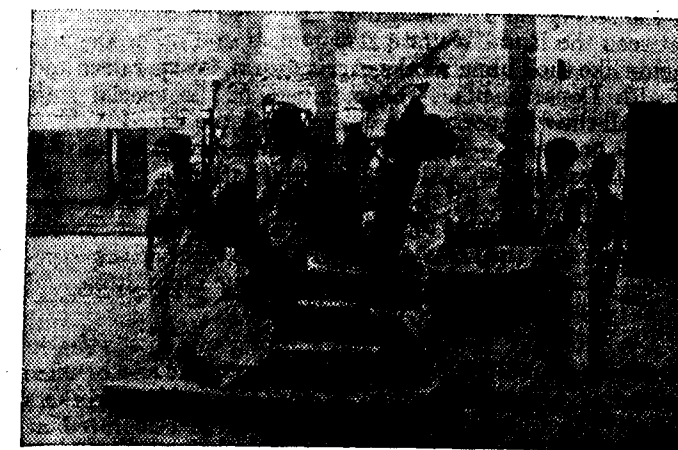
The village workers at Tirumangalam have learnt the truly human way of approach in rural uplift and development. These workers do not consider themselves as just periodical visitors or supervisory counsellors administering once in a way pontifical advice. They are among the villagers whose regeneration is their motto. The result of this complete identification with the villagers has had the most salutary effect. Whole families have joined in the community service of rehabilitating the villages. That natural hostility towards any ostentatious programme of welfare work enforced or imposed from outside is nowhere in evidence in Tirumangalam. There is not a single self-conscious or self-proclaimed saviour in Tirumangalam. Not even the most critical observer can come across a feeling of inferiority complex or helplessness in the attitude of villagers. And this is remarkable, particularly because large numbers of the villagers are composed of Harijans, Kallars and Thevars, supposed to belong to backward communities.

This selfless merging by the Rural Welfare workers is having a profound and lasting psychological effect on the outlook and attitude of the communities in villages. The so-called backward communities have ceased to feel and look so.

Village Leadership

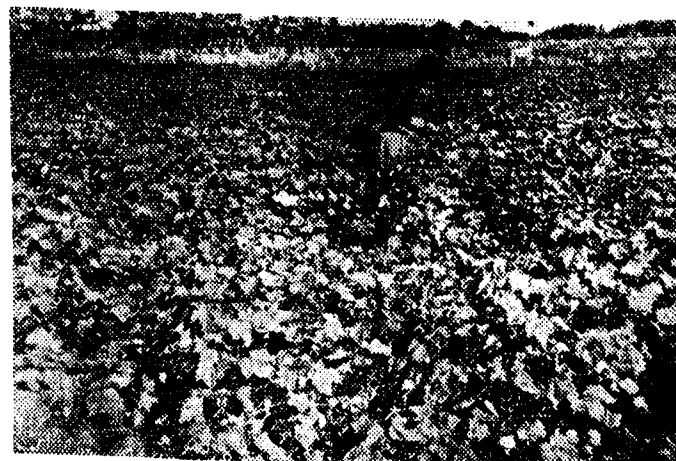
Another important factor that has contributed to the striking success of the Rural Welfare Scheme in Tirumangalam firka has been the creation of sound village leadership in every village. Grama Seva Sanghams have been organized in almost every village under the leadership of elderly and respected persons. The sanction behind every scheme or work carried out so far in Tirumangalam has been this unity forged in villages, making possible a united action for a common, agreed cause. This local leadership and unity of action give the courage to the people to execute schemes involving considerable cost with just the minimum aid from the Government, sometimes even without it.

Just one example, out of many, may be cited in this particular context to illustrate how this leadership can



MUSIC : Bhajana party in the little mandapam in front of the village library

Cotton Cultivation in Rice Fallows



On account of acute shortage of cotton in the Indian Union, it has become imperative to increase the production through all possible resources. With a view to augment the production of cotton, experiments were conducted in the Agricultural Research Station, Aduthurai, to cultivate a new short duration variety of cotton imported from Punjab, viz., P 216F, by sowing the seed in wet lands during the fallow period after the harvest of paddy.

Finding that these experiments have proved to be successful, large areas were brought under cultivation in the last year in Tanjore District by importing this variety from Punjab. The cotton crop grew well, flowered normally, set bolls freely and yielded up to 1,000 lb. of seed cotton per acre. The results obtained in some of the important villages are given under:—

Name of the village.	Date of sowing.	Area sown in acres.	Yield of kapas in lb.	Acre yield of kapas in lb.
Thopevattaram	23rd January 1951	3.50	2,700	771
Alalgadu	18th January 1951	3.50	1,800	514
Ennanallore	14th February 1951	4.00	1,600	400
Vanathirajapuram * ..	4th March 1951	0.80	725	906

* Picking had not been completely finished.

These two photographs illustrate the actual crop standing in the field in two villages, viz., Ennanallore and Vanathirajapuram in Tanjore District. The ryots were not only benefited on account of cultivating cotton as an off-seasonal crop, but they were also able to get from 4,000 to 6,000 lb. of green matter per acre which added to the fertility of the soil and thereby increased the yield of the succeeding paddy crop appreciably.

Mixed Crop with Rainfed Paddy

Madras Uganda I Cotton tried as a mixed crop with rainfed paddy in Chingleput District was a success, as the crop when dibbled in lines 16 feet apart gave an acre yield of 109 lb. of kapas when the paddy crop completely failed. The cultivation of this crop mixed with rainfed paddy will ensure a steady income even in seasons when the paddy crop fails.

Cotton in rice fallows.—Growing early Punjab variety of cotton after harvest of paddy in wet lands particularly in Tanjore, South Arcot and Chingleput Districts has proved to be profitable. Experience has shown that it is advisable to sow the cotton seeds within a week after the harvest of paddy, taking advantage of the existing moisture in the soil.

During 1951, cotton crop was gappy in many of the fields. To avoid this, the following method of sowing to improve germination of seeds and population of plants

is suggested. Secure cylindrical wooden pegs 6 inches long $\frac{3}{4}$ inch in diameter with one end prepared to a conical shape up to one inch. Make depressions up to a depth of 1 inch with the conical end at 6 inches apart in rows and spaced 2 inches apart. Drop two or three good cotton seeds in each depression and cover the seeds with a handful of wet loamy soil. Soil from the paddy fields itself, if it happens to be clayey, should not be used for covering the soil as such a sticky soil retards the emergence of the germinated seeds. By covering with wet loam, 93 per cent of the holes had plants on the fifth day of sowing whereas only 49 per cent of the holes had plants when clayey soil of the paddy field was used for covering. Thus, 44 per cent extra stand was obtained by practising the above method of sowing which will materially contribute to extra yield as well. Ryots growing cotton in rice fallows are requested to practice the abovementioned method of sowing with benefit to themselves.

India's Best Cow

"Gulzar," adjudged to be India's best cow, won the Indian Council of Agricultural Research prize of Rs. 1,000 recently given away by Sri K. M. Munshi. The prize given to the best cow in India was donated by Sri Purshottamdas Thakurdas of Bombay.

Five and a half year old "Gulzar", owned by His Holiness Satguru Partap Singh of Jiwan Nagar, in Hissar District of Punjab, has already won five awards. It is a *Sahiwal* cow which is considered to be the best Indian milch breed. The lactational average of selected herds of this breed is between 6,000 to 7,000 lb. The prize winning cow's yield was 6,000 lb. during first lactation and 7,500 lb. in second lactation. She comes of a dam whose milk yield has reached 9,000 lb.

The original home of the *Sahiwal* breed is Montgomery District of Pakistan. Several pedigree herds of this breed are being developed in Punjab, Delhi, Uttar Pradesh, Bihar and Madhya Pradesh. Efforts are being made to multiply them as rapidly as possible.

Pilot Survey on Crop Production Costs

The Government have ordered an enquiry into the cost of production of crops on a random sampling basis, in accordance with a prepared scheme.

The enquiry contemplated by the scheme will be exploratory in character and will be in the nature of a pilot survey. It will be directed mainly towards finding out the total farm costs and the cost of production of the major crops in the holdings and localities to be selected. The villages and holdings, for the purpose of this enquiry, would be from among the villages chosen for crop cutting experiments, excluding those selected for experiments on Grow More Food aids.

This action has been taken, in view of the importance of cost of production studies, for evolving agricultural policies and development programmes and also for formulating suitable price policies.

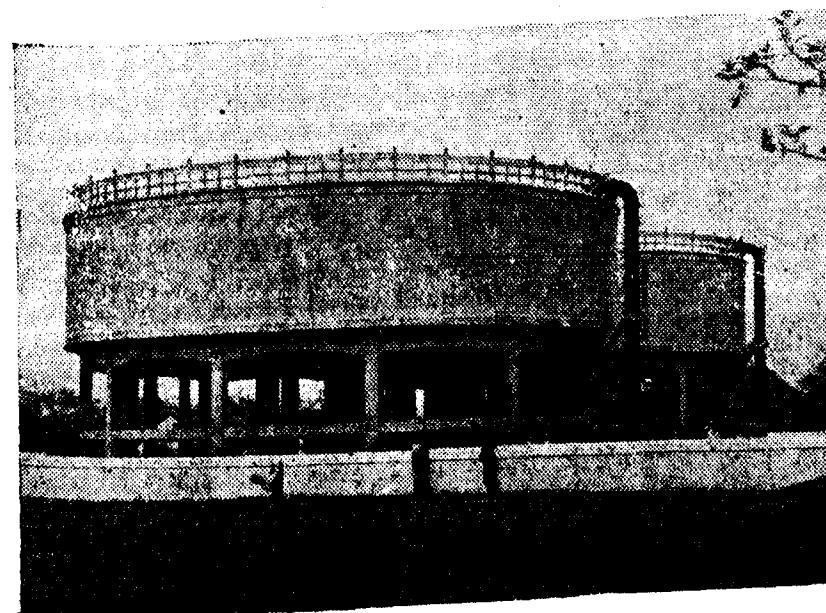
State Extension Board

The Government have constituted a State Extension Board, consisting of the following persons:—

The Hon'ble Minister for Agriculture and Animal Husbandry—Chairman, the Commissioner for Food Production—Vice-Chairman, the Director of Extension (to be appointed)—Secretary, the Director of Agriculture, the Director of Animal Husbandry, the Chief Conservator of Forests, the Chief Engineer for Irrigation, the Registrar of Co-operative Societies, the Director of Rural Welfare and Ex-officio Joint Secretary to Government, Rural Welfare Department, the Chairman, Agricultural Research Council, Coimbatore, five non-officials, representing agricultural and rural interests (including one or two temporary honorary propagandists and registered model farmers), two non-officials, one each from the Board of Honorary Visitors to the Agricultural Colleges at Coimbatore and Bapatla.

The District Food Production Committees will do the work of fostering the development of the extension activities in their respective districts.

This action has been taken in pursuance of the resolution adopted by the joint meeting of the Advisory Board and the governing body of the Indian Council of Agricultural Research, held at Dehra Dun on May 8, 1951, recommending the implementation of an Extension Scheme for the country, so that the results achieved by research in the various spheres of Agriculture, including Animal Husbandry, Forestry and Fisheries, might be brought to the door of the cultivator and he be persuaded and helped to adopt them.



WATER TANKS: These two reservoirs in the Salem Water-Supply System, each have a capacity of 250,000 gallons.



FOOD : Communal pounding of rice

function in terms of equity and profound social justice. The people of Deivanayagapuram decided to have a complete masonry drainage with disposal pits for their village. They had it. It was a drainage scheme worthy of any municipality. This was how they carried it out. The cost came to more than Rs. 5,000. The villagers decided to levy Rs. 2 on the basis of every acre of land owned. Thus the owner of 10 acres or 15 acres had to contribute Rs. 20 or Rs. 30 respectively. Those who owned no lands, but had carts had to contribute the free use of their carts. Those who owned neither lands nor carts had to contribute labour. The Government contribution for the work was only Rs. 500. The people of Deivanayagapuram thus had their drainage work completed.

Co-ordination

An important factor that has contributed to the success of the scheme in Tirumangalam firka is the co-ordination between the Rural Welfare Department and other Departments like the Public Works, Agricultural, Co-operative and Health Departments. The members of the special staff from all these Departments worked with the Rural Welfare staff as one team. There is no isolated activity by any of these Departments. All fit into one pattern. At every monthly meeting of the District Welfare Committee, a co-ordinated plan by all Departments was drawn up for execution and the same discussed on the basis of the experience gained, at the next meeting of the Committee, and fresh plans for the next month drawn up.

A noteworthy feature in the working of the scheme in Tirumangalam is the new spirit of camaraderie and oneness prevailing among the villagers and the welfare workers alike. The Constructive Workers' Day is celebrated at least twice in a month. The day is celebrated in villages when the entire Rural Welfare staff and the local Grama

Seva Sangham evolve a common programme for work, and also execute works of an urgent and immediate nature. Intensive sanitation, mass spinning, cosmopolitan dinner, games, public meetings, and community prayer are also arranged during the day. Usually prayers are conducted in places which are found most insanitary in the morning, but cleaned up by the villagers during the day.

Achievements

In the five years of the working of the scheme, striking results have already been achieved. Quite a number of substantial ameliorative works have been carried out by the villagers themselves through their own efforts. The improvements to the Kallanai Tank carried out with the entire village turning out to the work spot, is one such inspiring example.

In the Kallanai Tank, with an ayacut of 180 acres, it was found that the crest of the dividing dam was lower than that of the full tank level and consequently when the tank got its full level, water backed up and flowed into the supply channel itself. Sufficient water could not therefore be stored up for irrigation.

Two alternative proposals came up for consideration. One was to raise the crest of the dam and the other to extend the tank-bed at the right flank by putting a new bund of about one mile in length. The Public Works Department had objections to raising the crest level. The estimated cost for extending the tank bund came up to Rs. 30,000. The villagers decided to take up the work themselves. Today, the bund work has been more than half completed. The labour involved is stupendous. Even with the work so far completed, the villagers of Kallanai were able to raise one good crop for the first time in ten years. The work is going on with undiminished enthusiasm.

They Deepen a Tank

The story of the Vidathakulam Spring improvement is another instance of self-help. There was a small natural spring 80 feet by 30 feet and 8 feet deep lying in irregular shape. This was found to be a permanent source for water-supply. The villagers kept petitioning the Government to deepen the spring and to dig a supply channel to the paddy fields. During the Grama Sevak Constructive Workers' Day in September 1951, at the instance of the Rural Welfare staff, about 200 villagers gathered with implements and worked for the whole day from morning 8 a.m. to 5 p.m. The work was continued for a few days more and the villagers were able to remove the silt completely and dig a supply channel extending over 3,000 feet. The tank is now full and the villagers are now using the water for irrigation purposes.

Improvements to the Muruganeri village tank were also effected in the same spirit by a land army of the villagers. This is a rainfed tank with an ayacut of 101 acres. The bund was irregular in shape, having too many curves. The tank also did not have any arrangements for storing the surplus water. Without improvements, the tank was totally inadequate for the purpose of irrigation. The extension of the tank bund and the construction of a masonry weir alone could improve the tank.

The villagers joined together and formed a land army. It was decided that each household should send a representative for work or lend his cart or pay cash in case he could not contribute labour. The work on the tank bund was completed.

The work on the masonry weir at the right flank was also entrusted to the Grama Seva Sangham without letting it on contract. The work, supervised departmentally, is also proceeding.

Within a Month

Another work carried out by the villagers in this firka and now substantially helping agriculture through irrigation is the deepening of the Urandauppanur village tank. This work was pending for the last two years. The villagers then decided to take up the work in their own hands. On a voluntary basis, the villagers excavated the tank to a depth of about 10 feet over a range of 100 feet x 60 feet and the work was completed before 15th July 1952—within less than a month of the taking up of the work. A pumpset was also fixed under the Kallar Reclamation Scheme and the improved tank is now capable of irrigating about 100 acres of land.

Another sphere in which substantial results have been achieved is in the sphere of construction of village roads. The Karisalpatti village was not accessible by any good road for a length of about two furlongs. People had to trespass through private holdings and it was felt very difficult to take bullock carts and cattle from the village to the fields.

300-Yard Road in One Day

On 29th January 1952, a Constructive Workers' Day, about 200 villagers gathered at 8 a.m. with the necessary implements and started the road work. The whole day they worked. About 300 yards length of road was completed on the day. The long-felt need for an approach road had taken shape through their self-efforts without depending on any other source. The estimated cost of the work done during the day amounted to Rs. 500.

Ten per cent Cut in Pay for Government Servants

In view of the present acute financial position of the State, the Government have decided that a cut of 10 per cent should be imposed in the pay of all Government servants under their administrative control drawing a pay above Rs. 300 per mensem. The Government of India are being addressed for the issue of an order or rule by the President to enable this Government to give effect to the cut in respect of the officers serving in this State who are under the rule-making control of the Government of India.

The Governor and the Ministers have voluntarily agreed to the cut in their salaries.

The cut will be in force for 12 months from 1st January 1953, i.e., the cut will begin to operate from the pay for December, 1952, to be disbursed in January 1953. The first Rs. 300 of a Government servant's pay will not be liable to any cut. It will not apply to dearness or any other allowances. The cut will apply to pensioners who are re-employed under the Government and their liability to the cut will be determined by their total emoluments made up of pay and pension (of course excluding dearness allowance and other compensatory allowances, etc.).

Dearness and other allowances will continue to be calculated on the pay without 10 per cent cut.

Again, recently, the villagers constructed a road one mile and two furlongs long at Orapanur connecting Keelavarappanur to Urandauppanur. The work was completed in seven days. The road was opened by Shri Sri Prakasa, the Governor of Madras, during his recent visit. The villagers promptly named it 'Sri Prakasa Road'.

During the five-year period, 26 road works were sanctioned covering about 40 miles of which 20 are nearing completion. The total amount sanctioned by Government was Rs. 90,000. Villagers in many cases surrendered lands free of cost for laying the roads or paid in cash one-fourth of the cost of the land acquired. In all cases, they contributed at least one-fourth of the cost for the execution of all the road works.

Water-supply and Drainage

In the sphere of rural water-supply, the villagers in Tirumangalam have achieved magnificent success. Everywhere one sees beautifully constructed wells, kept under most sanitary conditions. One hundred and thirty well works were completed during the years 1947—1952 at an estimated cost of Rs. 1,39,500 of which Government sanctioned Rs. 89,000. The balance amount, viz., Rs. 50,500, was contributed by the villagers.

Another sight, unusual in an ordinary village, is the pucca masonry drainage constructed in several villages with competence and even artistry. Most of these drainage

Two 'Vegetarian Fishes'

By SRI V. D. SPURGEON, Head of the Fisheries Section, Central Polytechnic, Madras

Today the food scarcity in India in general and Madras State in particular is acute. We are forced by circumstances beyond our control to manage on meagre rations. The Government and public spirited individuals voice forth their concern over this disquieting situation from the platform and through the press and appeal to us to follow rigorous measures of austerity, to change the dietary habits and also to grow more food. The public must rise up to the occasion. We should economise in the use of rice, change slowly to wheat, vegetables, etc., and grow food of all kinds.

In attempting to "grow more food" emphasis is always laid on growing more paddy alone. Recently growing fruits and vegetables is also included in the programme. But besides our staple diet rice and vegetables, there are some products which can be styled *protective foods*. Nutrition workers and doctors call these "protective", because they maintain the stamina of people at a high level and thus protect them from tuberculosis, malaria, anaemia, diarrhoea and other diseases. They are also called 'nutritive' foods for they are essential for good growth and for the repair of tissues damaged by daily work and by ill-health. These protective foods are milk, butter, eggs, meat and fish.

Fish as Protective Food

Can we grow fish-food in our garden pool or cement cistern or large tank as the case may be? In Bengal it is a common sight to see one or more ponds in every house compound. Others there own a tank or a swamp outside the town wherein they grow fish for their own use. That is quite easy in Bengal where by Nature's benevolence there is a mighty river system (Ganges) and good fish fry sources. The peasant, the landlord, the businessman or the officials can collect fry 'from river' or purchase 'spawn' (fish eggs and larvae) from a fry merchant and throw it into his otherwise useless tank and reap a good harvest of fish from time to time. Nothing is spent on food of fish or upkeep of the water source.

In Madras the condition is slightly different. Such a mighty river is not found here but yet we have our Godavari, Krishna, Tungabhadra, Pennar, Cauvery, Periar and Tambaraparani. In the deltaic regions through which these rivers flow (viz., the Godavari, Krishna, Kurnool, Nellore, Tiruchirappalli, Tanjore, Madurai and Tirunelveli Districts) are found innumerable tanks, ponds, swamps, pools, puddles, lakes, reservoirs, etc. Some are perennial, while others are long and short seasonal. These lie fallow for most of the time. Water is drained for irrigation throughout the year. Seldom do we think of harnessing water sources for purposes more than one. In some places with the existence of natural facilities water is impounded and made to produce electricity. The other use, namely, of growing fish in them side by side with agricultural and electrical interests has not been fully examined.

The Fisheries department is doing a lot these days in utilising larger sources of waters. It is the aim of this

article to show how best individuals who own even a small piece of water, say even one acre of waterspread or a garden pool or a large ornamental cement tank in a park or garden or in bungalow premises could contribute their mite in the national struggle to increase *protective food* supply.

If we go round the city and see public parks and gardens, we never fail to see ornamental pools in each place. Do these yield any fish? If we make our inspection more intensive and pay visits to bungalows and houses with a garden, don't we come across countless large ornamental cement tanks and cisterns? Do these yield at least a few pounds of table fish? To a layman these small water sources may seem unsuitable for fish culture. Yet two of the best table fishes can be comfortably grown, bred, and fattened for the table in limited spaces. They live on water plants alone, hence they can be termed "Vegetarian fishes."

The Gourami

Gourami is the popular English name of an exotic fish now established in Madras. The scientist calls it *Osphronemus Goramy*. In Tamil areas it is known as *Sangara*; there is no name for it in Telugu.

It is a native of Java and in the year 1866 Sir William Denison—then Governor of Madras—imported it. A few Gourami were introduced for the first time in Guindy and Mount Road Government Houses. This attempt by a non-technical officer was a great success and today we have Gourami everywhere, thanks to the far-sighted efforts of Denison.

Gourami is a remarkable fish. Firstly, it has a graceful form with two long filamentous rays—one on each side starting from the ventral fins. The body is compressed and broad. The rate of growth is 4" in the first year, 8" in the second year and 11" in the third year. The maximum growth is 24" and weight 8 lb. Usually the growth is 18" and weight 4 lb.

The fish fattens on artificial diet as oilcake-paste and bran. It is primarily a vegetarian. It eats with great avidity waterlilies, lotus, Hydrilla, Vallisneria and other weeds. Therefore it is easy to feed the fish. A tank filled with water weeds or a garden pool or cement tank of even 24' depth where water weeds have been transplanted are ideal for this fish. Occasionally it swallows a worm or insect.

Gourami can be Tamed Easily

It is an air-breather also. Besides inhaling air dissolved in water through its gills, this fish frequently ascends to the water surface, thrusts its robust snout outside the water and gulps in pure air and withdraws to the bottom. This habit is welcome as incidentally it offers a pleasing sight to onlookers. In public parks where I introduced Gourami, the public used to flock to see the rising and disappearing Gourami.

If treated gently it responds admirably. If you regularly feed a pair, say at 5 p.m., the pair comes up sharply at

Training in Gardening

The Agri-Horticultural Society, Madras, will start another course of training in gardening on the 1st July 1952 covering a period of 12 months. Applications must be made on the prescribed form which may be obtained from the Honorary Secretary. The last date for the receipt of applications is the 5th June 1952. Applications received after that date will not be considered.

Eight candidates will be admitted to this course. They will receive a monthly stipend which will be decided upon by a special selection committee. A portion of the stipend will, however, be withheld and paid as a reward only upon satisfactory completion of the course.

Four more candidates who may be deputed by District Boards, Municipalities, or Institutions, will be admitted. A fee of Rs. 50 will be charged per head in this case.

Candidates must be males not below the age of 15. They must be literate in one of the vernaculars and must be able to read and write in their own vernacular. Those students who complete the course of training satisfactorily will be granted a certificate from the Society. In view of the increasing demand for trained gardeners, it is expected that all the men so trained will be suitably employed.

Applicants must be of good physique and must be prepared to do manual work.

They will be selected by a special committee and should be prepared to come for interview to Madras at their own expense.

DR. RICHARD APPEL,
Honorary Secretary.

The Agri-Horticultural Society,
Cathedral P.O., Madras-6.

5 o'clock and looks up for food. If the feeding has been regular it follows you around the tank expecting tit-bits. You can have oilcake-paste rolled into small pellets or bran or a piece of bread or a shoeflower in your palm and hold it almost on level with the water surface. Then the fish picks it up gracefully from your palm, gulps it and goes down to reappear for a second course, if you are generous enough. It is easy to keep Gourami in a glass table aquarium. Students are taught in the Central Polytechnic how to keep it even in small glass jars. It is most interesting to watch its movements.

Breeding and Hatching

Another peculiarity about this fish is that the male and female can be distinguished. In the majority of the fishes sexes cannot be outwardly made out. But in Gourami the male has a pronounced cephalic knob on its forehead and has a thick lower lip, whereas the female has no knob, and the lip is thin and 'sweet'. Both collaborate and build a nest as big as a bird's nest, spherical like football, underwater with water weeds. The opening is kept to face towards the centre of the tank and "floating eggs" are carefully put inside the nest and made to remain there without coming out. If one meddles with the nest or the eggs, all the eggs get dislodged and spring up to the top and you can never put them back in the nest.

Favourable Factors

After hatching, the parents carefully escort the young ones and teach them to feed and to protect themselves from enemies. The Gourami does not lay too many eggs. This is a handicap for culture. But look at the redeeming features: (1) The growing even in a small cement tank; (2) It feeds on useless vegetation; (3) It has a fairly good rate of growth; (4) It is beautiful and useful as a aquarium fish; (5) It has the nest-building nature and parental care for the brood; (6) and last and not in the least it tastes good. Those who have tasted a Gourami can never forget the taste! Such a dainty freshwater table fish and with such few bones is not easily found elsewhere.

The Pearl Spot

The Ichthyologist calls it *Etiopius Suratensis*. In Tamil it is known *Sethakendai*, in Telugu *Duvanachappa* and in Malayalam *Kari-meen*. It is another vegetarian fish. It eats weeds and has a great partiality for hair-weed (*Spirogyra*). The fish has a light green colour with eight dark transverse bands. The scales above the lateral line have a central white pearly spot and hence the popular name "Pearl Spot."

It is a common backwater perch. The body is flat and broad. The dorsal fin has several sharp spines and thus the fish manages to escape predaceous fish or other enemies who try to prey upon it.

Merits of Etiopius

The special advantages of this fish are as follows: (1) It is easily obtained from backwaters throughout the State. The collection or purchasing cost is very small. (2) It thrives and breeds in salt water, fresh water, slightly brackish water, still waters, running waters and even in cement tanks. What a good-natured fish! No other fish in Madras State or for that matter in the whole of India, behaves like the *Etiopius*. Not only does it grow in any type of water but it also breeds anywhere. One

cannot think of any another fish to excel *Etiopius* in this respect. Gourami though so tasty, does not thrive in salt water and deep-reservoir and fails to breed in them. So its use is thus limited, whereas *Etiopius* can be grown in any type of water.

Its diet is also simple. Small weeds are its food. It is easy to provide this hairweed, *Spirogyra*—in Tamil *Pasam*—in the tanks for *Etiopius*; it is the most delicious food. *Etiopius* is sporting too! By that is meant that it responds with alacrity to anglers. Even a crude hook (made by bending a small paper-pin) and a bit of earthworm bait attracts this fish. For breeding you have to keep a few stones under water so that the fish may attach its eggs on them. The sex cannot be made out in the *Etiopius*, but there is the same parental care as in the case of Gourami. Occasionally the *Etiopius* also, like the Gourami, has no objection to worms, though both are avowedly strict "vegetarians"!!

RURAL RECONSTRUCTION

12

MADRAS INFORMATION



HEALTH: Medical relief from a mobile van

schemes have been carried out at the villagers' own cost or in a few cases with only the minimum aid from the Government. Today 24 villages can boast of masonry drainage covering a distance of 79,000 feet carried out at an approximate cost of Rs. 1,00,000.

In addition to all these, the villagers, utilising the Collectors' discretionary grant, have carried out more than 200 items of works such as improvements to wells, construction of school buildings, reading rooms, community halls, maternity centres, bathrooms, disposal pits, culverts and latrines. Besides, radio sets and stud bulls were also purchased with Government grant. The total cost of all these improvements came to Rs. 1,80,400. The amount sanctioned by the Government was only Rs. 60,800 while the rest Rs. 1,19,600 was the contribution of the villagers. That means, more than double the grant was contributed by the villagers.

Better Farming

Special attention is also paid in increasing production of foodgrains, cotton and vegetables by subsidising the agricultural requirements and offering various facilities to the farmer. Attempts to make good the deficit in foodgrains are made by adopting improved methods of cultivation using improved strains of paddy and millets. Farmers are encouraged to prepare compost manure with waste vegetable matter like grass, weeds, stubbles of crops and other farm wastes. A subsidy of Rs. 1 is paid for every ton of compost prepared. About 2,000 compost pits were dug, making not less than 10,000 tons of manure. For purposes of better irrigation, the existing tanks are being improved and subsidy paid for digging irrigation wells. Five thousand acres of dry land were brought under K2 cotton seed multiplication scheme in 1952 and loans at the rate of Rs. 25 per acre were also granted. The total amount of loans granted was Rs. 14,000.

Model farms are also run in villages, the special staff of the Agricultural Department giving intensive training to the villagers in the process.

Training Artisans

With a view to encourage village industries and to train artisans on up-to-date methods, a Village Industries Training Centre has been started at the Kallupatti Grama Sevaka

Vidyalaya. The Centre is run by competent persons who have undergone training at the All-India Village Industries Association, Wardha. The main subjects dealt with are oil-pressing by improved ghani, paper making, food processing, bee-keeping, palm-gur, pottery, spinning and Khadi weaving, soap making, metal works, etc. Thirty-two candidates are given training in the advance course for one year in weaving and 30 candidates are selected from villages, mostly artisans who are given six months' free training in village industries.

Arrangements have also been made through multipurpose co-operative societies to collect and distribute raw materials for artisans and also arranged to find markets for finished goods through the Central Sales Society. Improved tools have also been supplied free of cost to deserving artisans through the Industrial Department and so far about 942 tools worth about Rs. 9,000 have been distributed to 275 artisans.

Khadi and Charkha

To achieve self-sufficiency in clothing, an Extensive Khadi Scheme has been started in this area. Under this scheme, charkhas are being distributed on concessional terms by giving subsidy at Rs. 3 per charkha and also by paying a subsidy of eight pies per hank of yarn used on self-sufficiency basis. Two thousand six hundred charkhas have been distributed in this area on concessional terms over and above 1,000 charkhas that were plying originally.

About 25 villages in the development area have been electrified for the main object of promoting agriculture. One hundred and fifty pumpsets have already been fixed and arrangements are being made for agricultural loads for 130 more pumpsets.

Culture and Recreation

Village games, sports, dramas, folk dances and bhajanas and community prayers are conducted regularly. There are periodical inter-village tournaments and prizes are distributed to the winners. Radio sets have been installed in 16 villages under the auspices of the local Panchayat or Co-operative societies, the Government paying a half-contribution towards the cost. There is also a Central Library at Tirumangalam with 65 branch libraries in the villages. Books and periodicals are circulated among the branch libraries.

The above account gives only a meagre idea of the stupendous constructive efforts going on in Tirumangalam. There one can see old and wrinkled men handling slate and chalk; though their hands are shaking, their minds are firm in the purpose. That is the start of a new life. The leader of one such group was reading out a newspaper to his fellow-men. They were discussing an item—Sri Vinobaji's 'Bhoodan Yagna' movement.

Tirumangalam is an object lesson in a modern world. Good simple folk, however 'backward', respond to sincere, constructive approaches. Coercion need have no place in society, if the heart is good and there is goodwill for all.

Soil Conservation Measure Sanctioned for Puliakata Lake

The Government have sanctioned an expenditure of Rs. 5,753, for planting *Propolis juliflora* and casuarina trees on the tank bed of Puliakata lake in Sulerpet Taluk, Nellore District, as a soil conservation measure.

RURAL RECONSTRUCTION

13

MADRAS INFORMATION

Rural Welfare Scheme for Nagarikatakam

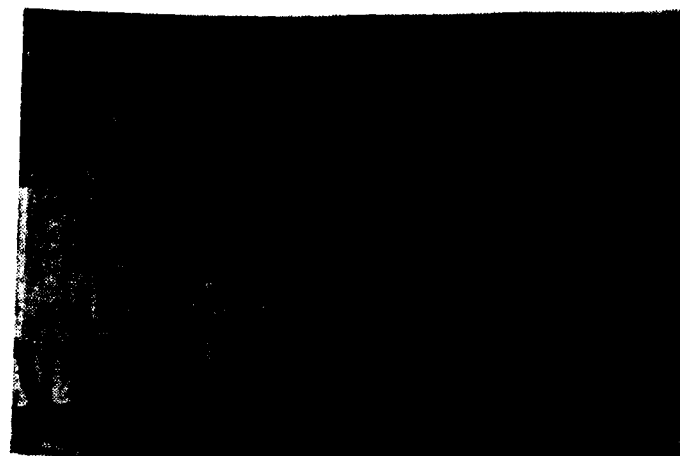
The Government have ordered the extension of the Rural Welfare Scheme to Nagarikatakam firka during the year 1952-53. Sri N. Bhagwandas, I.A.S., Collector of Srikakulam district, convened a meeting of all District Officers on 1st October 1952, to chalk out ways and means to inaugurate the Rural Welfare Scheme in the new Nagarikatakam firka. At the meeting, it was decided to inaugurate the scheme in Rottavalasa, Saribujjili, Borrapeta and Iscatpeta in a spectacular manner.

On 5th October 1952, the District Officers assembled at Saribujjili by 3 p.m. A guard of honour was presented to Sri S. B. P. Pattabhirama Rao, Minister for Rural Welfare, by the Red Cross volunteers of the Municipal High School, Srikakulam. The Firka Development Scheme in Nagarikatakam firka was inaugurated by the Minister for Rural Welfare with Sri N. Bhagwandas presiding. The Collector read a short note on the work done in the last 12 months.

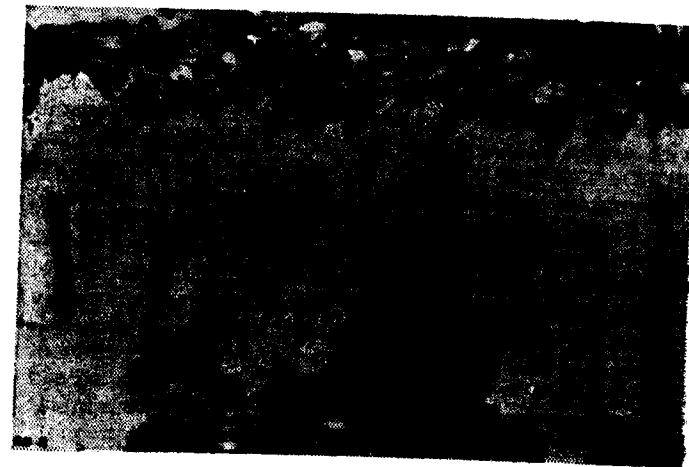
The Minister then laid the foundation stone for a children park. After the inauguration, a pageantry vehicular procession—35-mile procession—traversed the entire length of the new firka; vehicles of all departments taking part in the Rural Welfare activities took part in the procession. There were nearly 20 vehicles, all tastefully decorated. The roads were lined with villagers. The procession was led by a jeep in which the Minister and the Collector were accommodated, painted white and tastefully decorated with a life size cut-out painting of Gandhiji and a decorated charkha in front.

The other highlights of the celebration were the celebration of the compost week and opening of a well in Borrapeta; introduction of spinning and presentation of one charkha in Iscatpeta, initiation of stocking of fingerlings in a tank in Saribujjili and the opening of a road connection the Rottavalasa village with the highway, all by the Minister.

This spectacular inauguration was received with enthusiasm by the villagers who not only enjoyed the pageantry and show but co-operated fully in all the functions.



VEHICULAR PROCESSION: The highlight of the Inauguration Ceremony of the Rural Welfare Scheme was a pageant of a 35-mile vehicular procession. Photo shows some of the vehicles that took part, with Sri S. B. P. Pattabhirama Rao and Sri N. Bhagwandas, I.A.S., Collector, Srikakulam district, in the jeep.



A PARK FOR CHILDREN: Sri S. B. P. Pattabhirama Rao, Minister for Rural Development, laid the foundation stone for a Children's Park when the Rural Welfare Scheme was inaugurated for Nagarikatakam firka, Srikakulam district.

Proposals for Engineering Research Schemes Invited

The Board of Engineering Research of the Council of Scientific and Industrial Research would be glad to receive proposals for schemes of research in various branches of engineering and requests for suitable grants-in-aid for this purpose. There are five expert committees which will help the Board of Engineering Research to examine and assess the schemes submitted. These are on civil structural engineering; mechanical engineering (including machine tools); electrical and radio engineering; hydraulic engineering and aeronautical engineering.

The schemes will be placed before the Governing Body of the Council of Scientific and Industrial Research, for consideration and approval at their next meeting in March 1953.

The Council of Scientific and Industrial Research recently constituted the Board of Engineering Research with the functions of initiation, co-ordination and development of engineering research in the country, as it was felt that collaboration of the scientist and the engineer is essential for successful industrial application of scientific research.

Interested institutions and research workers may write to the Council of Scientific and Industrial Research, 'P' Block, Raisina Road, New Delhi, for further information.

P. & T. Facilities in Madras Circle

There was an all-round extension in all the Postal and Telegraph facilities available in the Madras Circle during the year 1951-52, according to a review outlined by Sri C. V. Rajan, Postmaster-General, Madras, to the Postal and Telegraph Advisory Committee, which held its 11th meeting in Madras recently. Sri C. V. Rajan disclosed that nearly 4,000 additional appointments were made in all grades in the Madras Circle alone, where 81 additional mail motor services covering 1,600 miles were introduced and 1,600 new letter boxes were planted, mostly in rural areas, during the year under review. The service was increased to daily frequency in 1,500 villages; and even more important than that was the opening of new post offices in 1,420 villages with a population of 2,000 and above, by way of implementing the Post-war Plan. Telegraph facilities were provided in 31 more towns, while still five more towns will get them within the next two months.

The Mobile Post Office which has been introduced in Madras City since August 1, 1951, has been greatly appreciated and has provided the public the maximum facility for posting and registration at later hours.

Additional Phone Connections

During the year ending March 31, 1952, three new Exchanges were opened at Srikakulam, Karur and Chingleput while three more Exchanges are expected to be opened during the course of the next two months respectively at Erode, Dindigul and Davangere, thus bringing the total number of Exchanges to 102 with nearly 15,000 connections.

At the same time, there has been a considerable expansion of existing exchanges. Nineteen Telephone Exchanges have been expanded to provide for more than 1,500 additional connections. The more important of these are at Bangalore City, where 400 additional lines were provided, at Madurai with 300 additional lines, and at Salem, Kurnool and Tiruchirappalli each with 100 additional lines. It is expected that in the course of the next two months, eight more Exchanges will be expanded to provide for 860 additional connections, out of which Vellore and Mysore will each have 200 and Tirunelveli 100 additional connections.

Sixty-three public call offices with trunk facilities have since been opened, bringing the total for the whole Circle to 372 P.C.Os. It is expected that within the next two months 25 more public call offices will be opened.

Successful Functioning of Committee

Sri C. V. Rajan, Postmaster-General, presiding over the meeting of the Committee, pointed out how the fruitful

Rural Water Supply

The Government have sanctioned an allotment of Rs. 6,34,800 in addition to the provision of Rs. 81,94,760, already sanctioned, for rural water-supply schemes in 1951-52.

functioning of Postal and Telegraph Advisory Committee, Madras, could itself be listed as an important achievement of the year under review. This Committee, set up for the maintenance of close liaison between the Department and important beneficiaries of its services, has a membership drawn from Members of Parliament, Members of the respective State Legislatures, State Governments and trade interests. Besides meeting quarterly to discuss actual, concrete and local problems relating to the administration of Postal, Telegraph and Telephone services, the Committee has also familiarised itself during the year with the actual functioning of the postal and telegraph systems and the Telephones and the Overseas Communication Service, by visiting them and studying them at close quarters.

New Telephone Exchanges

A 100 line C.B. telephone exchange was opened at Dindigul on March 27, 1952, with 63 connections.

A Trunk Call P.C.I. was opened at the Mount Road Post Office on service from April 3, 1952.

A telephone public call office, connected to the general trunk system was opened at Bapatla P.O. on March 24, 1952.

A telephone public call office at Yercaud connected to the Salem Telephone Exchange was opened on March 16, 1952.

A public call office has been installed at the junction of Bharathamatha Street and Nalvar Street, East Tambaram, on March 12, 1952.

A telephone public call office at Katapadi (South Kanara) connected to the Udipi Exchange was opened on March 17, 1952.

A non-delivery post office was opened on March 28, 1952 at 10/30; Mount Road (Gopala Pillai Buildings), Madras.

Inspector of Police Removed from Service

The Government have ordered the removal from service of Sri S. M. Veeranna Thevar, formerly Inspector of Police, Palni, on the basis of the recommendation of the Tribunal for Disciplinary Proceedings which held an enquiry into certain charges of corruption and high-handedness against him.

Famine Relief in Rayalaseema

The Hon'ble Rajkumari Amrit Kaur, Minister for Health, Government of India, has kindly issued instructions to the Director-General, Health Services, New Delhi, for sending to Rayalaseema, now under the grip of acute scarcity conditions, 60,000 lb. of condensed milk and 2½ lakhs of multi-vitamin tablets for free distribution in the area. The condensed milk, the market value of which will be nearly one lakh of rupees, was received from the Governments of the Netherlands and Switzerland and the multi-vitamin tablets costing nearly Rs. 10,000 was from the fund donated by the Indian Famine Relief Committee, Melbourne, Australia. Arrangements are being made to distribute them through the District Collectors.

Discontinuance of Well Subsidy Schemes

In a Press communique, dated June 7, 1951, the Government informed the public that subsidy loans under the New Well Subsidy Scheme, 1951-52 were being granted on a restricted scale. This restriction in the scope of the scheme was necessary as the Government of India, having regard to the changed policy regarding financial assistance for Food Production Schemes, desired that the area of operation of the Wells Scheme during 1951-52 should be confined to a few chosen areas like Central districts where well irrigation was the only feasible and economical mode of irrigation and where the water table was comparatively high. The allotment towards the disbursement of subsidies during 1951-52 was only Rs. 38 lakhs as against Rs. 152 lakhs for 1949-50 and Rs. 76 lakhs for 1950-51.

Since 1944, the Government have sanctioned eight schemes for the grant of subsidies for the sinking of new wells or for repairing or improving old ones. Under all these schemes, about 217,000 wells were subsidised and about 51,600 wells remained to be completed at the end of January 1952. Time has been granted for the completion of these wells till June 30, 1952.

The continued drought for the last five years has made the water table fall steeply and many wells have consequently dried up. Often the installation of a powerful pump in a big private well has also meant the complete drying up of many smaller subsidy wells connected by the water veins with the big well. There is also good private enterprise in tapping this form of irrigation. Having due regard to these aspects, the Government consider that it is time to cry a halt to this scheme and to consolidate the work already done. They have accordingly decided not to continue the Well Subsidy Scheme in the present form during 1952-53. It is, however, open to the ryots who are keen on sinking wells, to obtain loans from the Revenue Department under the Land Improvement Loan Act.

Registration Certificates of Motor Vehicles

The District Superintendents of Police in the mofussil are now issuing Registration Certificates of motor vehicles, Driving Licences, Conductor's passes, etc., while the work connected with the issue of permits for transport vehicles, appeals against orders relating to issue of driving licences, etc., is being done by the Regional Transport Officers etc., is being done by the Regional Transport Officers concerned. The Government have had under consideration the question whether the work relating to the issue of the registration certificates, etc., cannot be transferred to the Regional Transport Officers with a view to afford greater convenience to the public. They have now decided that the scheme may be tried, as an experimental measure, in the districts of Tiruchirappalli and Krishna for a period of one year with effect from April 1, 1952.

B.Sc. (Eng.) of Travancore University

The Government have directed that the B.Sc. Degree in Electrical and Mechanical Engineering of the Travancore University be deemed as equivalent to the B.E. Degree of the Madras University in the respective branches of engineering.

Four Sugar Factories

Under the post-war programme for the expansion of the sugar industry in Madras State, the Government are considering the question of the establishment of four sugar factories by private enterprise in the following areas:

Area.	Daily cane crushing capacity.
	TONS.
North Arcot District	800
South Arcot District	800
Coimbatore District	450
Tiruchirappalli-Tanjore area ..	500

In view of the urgent need to make the State self-sufficient in respect of sugar, the Government are anxious that these factories should be set up as quickly as possible. They will be prepared to consider the question of granting all reasonable facilities to the promoters for the establishment of the factories. Persons or companies with the necessary business experience and financial resources and who are anxious to start sugar factories in these areas in collaboration with the local cane growers without expecting financial assistance from the Government, may apply to the Secretary to Government in the Development Department, Fort St. George, before 10th May 1952. The application should furnish *inter alia* detailed information on the following points:

- (1) Names of the promoters and their financial standing;
- (2) Business experience;
- (3) Proposed location of the factory; and
- (4) The time within which they will be able to put up the plant and start manufacture of sugar.

Visas for Foreign Visitors

The Government of India have observed that on a number of occasions non-official organisations or private persons have invited foreigners to attend conferences, discussion groups and lecture tours. Not infrequently both the persons invited and their hosts have been put to great inconvenience, because of the delay or failure to obtain the necessary visa facilities for visiting the country. The Government of India wish to emphasise that, in order to avoid this difficulty, it will be desirable for private persons and non-officials bodies to inform, in advance, the Government of India in the Ministry of Home Affairs, of their intention to invite foreigners. Only after the Ministry of Home Affairs have agreed to issue visas in favour of the persons, whom it is proposed to invite, should invitations be sent out. This will prevent last-minute rush, inconvenience and possible misunderstandings.

Adult Education Week

Adult Education Work has obtained a new significance in India. The old days are gone—the old days of rule by firmans, the lethargic people just paying taxes and minding their own business and suffering when sufferings came with an occasional grouse against Government and God, all in a mood of fatalism. Now the people have become conscious of their new role in Society. Adult franchise has confirmed on them a supreme right—the right of choosing the kind of Government they want. The proper exercise of this right demands new conditions—a mental equipment on the part of the people that can properly evaluate concepts like civic rights, duties and responsibilities. Literacy is a first step towards the creation of this condition in Society. And the earlier it is spread among the masses, the better for the survival of our infant democracy.

Conscious of the duties of the enlightened few towards the unenlightened many, the South Indian Adult Education Association sponsored the Adult Education Week in the State, which was inaugurated by Dr. M. V. Krishna Rao, Minister for Education, on 8th November 1952 in

Madras City. Other social service organisations and students in various colleges helped the Society in making the Week a success. The Week was inaugurated in Swatantra Nagar in Lloyds Road, a slum area where work in this direction has been progressing successfully for some time now.

Inaugurating the Week, the Minister for Education stated that the movement should be a national movement and its success depended on the activity of the whole community, particularly of those who were educated and patriotic. The role of the Government was to co-operate with them and create facilities. Till recently the Madras Government, he said, had very little organised activity in the sphere of adult education. It is only since 1948 that some activity was seen. The Government of India, he said, wanted the Madras Government to submit to them certain proposals and came forward with assistance in 1949. Since then, the conditions improved a little. In May 1951 there were about 1,200 adult literacy centres. He was glad that at the present day the number was 2,400 of which 1,727 were run by private agencies. A limited number were run by Panchayats and District Boards and Municipalities and the Madras Corporation.

Proceeding, the Minister said that the Adult Education Scheme of the State provided for the formation of District Councils and local Social Education Committees. He was glad to find that some of the Colleges were coming forward to run summer camps for social service in which adult education work figured prominently. To achieve the object of Adult Literacy on a mass scale, he said, the entire educated section of the community, official or non-official, should mobilise itself to the task. In that sense they had to think not of one education week but of such a celebration throughout the year. The services of elementary school teachers could be utilised in every village, but over and above that he felt that all schools, colleges and University institutions and teachers and senior students should try to develop an Extension Department and an annexe to their activities which would take up the work. In that attempt, the Minister said, this Government would give all encouragement and facilities.

The Week was also celebrated by various social service organisations in the City and also College Associations. A free Adult Education Class was opened at 180, Mount Road, under the auspices of the Madras Service League, by Sri J. L. P. Roche Victoris in the course of the Week.

1st International Montessori Training Course

The 31st International Training Course for teachers is being held by the Association Montessori Internationale in London, from January 12, 1953, to July 15, 1953. The lectures will deal with the Montessori Method in all its aspects, with particular emphasis on the fostering of international understanding from an early age. The idea is to bring about a close understanding between individuals of different nations, and considerable efforts would be made to change educational programmes with that particular aspect in view. In addition, instruction will be given in subjects forming part of the general school curriculum.

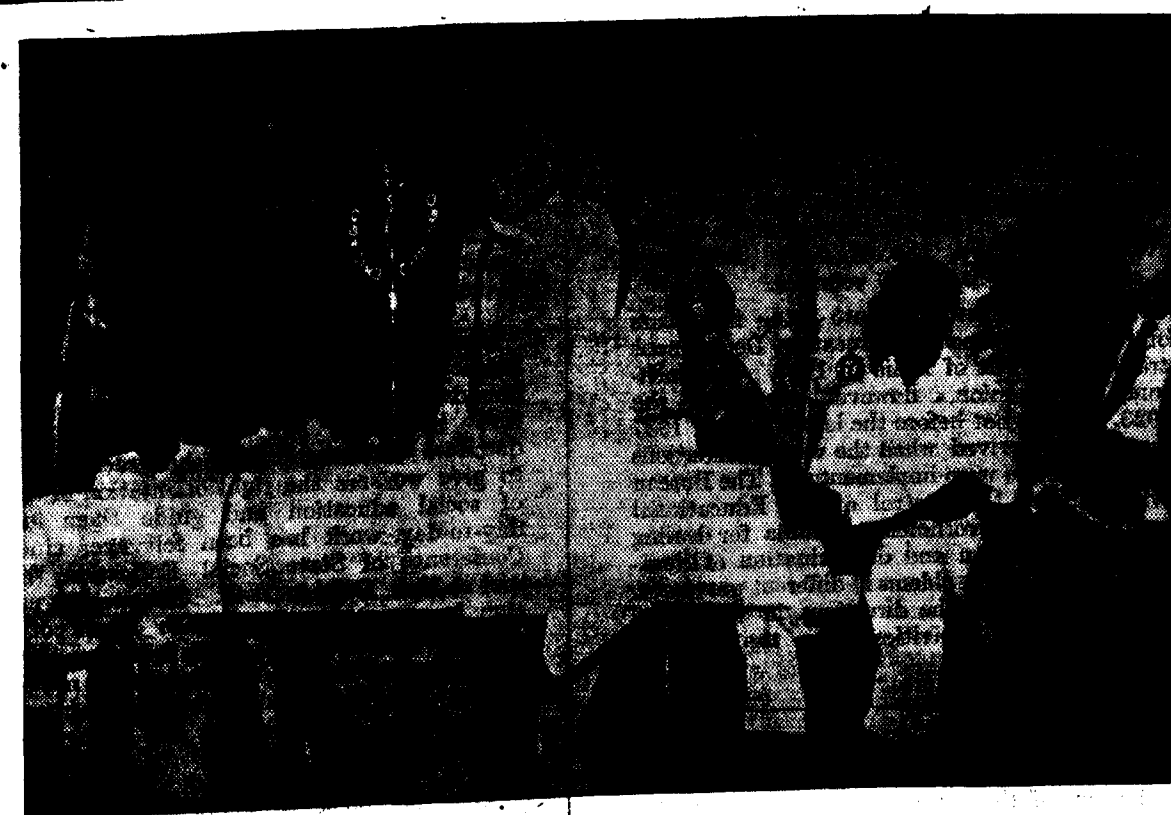
Books for Neo-Literates: Manuscripts Invited

The Delhi Public Library invites manuscripts of easy-to-read books for neo-literates under the publication programme of the Library which has received a special grant from the UNESCO for the preparation of such material for neo-literates.

The manuscripts are required on these subjects: Economic Geography of India; Physical Geography of India; Human Geography of India; Our rural and urban community centres like Faridabad, Nilokheri and Etawah, etc.; Power development projects; Education in India; Our Children; United Nations; UNESCO; W.H.O.; Masonry; Elementary carpentry; Quick Dish Menus; and Putting Waste to Use.

The first three manuscripts may be of 16 to 24 pages and the rest between 32 to 48 pages. Approved manuscripts which should preferably be in Hindi, though acceptable in English and Urdu, will remain the property of the Delhi Library Board and will be paid for at the rate of Rs. 100 per 5,000-6,000 words and Rs. 200 per 10,000-12,000 words. The Board may refer back the approved manuscripts for re-writing and will have the right of editing and translating manuscripts into other languages, if necessary.

Manuscripts should be submitted by January 1, 1953, to Shri D. R. Kalia, Secretary, Delhi Library Board, Queens Road, Delhi 6, from whom further particulars may be obtained.



ADULT EDUCATION WEEK: Dr. M. V. Krishna Rao, Minister for Education, inaugurating the Third Adult Education Week in Madras State, Swatantra Nagar, Lloyds Road, Mylapore. The Week was organised by the South Indian Adult Education Society.

Service Agency for Educationists

The activities of the Central Bureau of Education form the theme of a brochure entitled *The Central Bureau of Education*, just published by the Ministry of Education, Government of India.

Organised as a service agency through which the Ministry can be of assistance to States as well as to educationists and educational institutions, the Central Bureau of Education consists of six sections dealing with Publication, Information, Statistics, Audio-Visual Aids, the Central Education Library and the Central Secretariat Library.

The publication work of the Bureau includes research and compilation, preparation and printing of pamphlets, exchange of the Bureau's publications with outside agencies and distribution within India of gift books received from abroad. The publications so far brought out include Directories like *Humanistic Institutions and Societies in India* and studies in educational psychology like *Attitudes of Student-Teachers towards Children's Behaviour*. The *Single-Teacher School* and the *Vidya Bhawan Open Air Session*, two studies on educational experiments, will be published shortly. The Publication Section has also brought out a number of pamphlets in its series *Facilities for Advanced Studies Abroad*, dealing with Architecture, Engineering, Public Health, Veterinary Sciences, Social Welfare, etc. The Section also publishes the *Education Quarterly*.

The Information Service of the Bureau compiles data on education in India and foreign countries and meets numerous enquiries, not only from educationists and the general public in India and abroad, but from various diplomatic missions and international organisations like the International Bureau of Education, Geneva. Literature on foreign Universities and institutions received in the Bureau is distributed to many students' advisory organisations in the country.

The Statistical Section compiles data on all aspects of education, processes them into educational charts, pictorial diagrams, graphs, etc., attends to statistical enquiries on education from educationists, research scholars, publishers, foreign governments, international organisations, etc., and has so far brought out 32 publications.

The Audio-Visual Aid Section maintains a film library with a stock of over 1,000 educational films and film strips which are lent free of charge to all approved institutions and organisations engaged in educational, social and cultural activities throughout the country. The present membership of the Library is 220 and on an average about 400 films and film strips are issued every month. Recently it has started organising a library of educational charts and posters also.

The Central Education Library receives nearly 500 periodicals, more than half of which are concerned with

Neera

By SRI RADHAKRISHNA RAO, Nutrition Expert, Government of Bombay

The sweet juice obtained by tapping any sugar-yielding Palm tree is called Neera. The silver 'blood' of the Palm trees has a pleasant delicious taste, and an agreeable flavour. When freshly drawn from the tree, it is slightly alkaline to litmus, but in course of time, becomes more and more acid. In India, it is usually obtained from the Palmyra (Tad), Coconut (Narial), Sago Palm or Wild Date Palm (Khajoor) trees.

Neera is sweet in taste and contains over ten per cent of sugar. It is a health-giving drink and can be consumed in any quantity without harm to the system. Apart from the various nutrients (including vitamins) present in the juice, Neera also contains variable quantities of mucilage which is of doubtful nutritive value. This mucilage along with most of the yeast, however, separates and settles down when Neera is treated with lime.

The chemical composition of Neera (fresh Date Neera) is given below :

Specific gravity	..	..	1.07
pH	..	..	6.7 — 6.9
Nitrogen	..	..	0.056 gm. per 100 ccs.
Protein	..	..	0.35 gms. "
Total sugars	..	..	10.93 gms. "
Reducing sugars	..	..	0.96 gm. "
Ash (Minerals)	..	..	0.54 gm. "
Calcium	..	..	Traces "
Phosphorus	..	..	0.14 gm. "
Iron	..	..	0.04 mgm. "
Titrate acidity	..	..	8.75 ccs. of N/10 alkali.
Vitamin C	..	..	13.25 mgms. per 100 ccs.

Tapping of the juice from the Palm trees is a delicate operation and requires much care and skill. The earthen pots in which the juice is collected are usually lined with slaked lime. The amount of lime added depends on the amount of juice from the tree, and only experienced tappers will be able to say as to how much juice will be produced, depending on the weather, locality and the tree. Probably limed Neera is bright and transparent, the lime settling at a bottom of the pot. If less lime is used, the Neera becomes hazy and sour, due to the growth of yeast, and if the quantity of lime added is more than the required amount, the Neera has a milky and bitter taste.

In very cold climates, addition of lime is not absolutely necessary, since no perceptible change takes place within 12-14 hours, between sunset and dawn, when the pot is suspended for collection of the sap.

The addition of lime in the pots for Neera collection is not an innovation, but has been practised since ages. In fact, with all the advancements in science and improvements in methods, we have not been able to find out any other equally harmless or efficient preservative. It is true that due to the addition of lime, vitamin C of Neera is destroyed. The advantages of lime as a preservative are : (1) the amount added to the juice is harmless to the system, and (2) it does not allow the pH of the Neera to decrease below 7, and thus retards alcoholic fermentation.

Recently doubts have been expressed in certain quarters that the addition of lime to Neera is detrimental to habitual drinkers of Neera, that calcium taken frequently causes premature thickening of the arteries and causes kidney trouble. In this connection it may be stated that for every 10 lb. (approx. 20 glasses) of Neera, the portion of lime used is only 6 ccs. of a 20 per cent solution, and even part of this lime so used precipitates and settles at the bottom along with the yeast, and is not consumed along with the Neera. In fact, a person chewing betel leaves consumes much more lime than that present in nearly 5 lb. of Neera. In order to enhance the nutritive value of bread, wheat flour is fortified with calcium. Calcium intake of the people of this country is far below the minimum requirements, and for this fact alone, apart from others, the intake of additional calcium along with the sugars is to be recommended.

Another objection raised against the use of lime to prevent fermentation is that it makes the Neera alkaline and makes it a favourable medium for the growth of pathogenic organisms. Unless necessary precautions are taken and strict cleanliness maintained in collection and distribution, any food article (e.g., milk and milk products) is liable to be contaminated, and the danger of food-borne diseases is always there. The obvious method of averting such risk lies in the increase of greater vigilance on the part of those handling the food, and the risk in no way arises from the addition of lime to such a nourishing drink as Neera.

(Tad Gud Khabar)

Educational Concessions for Demobilised Personnel

The Government have directed, in modification of their previous orders, that assistance under the Further Education Scheme to demobilised personnel will not be granted to students, who after being compelled to discontinue the course of study for valid reasons, do not take up the course again before the expiry of one year from the date of discontinuance of studies previously undertaken or in cases of failure at examinations, before the expiry of one year from the date on which the student becomes eligible to continue the higher studies. All cases of break in studies exceeding one year will be decided by the Further Education Board.

Books Received

TRIMURTI ALMANAC, 1952-53.

For the Tamil year Nandana, containing 68 pages and priced at 7 annas. Published by the Suguna Publishing House, 60, Iswaran Koil Street, Mambalam, Madras-17. Edited by Sri K. S. Srinivasan of Akkur.

FROM THE DATE PALM . . .

Neera is a delicious and healthy beverage containing sugar, minerals and vitamins. Neera (sweet toddy) is tapped from date trees and sold in parlours to the public. The process of extraction is a delicate one.

(1) The tapper coats his pot with lime solution (2) selects the tree and climbs it, (3) slices the stem to draw the juice and (4) ties the pot in place. (5) The tappers bring the collected juice to the pooling centre.

(More pictures overleaf)



EDUCATION

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MADRAS INFORMATION

technical aspects of education. It also maintains an Adult Literature Section for catering to the special needs of the semi-educated members of Class IV Service of the Government of India and also a Children's Section which has built up a good collection of children's literature in English as well as in different Indian languages. The Central Secretariat Library which has grown by absorbing the collection of several libraries such as the old Fort William Library, the Kashmir Residency Library, etc., has now about 95,000 volumes.

The Bureau of Education came into being five years after the formation of a separate Education Department in the Central Government of India in 1910. The Income Economy Commission, however, abolished the Bureau in 1923. It was not before the latter part of 1937 that the Bureau was revived when the recommendations of the Hartog Committee were implemented. The Bureau was then revived under the control of the Educational Commissioner with the Government of India for dealing specifically with the collection and dissemination of literature relating to educational problems in different provinces. The brochure also indicates the directions in which the Bureau can expand its activities when the financial situation improves.

National Cadet Corps

The annual camp of the National Cadet Corps Junior Division Units (Army Wing) attached to the High Schools in the State, were held from September 19, 1952, to September 28, 1952, in the undermentioned centres:—

	Number participating	
	Officers.	Cadets.
1 Avadi	20	630
2 Visakhapatnam	14	450
3 Bangalore	19	600
4 Trivandrum	11	330
5 Tiruchirappalli	22	660
6 Cannanore	14	450
	100	3,120

The camps were conducted by the Liaison Officer, N.C.C. Junior Division Units in Avadi and the Officers Commanding the Senior Division Units in other centres.

The cadets took certificate, parts A I and II Examinations during the camps. The Government appointed *ad hoc* committees of official and non-official visitors to visit the camps held at centres in this State and to see the arrangements made.

The reports received by the Government from the members go to show that the camps were run well.

Students of Eligible Communities Exempted from Examination Fees

The Government have empowered the Director of Harijan Welfare to grant exemptions, subject to the usual rules and regulations, to the students of the Madras University, belonging to the eligible communities, from the payment of fees to sit for the University examinations.

Teachers' Handbook of Social Education

The Central Ministry of Education will shortly bring out a Handbook of Social Education for Teachers.

Social education aims at providing not only literacy but training for a fuller and more abundant life for the masses who have had to face handicaps and deprivations for many decades. The need for publishing such a handbook to give workers the right orientation in the field of social education and guide them in their day-to-day work has been felt ever since the Conference of State Social Education Workers met at New Delhi in 1949. The present publication is expected to meet the needs of these workers and to provide them with new ideas and suggestions so that their techniques do not become static. For social education programmes call for constant adaptation to the changing needs of national life and ideology.

The handbook is divided into three parts: The first part will deal with the historical and theoretical background of social education, the second with the syllabus, supply and training of teachers and examinations, and the third with the agencies and associations directly or indirectly concerned with adult education. The various chapters in the first part are devoted to the purposes of adult education, psychology of adults and methods employed in their education. The specimen syllabus is an adaptation of the syllabus which has been used successfully in the social education programme implemented in the Bombay State. The section on agencies of social education includes chapters on the part played by Universities in adult education, inter-departmental co-operation and libraries and museums.

Appendices describe educational work among adults in certain other countries where the problems of social education are more or less similar to those in India. They also incorporate a tentative directory of voluntary associations working in the field of social education.

In the case of students of Andhra University, which gives only half-fee exemption to the students of eligible communities, the other half of the examination fee will be paid in advance by the Director of Harijan Welfare.

It may be stated in this connection that the Annamalai University gives full exemption from the payment of fees to the students belonging to the eligible communities.

PLANNING

17

Plea for Protection to Handloom Industry

The series of discussions which the Planning Commission proposed to have with the important political parties before finalising their recommendations on the Five-Year Plan took place recently in New Delhi. Here members of the Congress Working Committee met the Commission, namely, Sri Jawaharlal Nehru, Prime Minister, Sri Gulzarilal Nanda, Minister for Planning, Sri C. D. Deshmukh, Finance Minister, Sri V. T. Krishnamachari, Sri R. K. Patil and Srimati Durgabai.

Members of the Congress Working Committee besides Sri Jawaharlal Nehru present were Maulana Abul Kalam Azad, Dr. K. N. Katju, Janab Rafi Ahmed Kidwai, Sri Jagjivan Ram, Sri Lal Bahadur Shastri, Sri Govind Vallabh Pant, Sri Morarji Desai, Sri U. N. Bhebar, Sri N. V. Gadgil, Sri Khandubhai Desai, Sri Balwant Rai Mehta, Sri U. S. Malliah, and Sri S. N. Aggarwal.

Sri C. Rajagopalachari was present by special invitation.

Total Expenditure of Rs. 2,000 Crores

The recommendations with such modifications as may be necessary in the light of discussions that take place with the leaders of the various political parties, will form the Final Report of the Commission. After the discussions

are over, the Commission will consult its Advisory Board and the recommendations will be finalised after hearing the views of the National Development Council.

Sri Gulzarilal Nanda, Planning Minister, said that the Five-Year Plan as indicated in the Draft Outline has been revised in many respects and the total cost now comes to Rs. 2,000 crores as against Rs. 1,793 crores which was the cost of the two parts of the Plan in the Draft Outline. In the Final Report, there would be no second part and the Plan would be treated as one whole. The increase in expenditure in the Revised Plan is due mainly to additional funds provided for schemes on railways, river valley projects, new river valley schemes, basic industries and transport, community projects, relief works caused by natural calamities, minor irrigation works, loans to agriculture and to municipal corporations, assistance to Kashmir for its development plan, industrial housing, port development, etc. Certain new schemes, particularly some irrigation and power projects and a special scheme of social welfare services, which have been included in the revised plan will also mean additional expenditure.

Handloom Industry

Development of the handloom industry formed a subject for discussion. Sri C. Rajagopalachari suggested



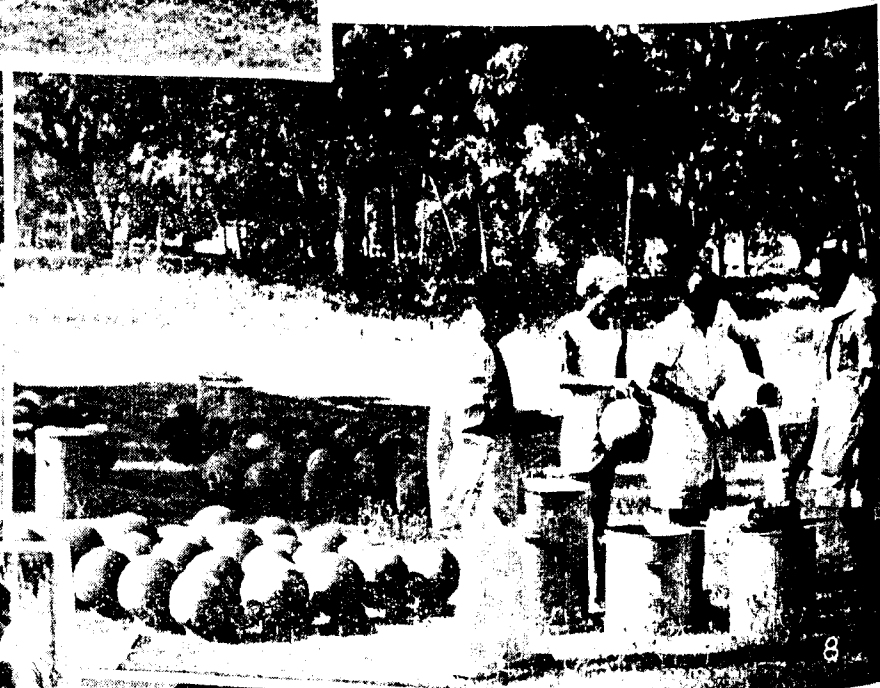
DRAFT FIVE-YEAR PLAN: Members of the Planning Commission met the Congress Working Committee members in New Delhi on October 16, 1952, to discuss the Planning Commission's tentative recommendations in the Final Report of the Five-Year Plan.



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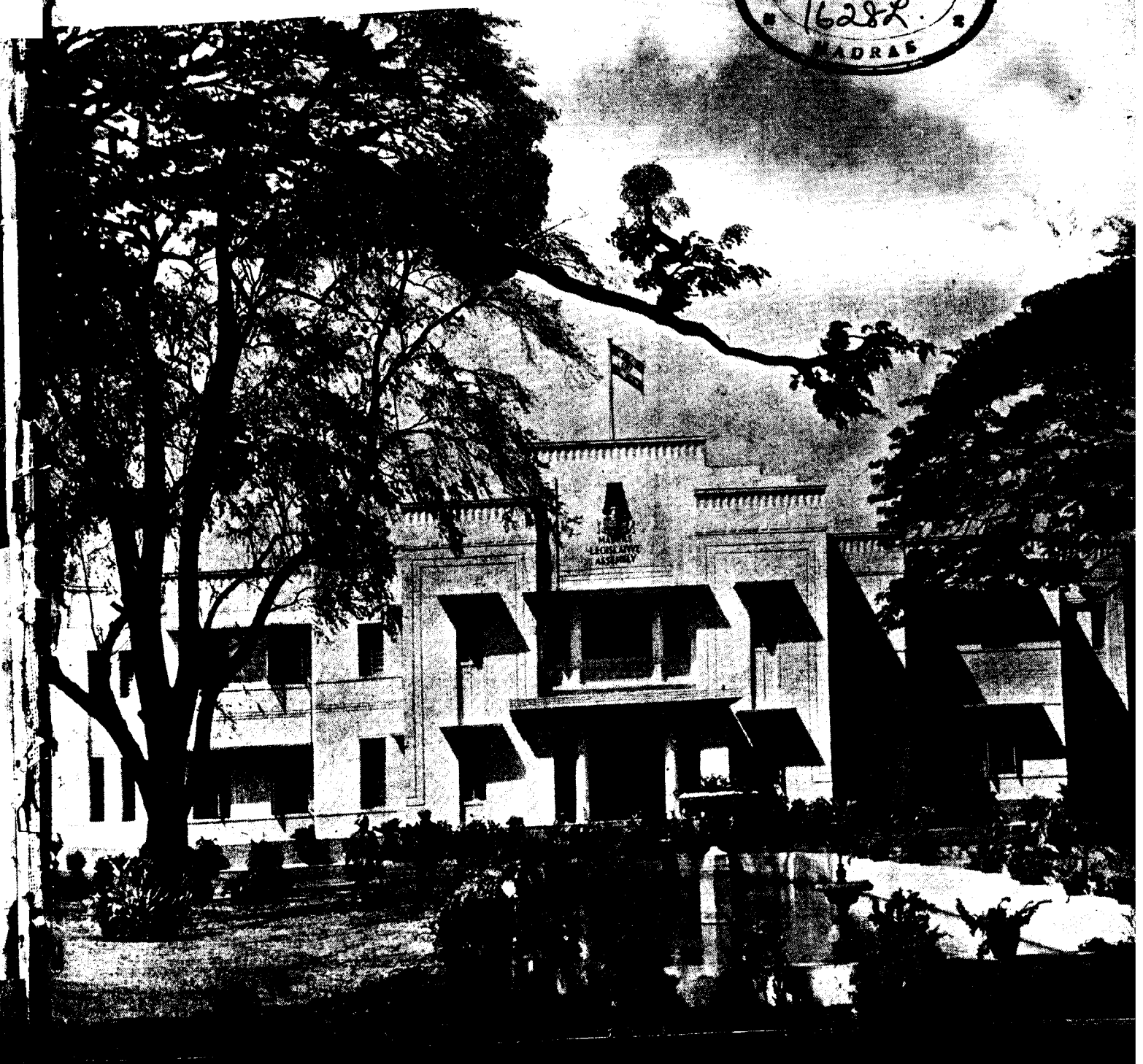
... TO THE NEERA PARLOUR

- (6) At the collection centre, the juice is filtered, (7) poured into cans,
- (8) loaded on to transport barrows,
- (9) brought to the neera parlour and
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MADRAS *Information*



the reservation of certain types of cloth to handloom weavers which will provide additional employment to a large section of the people and also increase production. The need for expansion of the handloom industries has been recognised in the Plan which has recommended an increase of 800 million yards of handloom cloth during the five-year period from 900 million yards in 1950-51 to 1,700 million yards in 1955-56. The suggestion to reserve certain types of cloth to handloom weavers only was discussed in detail at the meeting. Various aspects of the proposal, viz., the extent to which employment can increase in the rural areas, the effect that such a recommendation will cause on the price situation and unemployment, if any, that will be caused in the ranks of mill workers were particularly commented upon.

The members present emphasised the need for improving the efficiency of the handloom weavers and suggested

that the protection should be given for a certain specified period within which the industry should improve its efficiency by adopting better technology and improving on the artistic finery of its products.

Textile Dyeing and Printing Works: No Sales Tax for One More Year

The Government have directed that the dyeing and printing works be exempted from sales tax for a further period of one year from April 1, 1952, and that the percentage of deduction towards cost of labour in respect of such contracts for purposes of rule 4 (3) of the Turnover and Assessment Rules should be fixed at 50 with effect from April 1, 1953.

All-India Handloom Board Constituted

The Government of India have set up an All-India Handloom Board to advise Government on the problem of the Handloom Industry. A Commerce and Industry Ministry resolution, published in a *Gazette of India* Extraordinary dated October 25, 1952, says the Government of India have decided to set up this Board in place of the present Standing Handloom Committee.

The Textile Commissioner to the Government of India will be the Chairman of the Board, which will have sixteen members. The other members of the Board are Janab Abdul Quayum Ansari, Bihar; Sri P. R. Chikodi, Chairman, District Industrial Co-operative Society, Belgaum; Sri M. P. Nachimuthu Mudaliar, Vice-President, Madras Handloom Weavers' Provincial Co-operative Society, Madras; Sri Y. N. Paonikar, Secretary, All-India Weavers' Congress, Umrer, Nagpur District; Sri M. Somappa, President, Yemmiganur Weavers' Co-operative Society, Yemmiganur; Sri K. Sundaram, the Coimbatore Cotton Mills, Singanallur P.O., Coimbatore; the Director of Cottage Industries, Government of Uttar Pradesh, Lucknow, or his nominee; the Additional Director of Industries, Government of Bihar, Patna, or his nominee; the Director of Commerce and Industries, Government of Hyderabad, or his nominee; the Director of Controlled Commodities, Government of Madras, or his nominees; the Director of Industries, Government of Madhya Bharat, Indore, or his nominee; the Joint Registrar for Industrial Co-operatives and Village Industries, Government of Bombay, or his nominee; the Joint Textile Commissioner to the Government of Bombay; the Registrar of Co-operative

Societies, Madras, or his nominee; and the Director (Yarn and Handlooms), Office of the Textile Commissioner to the Government of India, Bombay (Secretary).

Additional members will be appointed as and when necessary. According to the resolution, the Government of India also propose to create a Handloom Fund, from which grants of loans will be made for financing, in whole or in part, activities necessary for the development and improvement of the Handloom Industry. Among the purposes or subjects for which loans or grants could be made are—

- Ensuring a steady and adequate supply of suitable yarn to the Handloom Industry, including the holding stocks, where necessary;
- establishing marketing organisations in the country and abroad;
- promoting research, improvements in and better techniques of production;
- training of personnel, arranging for improved equipment, prescribing standards of quality and the establishment of machinery to maintain those standards; and
- encouraging co-operative effort amongst Handloom weavers.

The functions of the Board will be, besides advising Government generally on the problems of the Handloom Industry, to examine schemes for the improvement and development of the Handloom Industry, and to make their recommendations for assistance from the Handloom Fund.

Power Supply in Madras State

By SRI N. RANGA REDDI, Minister for Public Works

The power position in the State can be conveniently dealt with under the following groups:—

1. The Southern Hydro Grid fed by Pykara, Mettur and Papanasam Hydro-Electric Powerhouses and the Madurai Thermal Station.

2. The Madras Thermal System served by the Basin Bridge Power house.

3. The Andhra Power System comprising the Thermal stations at Vijayawada, Visakhapatnam, Kakinada and Rajahmundry. This area will eventually be served by the Machkund Hydro-Electric Scheme.

4. The Rayalaseema System comprises the areas served now by Mysore Jog Power and the Thermal stations at Kurnool, Anantapur, Cuddapah, Proddatur, Nandyal, Tadpatri and Nellore.

5. The South Kanara area to be served by the Mysore Jog Power System.

The installed capacity of generating stations totalled about 160,000 K.W. at the end of the War in 1945. The demand for power is every day increasing and a number of major schemes were therefore taken up to add an additional 180,000 K.W. power. Some of them have been completed, viz., the Nellore Thermal Scheme in the Rayalaseema Grid, the first stage of the Madurai Thermal Scheme and the Visakhapatnam, Vijayawada and Papanasam Extensions.

Machkund

These have added 34,000 K.W. of power. Most of the other works will be completed in 1954. One of the three units generating 12,000 K.W. of power in Moyar has been put into operation in April last. The Machkund Hydro Scheme which is a joint scheme financed by Madras and Orissa States will be completed in 1954, adding 51,000 K.W. capacity. Orders for the plants for the Tungabhadra Hydro Power Station have been recently placed, and this, when built, will supply power to the entire Ceded Districts area and will enable Government to stop the supply of power from Mysore and also shut down oil engine stations in various parts of the Rayalaseema area. The rest of the programme consists of extensions to the existing power-houses to provide additional supplies of 23,000 K.W. at Pykara Hydro-Electric Station, 30,000 K.W. at Madras Thermal Station and 10,000 K.W. at Madurai Thermal Station. The Machkund Hydro-Electric Project is the largest single item in our electricity programme and it is ultimately capable of developing 100,000 K.W.

Southern Grid: In the Southern Grid the existing demand amounts to 232,560 K.W. against available power in 1953-54 of 176,000 K.W. in the irrigation season by which time most of the schemes under execution will be completed. It is therefore clear that the schemes under construction cannot meet all the demands in sight and new powerhouses are absolutely necessary, and until they are erected power restrictions have to be continued and we have to go slow in giving further connections.

Madras System: In the Madras Grid, the total power demand at the end of 1953-54 and the then available

generating capacity will be 49,150 K.W. and 47,000 K.W. respectively, and the shortage of power will continue even after the two 15,000 K.W. sets are commissioned.

Andhra Power System: The total demand will be 24,100 K.W. By the end of 1953-54 the Machkund generating sets will come into operation. The effective capacity available for Madras share under first stage of the scheme will be 23,000 K.W. which is just about the demand anticipated in 1953-54. Machkund will also have to come to the rescue of the other systems in Madras and further demands will have to be met by taking the second stage of Machkund providing for further generating plants.

Tungabhadra

Rayalaseema Grid: This area is at present served by Mysore power from the Jog Scheme and a number of small diesel stations at Anantapur, Kurnool, Cuddapah, Proddatur, Nandyal and Tadpatri, and a steam station at Nellore. The aggregate demand in 1953-54 will be 12,240 K.W. against the available total capacity of 10,225 K.W. The position will be tight until 1955-56 when the first stage of the Tungabhadra Hydro Scheme is expected to be completed, bringing in an additional capacity of 26,400 K.W.

South Kanara Area: A separate scheme for supplying this area from the Mysore Jog system has been sanctioned; but the agreement for the supply of power between Mysore and Madras has not been signed as yet. In the meantime sanction has been accorded for the purchase of an additional 500 K.W. diesel set for installation at Mangalore as an immediate measure to put the power position in the Mangalore area on a better footing. The matter is under correspondence between the private licensee at Mangalore and the Government as to the terms under which the diesel set has to be installed.

The conclusion to be arrived at from the foregoing is that the power demand is far ahead of the power available in the State, that power restrictions are now the rule and there has been therefore much public dissatisfaction both from the agriculturists and industrialists. The schemes under construction will suffice only to meet part of the demand and new schemes will necessarily have to be undertaken.

In the matter of rural electrification Madras probably takes the lead in the whole of India. The number of villages receiving electric supply is over 2,200. About 3,000 new pumpsets are being connected each year in rural areas. The total number of agriculture pumpsets connected up to the end of previous financial year was nearly 19,000 as compared to only 5,900 in 1946.

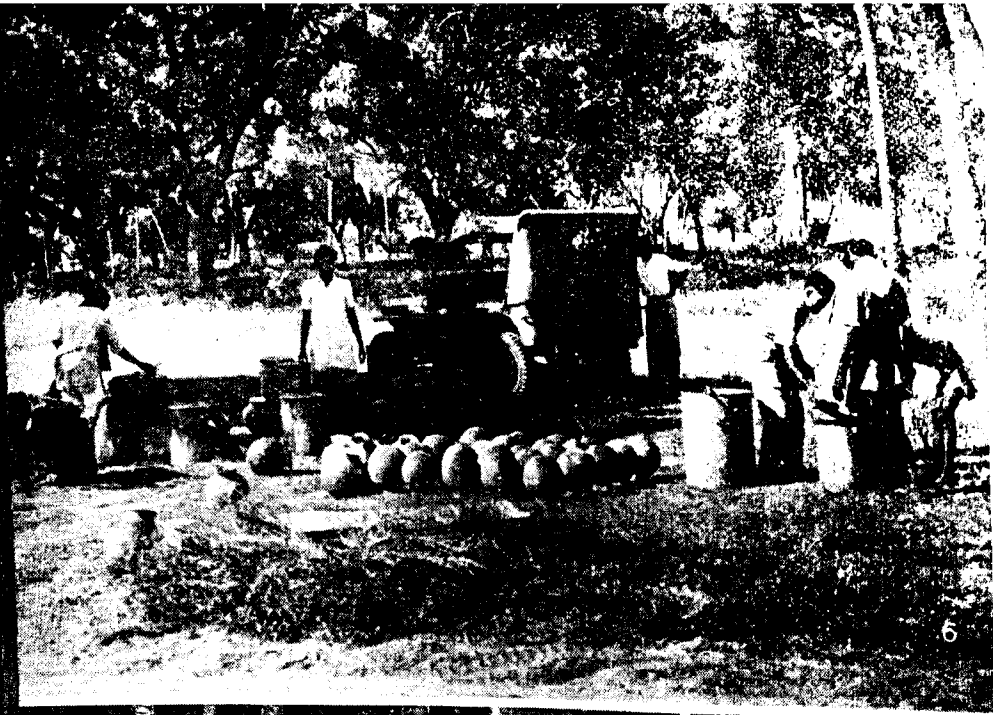
Acquisition Programme

The policy of the Madras Government has been to acquire all electricity undertakings by virtue of the Act placed on the Statute Book in 1949. There are three agencies functioning in the State, both for generation and distribution, viz., the State, the local bodies including Municipalities and the private licensees. It is true that some private licensees have done good work in the matter of rural electrification. But it cannot be gainsaid that

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... TO THE NEERA PARLOUR

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rural electrification is not a paying proposition for them, and both the Municipalities and private licensees are reluctant to extend to the rural areas. Further, the private licensees as well as the Municipalities purchase energy in bulk from the Government and only distribute the energy. If power has to be extended to rural areas as is the policy of the Government, it would be essential to rationalise the generation and distribution of energy in the State as a whole, and by having only one agency, viz., the State, duplication can be avoided in many areas which will result in great economies.

The acquisition programme has to be completed in five stages. But owing to lack of funds the Government are compelled to go slow in the acquisition programme, and this year a sum of Rs. 20 lakhs only has been provided in the Budget for the purpose, out of Rs. 8 crores allotted for the Demand under Electricity. Only a few have been acquired by now. The Government want to postpone the acquisition of undertakings owned by private licensees if they are giving good service, to the last stage, viz., fifth stage.

Projects for Telugu Areas

Criticism has been levelled that all the hydro-electric projects have been developed only in the South and not in the Telugu areas. Things like a head and perennial flow of water are necessary for a hydro-electric project and when these conditions are absent, hydro power projects cannot be developed. Where it is possible to serve the interests of the Andhra area by constructing a hydro-electric project, this Government has been doing so. The Machkund Hydro Project is one such and it is situated in Orissa. But it serves the Telugu area. It is well to remember that the projects which require the concurrence or consent of another State for implementation are not capable of quick execution as those which can be executed in our own State. Another criticism has been levelled that even if hydro-electric systems cannot be developed, thermal plants could be installed and they could be developed.



FINANCE MINISTERS' CONFERENCE: A two-day Finance Ministers' Conference was inaugurated in New Delhi on October 14, 1952, by Sri C. D. Deshmukh, Finance Minister, Government of India.

(Left to right, front row): Sri Jagjivan Ram, Central Minister for Communications; Sri Mohanlal Tyagi, Minister for Revenue and Expenditure; Sri C. D. Deshmukh; Sri B. Rama Rau, Governor, Reserve Bank of India; Sri M. C. Shah, Deputy Minister for Finance; Sri G. L. Nanda, Minister for Planning, Irrigation and Power; Janab Rafi Ahmed Kidwai, Minister for Food and Agriculture; Sardar Swaran Singh, Minister for Works, Housing and Supply; Sri C. Rajagopalachari, Chief Minister of Madras; Sri C. Subramaniam, Minister for Finance, Government of Madras.

The industrialists as well as labour have been complaining of imposition of cut in the use of electricity and urge that thermal schemes should be kept in readiness, so that they may serve as a stand-by in case the hydro-electric schemes do not supply energy on account of failure of monsoon. It should not be forgotten that machines should be imported from a foreign country, both for hydro-electric projects and thermal schemes, and it takes time for the manufacture of machines of the type we want. The countries which manufacture these machines were till now engaged in setting their own houses in order on account of the devastation caused by the War.

Financial Stringency

Added to that, the State has got its own financial difficulties in finding funds. It should not also be forgotten that the desire for the use of the energy for the agriculturists is a recent one and there was a time when agriculturists had to be coaxed for using the energy. In the Rayalseema area practically most of the electrical concerns were run by private licensees and as they did not give satisfactory service they were taken over by Government. It is therefore clear that no accusation of unfairness or discrimination to a particular area can be made in the development of electrical projects by the Government.

I should like to mention that the electricity development programme has to go slow on account of the financial stringency. If funds are made available there are many schemes which have been investigated, for being implemented. The Madras Government have recommended to the Centre a supplemental plan for including the Periyar Hydro-electric Scheme and the Kundah Hydro-electric Scheme. The former one costs Rs. 10½ crores and would provide 75,000 K.W. and 100,000 K.W. ultimately. The Kundah Scheme in the Nilgiris will generate power to the extent of 75,000 K.W. in the first stage and 150,000 K.W. ultimately and it is estimated to cost a little over Rs. 30 crores.

(A.I.R., Madras)

Electricity: Review for August 1952

Review of the activities of the Government Electricity Department for the month of August 1952 is given below:—

Machkund Hydro-electric Scheme.—Land acquisition proceedings were continued. The Lamptaput-Machkund headworks road was completed and was being maintained in good condition. The road from Soguru to Jalaput was formed and metalling was done to a length of 6-1/8 miles. Materials were being collected for construction of road dams at 5/0 and 7/2. Construction of permanent buildings at Onukudelli was nearing completion. In diversion dam 48 per cent of excavation and 42 per cent of masonry have been completed; 66-15 per cent of flume channel work has been completed; In tunnel pond dam excavation for foundation was completed; masonry in progress and concreting for bucket and apron were continued. Final invert concreting of pressure tunnel was completed except 206 feet full width and 2,036 feet for right half. Concreting the side of surge shaft was progressing and 60 per cent of work was finished. Shelters were being assembled for the pipe tunnel. Concreting the side walls and final invert of flume tunnel was in progress and 76 per cent of work has been completed.

Grading of penstocks slopes was progressing. Levelling of power-house site has almost been completed. Foundation excavation for power-house, excavation of tail race and levelling transformer yard were continued. Excavation for foundation for main dam at Jalaput was progressing and 1,039 units of earth work have been done. There was not much progress during the month due to heavy rains. Total labour force during the month was 2,405.

Moyar Hydro-electric Scheme.—All the civil works from headworks to power-house have been completed. The first 12,000 K.W. set was commissioned in April 1952. Erection of II penstock line was over and the erection of machine II is nearing completion. Erection of the III penstock line was nearing completion while the work on machine III is in progress.

Pykara III Stage Extensions.—Masonry construction for the main dam in the non-overflow section and wing walls was continued; collection of crushed sand and rubble stone was progressing. The IV penstock line was filled with water and tested terbid for leakage. Concreting of foundation for differential surge tank was completed. For the extension of Singara Power-house, work on machine foundation was progressing and erection of steel structures will be taken up shortly.

Madurai Thermal Scheme.—Work on the construction of additional cooling pond and foundation block for the 10,000 K.W. turbo set has almost been completed. Balance of turbine and boiler materials were being received, verified and staked.

South Kanara Extension.—Survey for the 33 K.V. line was completed. Plotting work was being done. Tree valuation for 110 K.V. line was progressing.

Tungabhadra Hydro-electric Scheme.—Trial pits were deepened in forebay low pressure pipeline, and surplus channels and tests conducted for ascertaining retentivity and percolation of soils. In Kamalapuram tank and tail race of the power-house investigations were being continued for plastic soil.

Profiles and pole schedules were finalised for Gooty-Cuddapah, Gooty-Kurnool and Gooty-Anantapur lines and were under scrutiny. Realignment has been completed in Guntakal-Gooty reach. Survey for Dhone-Nandyal was taken up.

Revised site plan with acquisition proposals have been prepared for Pamidi and was under scrutiny. The site plan for Bellary was also under scrutiny. Site survey was being done for the alternative site at Anantapur.

Vijayavada and Visakhapatnam Power-house Extension.—**Vijayavada.**—Second draw water well was progressing. Work on control and repair houses was continued. R.C.C. structure work was in progress.

Visakhapatnam.—Fabrication of steel work for west side extensions was progressing. Work on south side extensions was completed except for flooring. Foundation for the VI boiler and third chimney are to be taken up.

Nellore Thermal Scheme.—Work on staff quarters at Gudur was continued. Sub-station structures at Nellore and Gudur were in advance stage of completion.

Madras Plant Extensions.—Erection of steel work for power station was 98 per cent completed. Superstructure of main buildings was 80 per cent over. Superstructure of office and control block was 80 per cent over. Work of railway sidings was 70 per cent finished. Erection of the new boiler No. 4 has been completed and the boiler is in service since May 1952. About 75 per cent of works on erection of boilers Nos. 2 and 3 were done. Erection of the 1st 15,000 K.W. turboset is in progress. Erection of transformers, C.W. pumps, etc., were in various stages of progress. Work on pump house and sub-station near cooling tower was 35 per cent completed.

Operation Branch

Hydro Areas.—Due to further improvement in the water conditions, the restriction in connecting up new additional loads over 3 H.P. was withdrawn from 15th August 1952.

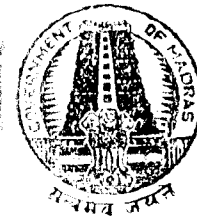
The hydro systems continued to run in parallel with the Madras Electricity System. The generation at Madras was reduced consequent on the availability of power from the hydro systems which helped in building up stock of the coal. The number of units generated, peak load and the services connected up during the month in the hydro system were as follows:—

Name of system.	System peak load in K.W.	Generation in millions units.	Services connected.		
			Agricultural.	Industrial.	Domestic.
(1)	(2)	(3)	(4)	(5)	(6)
Pykara	44,500	18-407	42	2	161
		+ 6-98			
Mettur	45,900	22-00	54	1	94
Papanasam	21,800	9-59	16	7	286
		+ *0-15			

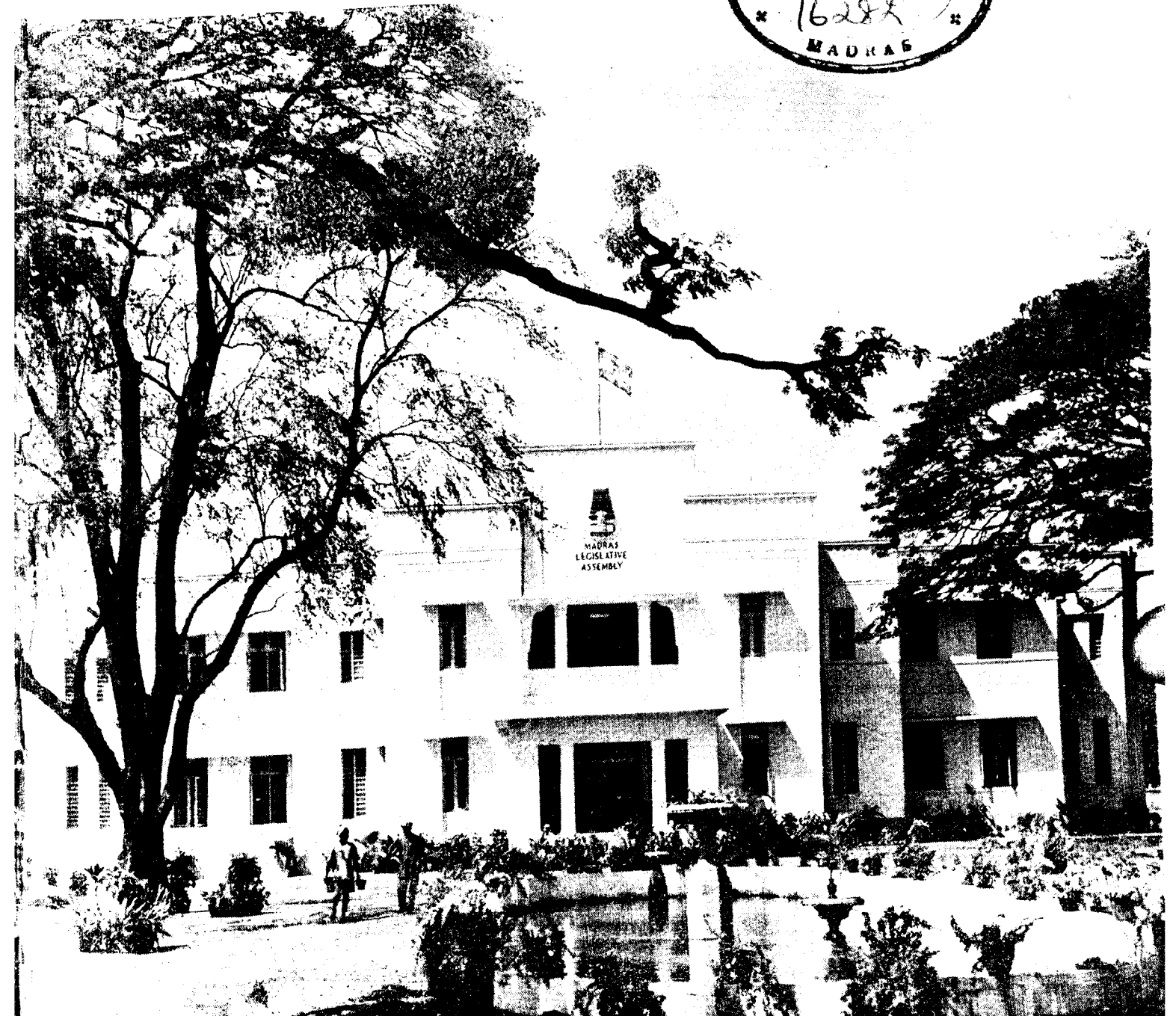
+ 6-98 million units were generated at Moyar power-house, the peak load being 12,500 K.W.
* 0-15 million units were generated at Madurai Thermal Station with a peak load of 3,500 K.W.

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POWER

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During the month, the Minister for Public Works visited Papanasam and Samayanallur on 3rd August 1952 and 31st August 1952 respectively. The Union Government Finance Minister Sri C. D. Deshmukh visited Mettur Power-house with the Chief Engineer (Irrigation) and Secretary to Government on 20th August 1952. The Public Works Department Minister of Travancore-Cochin State also visited Mettur Power-house on 24th August 1952.

Thermal Areas and Ceded Districts.—The Madras System was able to avail itself of relief from the hydro systems this month due to further improved water conditions in the hydro storages.

The peak load, generation and the number of services connected up during the month in the several areas were as follows :—

Name of system.	Peak load in K.W.	Generation in millions units.	Services connected.		
(1)	(2)	(3)	Agricultural.	Industrial.	Domestic.
1. Madras ..	29,000	8.916	17	21	230
2. Vijayavada—					
Steam ..	8,400	3.662	..	..	..
Diesel ..	320	0.006	..	..	..
3. Visakhapatnam—					
Steam ..	3,800	1.504	..	..	..
Diesel ..	1,000	0.067	..	..	..
4 Kakinada ..	790	0.065	..	..	..
5 Rajahmundry ..	698	0.049	..	..	..
6 Srikakulam ..	110	0.017	..	..	..
7 Ongole ..	104	0.022	..	..	..
8 Narasanna-peta.	17	0.003	..	..	..
9 Nellore ..	1,000	0.351	..	3	40
10 Proddatur ..	111	0.028	..	..	17
11 Kurnool ..	320	0.100	..	3	16
12 Anantapur ..	186	0.052	..	..	16
13 Cuddapah ..	215	0.071	..	1	7
14 Nandyal ..	165	0.025	..	1	10
15 Tadpatri ..	65	0.012	..	..	..
Power purchased from Mysore.					
Hindupur ..	250	0.054	..	1	10
Ceded Districts	2,940	1.254	7	3	66

In the Madras Electricity System 69 D.C. services with an approximate connected load of 107.8 KWs. were changed over to A.C. supply on a voluntary basis.

During the month 20 extensions were sanctioned by Chief Operation Engineers (South) and Chief Engineer for Electricity at an estimated total cost of Rs. 6,87,000.

Plywood Industry

A recent review of the plywood industry carried out by the Government of India has revealed that capacity for the manufacture of tea-chest plywood has considerably expanded of late. Prospective industrialists in this field are, therefore, cautioned against precipitate action in executing their plans. Government wish to take the opportunity to notify all concerned that requests for inclusion in the approved list will be entertained only if the scheme of production has received the Union Government's prior approval.

Do You Know?

1. The expenditure on the five-year plan will be Rs. 2,000 crores; the plan is expected to add 12 per cent to India's national income.

2. Rice and wheat constitute 60 per cent of India's total foodgrains production, millets 23 per cent and the balance is made up by gram, barley and maize.

3. Indian production of power alcohol during the first six months of 1952 is 4,226,050 bulk gallons; last year's total production was 3,120,000 bulk gallons as against 2,398,000 gallons in 1946.

4. The gross Central revenue collections in India for the first six months of 1952-53 amount to nearly Rs. 43 crores as against the budget estimate of Rs. 86 crores for the whole financial year.

5. The number of foreign tourists who visited India last year is 18,000, and they are estimated to have spent rupees one crore in the country.

6. The average per capita consumption of fish in India is the highest in Travancore-Cochin with 13.6 lb. per annum; West Bengal is second with 8.4 lb.

7. The total gross land and sea customs revenue in India for the first six months of 1952-53 is about Rs. 91.6 crores as against the Budget estimate of Rs. 169 crores for the financial year.

8. Since commencement of production the Sindri factory has saved India Rs. 3.26 crores in foreign exchange, being the cost of 93,228 tons of ammonium sulphate despatched up to October 4, 1952.

9. Bombay, West Bengal and Madras have together received more than half the total quantity of foodgrains so far despatched by the Union Government. The despatches to these States are 797,100 572,400 and 4,137,00 tons respectively.

10. The annual per capita consumption of ghee in Ajmer is nearly 6 lb which is the highest in the Indian Union; the lowest is in Assam with less than half a pound.

No Educational Concessions for Detained Students

The Government have directed that the educational concessions, granted in the Order dated 31st May 1952, to the children of Non-Gazetted Officers and others, should be withheld from a pupil who remains for more than one year in one and the same class or form.

Pupils, who were detained last year and who are continuing in the same class this year, will not be eligible for the concessions. The concessions thus withdrawn will be revived when the pupil is promoted to the next higher class or form.

FISHERIES

23

MADRAS INFORMATION

Plants that Kill Fish

Tiny little fishes, beginning their existence in the river waters, relish and seek only animal food—minute creatures! This exclusive non-vegetarian trait continues for a while, but later, as they grow up, they combine in their dietary both animal and plant food.

Scientific knowledge of fish life like this, so essential for the development of inland fisheries, is being investigated today at the Central Inland Fisheries Research Sub-station at Cuttack, sponsored by the Ministry of Food and Agriculture, Government of India.

At the Cuttack Research Centre, fishes are reared in nursery ponds—72 in all. At the end of summer, water is pumped out of these ponds. Their beds are cleaned, and cowdung and manure spread at the bottom. Then they are filled with water again.

Spawning Season

When, with the onset of the monsoon, the spawning season starts, thousands of little tiny spawn—about 5 to 7 mm in length—are caught from the Mahanadi irrigation canal nearby and put into these ponds for rearing. The earlier cowdung and manure bed produces enough plant and animal food for the fry.

Here, in the ponds, the fishes thrive. Additional food is supplied, whenever required, of mustard oil cake powder. When the fry reaches a suitable size, they are distributed through the State Government's Fisheries Department, to those who run fish farms.

One of the main problems investigated at the Cuttack Research Station is the mortality among the fry—its causes and possible prevention of high incidence. When the research work started, the mortality was found to be somewhere near 95 per cent. Today, as a result of continued experiments, the mortality has been brought down to about 50 per cent.

The Cuttack Research Station deals mainly with pond culture. Amongst the fish—both edible and of commercial value—on which research has been centred are varieties of Major Carp such as Catla, Rohu, Mrigal and Calhasu.

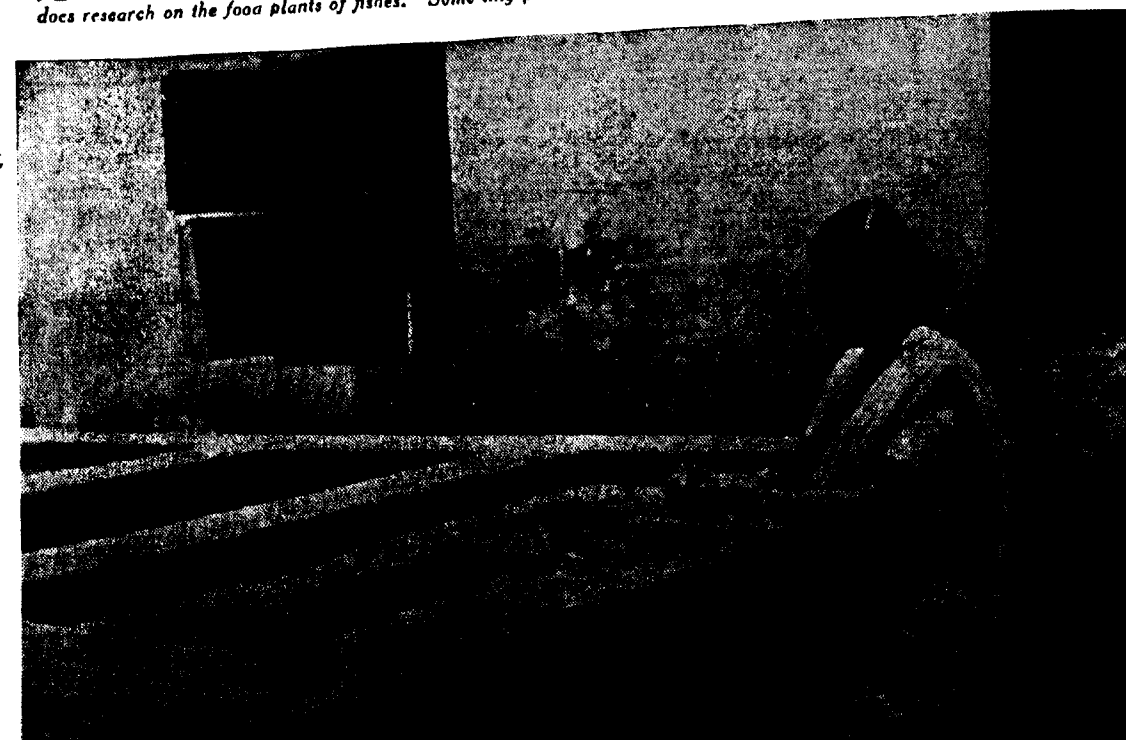
Experiments conducted are wide and varied. In rectangular cement cisterns small fry are kept for about two weeks. Their habits, feeding—everything—is watched during this period. In a small aquarium the Station possesses, experiments are conducted on small fry. Here the problem is to determine the acid and alkali properties of water and other factors best conducive to their maximum growth.

Catching Fish with Powder

Research on the food plants of the fishes has yielded results of utmost scientific value. It has been found that some minute plants offer very useful food for the fish, while some of the big plants are positively dangerous to their life or hinder their growth.

Research scientists at Cuttack have discovered a new use for Derris powder—formerly used to kill fish. This brownish powder, derived from the root of a plant, when mixed with water in large doses and splashed in a pond, will kill all the fish. But by diluting the dose, investigations have revealed, it is now possible to catch fish easily. The dilute solution when poured into the pond water and the water churned up, makes the fish go into a partial coma. Half-dazed, they come up to the surface, scooting, belly-up, in erratic movements. They can then easily be caught in nets. However, they recover fully when thrown back into fresh water.

PLANTS THAT KILL FISH: Kumari E. Mitra of the Central Inland Fisheries Research Sub-station at Cuttack does research on the food plants of fishes. Some tiny plants are useful food for fish, others positively dangerous to fish life.





Top : The Hon'ble Sri S. B. P. Pattabhirama Rao, Minister for Rural Welfare, inspects the Service Home for Women at Rayapuram.
 Centre : Srimathi Kamini Devi studies machine knitting done at the Technical Training Centre.
 Left : At the School for Deaf and Dumb children.
 Right above : Srimathi Kamini Devi presents books donated by CARE to an elementary school.

Madras Information

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COVER PAGE—
 A fine view of the new Assembly Buildings in the Government House Estate, Mount Road.

Fifty Years of Research at Samalkot

By SRI MULUKUTLA SATYANARAYANA, B.A., B.SC. (AG.), Deputy Director of Agriculture, II Division, Eluru

If Sir Arthur Cotton with his river projects greatly assisted the peasantry and the countryside and wiped out amine from parts of South India, another luminary that helped in no smaller measure the Indian peasant is Dr. Barber with his pioneer work on crop researches in India.

The following extract from Dr. Barber's first report on the work of the Agricultural Research Station at Samalkot shows with what object the Station was first started :—

"A disastrous disease having appeared among the canes in the Godavari delta and cultivation of this crop being in danger of extinction, the attention of Government was directed to the matter. Dr. Barber, the Government Botanist, with his experience of sugar canes in the West Indies, was directed to enquire into the matter and report on it. He found that the disease of the canes was caused by a fungus, *Colletotrichum falcatum*, commonly known as 'Red Rot'."

Healthy canes assembled in 1901 at a distant place, Hospet, that was free from the disease and planted at Samalkot and other places of the tract could not escape the disease. In his report Dr. Barber pointed out that far greater study was necessary both into the local practices and the characters of the different canes before any such introduction or acclimatisation could be attempted.

Twelve Acres of Land Rented

Accordingly in 1901, 12 acres of land were rented and to this area additions were made from year to year, till 1905, when the Farm attained the present size of 41 acres. In the research on the problem, it was discovered that the fungus causing the disease is more adaptable in its parasitism than the cane was in its resistance, and that any cane placed under a disadvantage may be destroyed by the fungus. With the application of incessant effort to the problem canes free from almost any disease could be produced in 1911-12. Attempts to distribute disease-free canes could not have rapid success as only a few ryots came forward and that too those staying nearby.

All the Government modes of advertisement were put into practice but with no marked success. An assistant was provided with a cart filled with the canes of good qualities and resistant to disease and asked to tour the interior villages, holding meetings wherever he could command good audiences. The effect was instantaneous. As many as 19 ryots came forward from one village and subsequent progress was marvellous. Out of a total of 13,000 canes distributed, nearly 9,000 went to Ganjam and Eluru, and the rest were sold to ryots in the delta.

Father of Sugar Industry

It is in the fitness of things to mention in brief at this juncture the outstanding work of Dr. Barber. He is the father of sugarcane taxonomy. He paved the way to solve many a problem connected with the sugar industry in agronomic breeding and physiological effects. Under a complicated plan, he introduced bloods of different measures from the noble canes of South India, the thin

canes of Northern India, the Chinese canes of a different race and the 'Sportaneums' which belong to the same grass family as the sugarcane. Old canes of the country have been supplanted with canes synthesised from the breeder's viewpoint, in the manner aforementioned.

This fell disease of 'Red Rot' is prevalent throughout India. If today sugar factories have sprung up throughout India and produce enough sugar not merely to meet the country's needs but with scope for export abroad, it is primarily due to the work of Dr. Barber and others trained by him.

History of Cane Work

At the time when this Farm was started it was under the control of the Board of Revenue with administrative authority vested in the Deputy Director of Land Records, Survey, Settlement and Agriculture, and the Collector, East Godavari. With the implementation of the broad-minded policy of Lord Curzon, the Viceroy in 1905, the Agricultural Department was created in the State in 1904 and the Agricultural Research Station at Samalkot came under the control of the Director of Agriculture.

Almost all the canes of the world, from Mauritius, Fiji Islands, Queensland, Barbados, Java, etc., were assembled and studied at the station in the first decade of this century. Canes from Barbados that showed promise came for intensive study in the second decade of the century. The local renowned chewing cane, *Bunguru-theeg* (B. 208) is from this stock. Canes from Java came for similar study in the third decade of the century. The seedling canes with Spontaneous blood were under tests in this station in the third decade of the century. Cultures from the noble canes were in test in the fourth decade. It was at this time that CO. 419 (the child of Mr. Dutt) far exceeding in its performance POJ. 2878, the wonder cane of the world, finally put the cane industry of India on the map of the world.

As the Godavari conditions were not then helpful for arrowing (flowering) of canes, Dr. Barber instituted his earlier researches to induce flowering and seeding in the glass-houses of the Nilgiris and later shifted his work to Coimbatore. The seedling-canec produced at the Sugarcane Breeding Station, Coimbatore, were grown at the Samalkot Station for the first time during 1918-19. J. 247 that was its main stay and CO. 213 (the off-spring of Sri T.S. Venkataraman) had all their tests on the station before they established themselves in the tract. Such was the line of work even in subsequent years with the *Jonni* hybrids, the bamboo hybrids and so forth till a Liaison Farm was opened at this place in the year 1948.

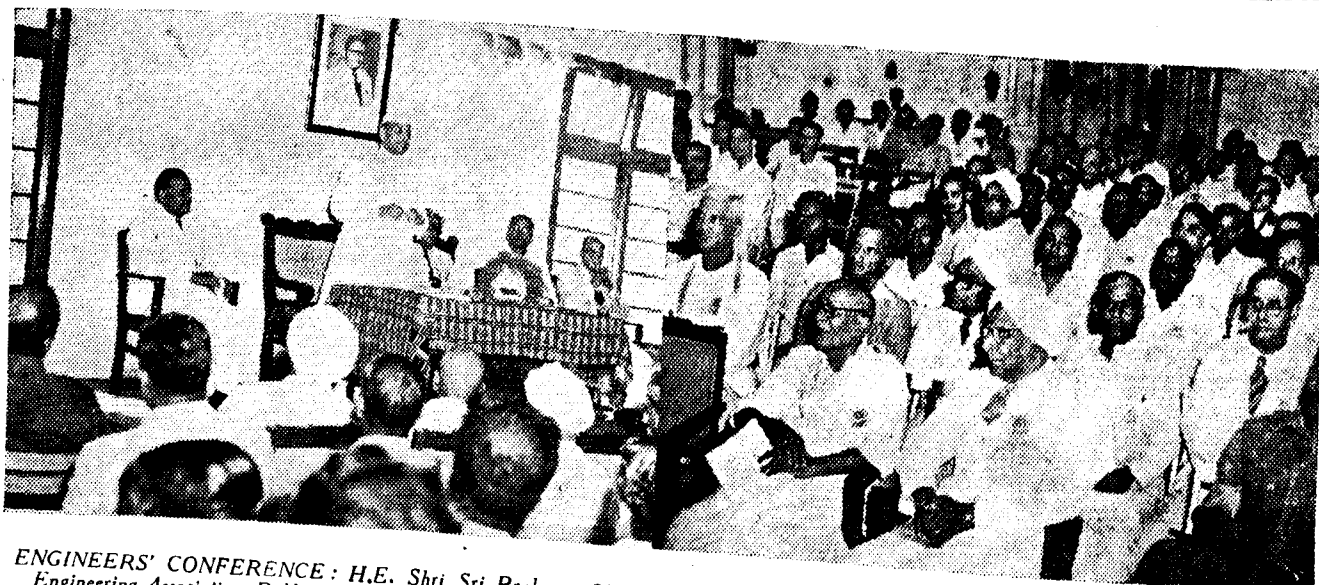
In short, the Samalkot-Agricultural Station made available canes to suit every type of land, class of ryot, varied investments in cultivation and the sugar factory. It systematised 'short crop', line planting, interculturing, cane mills, furnace construction for jaggery-making, preparation of good jaggery, and sugar by the Khandsari process.

TERRITORIAL
ARMY WEEK



The Territorial Army Week in Madras, held from November 16, 1952, at Rajendras Stadium. Pictures taken at a territorial unit: (1)

raw recruits arrive; (2) Medical Inspection; (3) (4) Anti-aircraft gunnery; (5) Games; (6) Fancy dress gala day; (7) Artillery practice; (8) Sri C. Rajagopalachari, who inaugurated the Week, was received by General H. M. Mohan, G.O.C., Madras Area; (9) Chief Minister exhorted young men to join the Territorial Army and thereby become better citizens.



ENGINEERS' CONFERENCE: H.E. Shri Sri Prakasa, Governor of Madras, recently inaugurated the Annual Conference of the Madras Engineering Association, Public Works Department.
His Excellency told the Engineers: "You will have to harness the great rivers in the north and in the middle of the country, so that the life-giving waters may be available to us at all times."



TRANSPORT WORKERS' PROBLEMS: Dr. U. Krishna Rao, Hon. Minister for Transport, recently addressed a gathering of Government Transport workers.
The Hon'ble Minister assured workers that their legitimate grievances would be considered and remedied, and appealed to them to extend their co-operation in making the bus service efficient.

PROGRAMMES

Adequate Relief Assured to Affected Areas

H.E. the Governor Addresses Joint Session of Madras Legislature

Hon'ble Members of the Legislature!

With this session of the State Legislature, we commence a new chapter in the history of our State. Before I proceed further, I would like to express on behalf of our State our regret at the passing away of King George VI, the Head of the Commonwealth of which our Republic has elected to be a member. The late King worthily upheld the great traditions of the British monarchy and endeared himself to all. We send our people's respectful greetings and good wishes to Queen Elizabeth.

This is the first session of the State Legislature as constituted in accordance with the Constitution of the Republic of India, and I congratulate you on being members of this historic Legislature. A democratic Constitution like ours will be largely what the voters and legislators make of it. The voters have done their part, and it is up to you, the legislators, to help in evolving sound traditions.

A Pledge Fulfilled

In his address at the commencement of the last session of the old Legislature, my predecessor assured the Hon'ble Members of that Legislature, and through them, the general public, that the Government were determined to do all that lay in their power to ensure that the general elections were conducted with absolute impartiality and fairness to all the contesting parties and candidates, and appealed for the co-operation of all the parties for achieving that result. I think we may claim that that assurance has been fulfilled. The largest share of the credit for this result must go to the several millions of voters, men and women, who exercised their franchise in an orderly manner.

My Government assumed office on 10th April 1952. Owing to the shortness of time between that date and now, my Address will not cover as much matter as ordinarily, at the beginning of a session, the Address may be expected to deal with. We could not possibly postpone this sitting in view of clause (1) of Article 382 of the Constitution. After completing the necessary business at this

Address by H.E. Shri Sri Prakasa, Governor of Madras, to the Joint Session of the Madras Legislature, on May 6, 1952.

JOINT SESSION: H.E. Shri Sri Prakasa, Governor of Madras, addressing the Joint Session of the Madras Legislature (Assembly and Council), on May 6, 1952. This is the first Joint Session of the State Legislature as constituted in accordance with the Constitution of the Republic of India.



sitting, it has been decided that you will be called upon to gather again in June and I shall address you again at the commencement of that sitting under clause (1) of Article 175. At that sitting of the Legislature, the full Budget for the current financial year will have to be passed, and it will be an occasion when there can be a comprehensive review of all matters which are important from the point of view of the welfare and development of the State.

Relief Measures in Stricken Areas

During the financial year 1951-52, this State experienced a failure of both the monsoons for the fifth year in succession. Cultivation of food crops suffered most seriously in four entire districts and in parts of six other districts. Relief measures have been extended to the affected areas by the grant of liberal wet and dry remissions and by providing relief works for labourers thrown out of employment by reason of this drought. The collection of takkavi instalments has been postponed till the next fasli year in these areas. Takkavi and subsistence loans and loans for deepening field wells are also being sanctioned on a liberal scale in the affected areas. To meet the distress caused by the drought, drinking-water wells are being deepened in a large number of places.

The Army of India is rendering great assistance in this respect. A number of water lorries have been loaned by them for distribution of water in the areas where scarcity of drinking water is most acute. Gruel centres have been opened in large numbers and free gruel is served to infirm and disabled persons and to women and children. The Government of India have sent a large quantity of multi-vitamin tablets and milk powder for distribution in the areas of distress.

Fodder and Grain

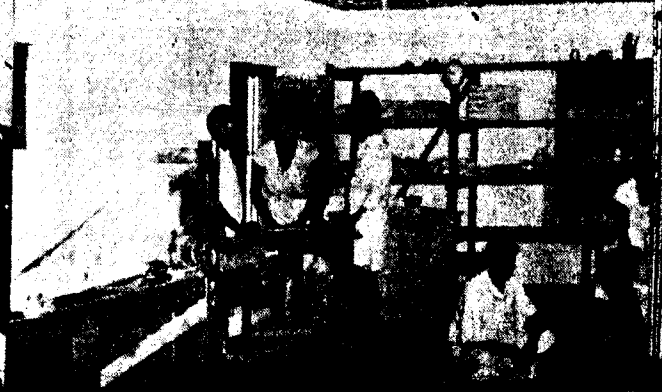
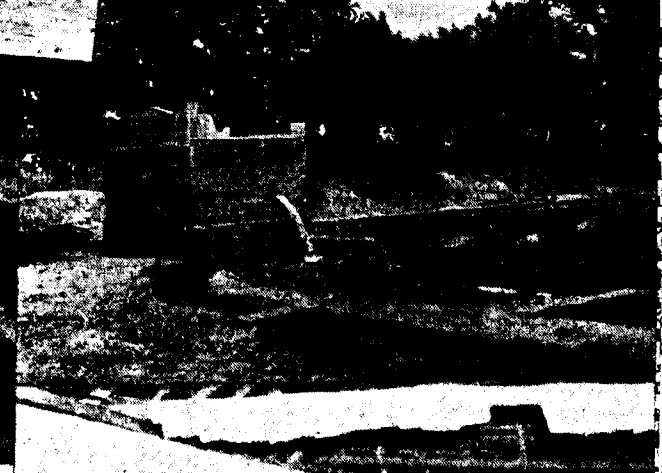
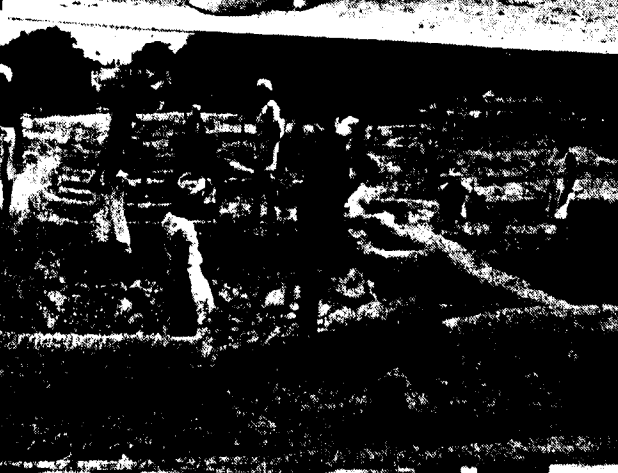
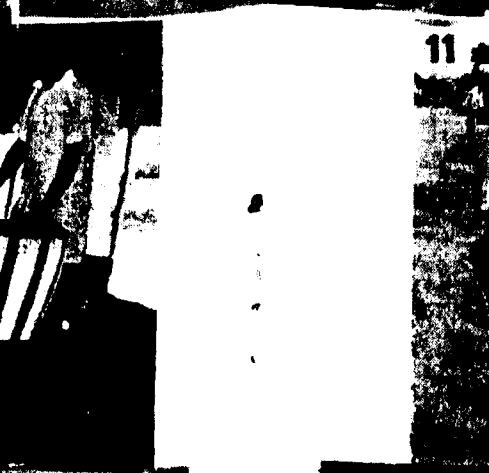
To relieve scarcity of fodder, the reserved forests in the districts of Cuddapah, Chittoor and Anantapur have been thrown open for free grazing and free removal of hill grass. Arrangements have also been made to import fodder and grass from the surplus districts and to sell them at concessional rates to the ryots in the drought affected districts, where purchasing power has been considerably reduced. Several voluntary organizations have

NEW LIFE AT TIRUMANGALAM

A pictorial record of rural reconstruction activities at Tirumangalam is presented on these pages. The various phases of co-operative endeavour depicted here indicate clearly promises of the new life ushered in under the Rural Welfare Scheme :—

1. Improvement work in the Kallanai Tank. 2. Bunding the sides of the Orappanur Road. 3. Everybody works at Kallanai. 4. Masonry weir for the Muruganeri Tank bund. 5. Gram Sevaks sweeping the lanes at Kadaneri. 6. A smiling harvest of ragi. 7. Single-bull

ghani at Kallupatti. 8. An adult education class at Thottiapatti. 9. From darkness to light. 10. Co-operative effort makes even a hard job pleasant. 11. Compost pits to turn waste into wealth. 12. News of the day—papers are read out, explained and discussed. 13. Walls like these are welcomed in every village. 14. Building steps for the tank. 15. Distant view of the tank. 16. Silt was removed and a pump was fixed for the Urundurappanur village tank. 17. Paper making section of the Kallupatti Grama Sevak Vidyalaya.



PROGRAMMES

Reconstitution of Rayalaseema Development Board Ordered

The Government have directed that the Rayalaseema Development Board be reconstituted with the following as members :—

The Hon'ble Minister in charge of Rayalaseema Development—Chairman; The Development Commissioner—Secretary; The Hon'ble Minister (Agriculture); The Hon'ble Minister (Local Administration); The Hon'ble Minister (Co-operation); Five members of either House of the Legislature—one from each of the five districts; Five members of the public—one from each district; Not more than five members of the public of the State from among those who are actively interested in the development of Rayalaseema Districts; the Chief Engineer (Irrigation); the Chief Engineer (Electricity); the Chief Engineer (Highways); the Registrar of Co-operative Societies; the Director of Agriculture; the Director of Industries and Commerce.

offered free gifts of fodder and grain, and transport facilities have been arranged at State cost for moving them to the affected areas. The Prime Minister of India has most generously assisted us from his Relief Fund. A Madras State Famine Relief Fund has been organised and I trust there will be good response to our appeal.

The Government of India have assisted us to find ways and means accommodation to the extent of two crores of rupees by purchasing securities held by the State Government, and have agreed to make a free grant not exceeding Rs. 48 lakhs to help run gruel centres. We are most grateful to the Government of India and to the voluntary organizations for all their assistance. My Government will endeavour to give adequate relief in all the areas where there is distress on account of the failure of the monsoons.

Food Situation

Owing to the successive failure of the monsoons during the last five years, the food situation in the State continues to be difficult. The latest estimates indicate that the production of rice this year will be less than the normal by nearly ten lakhs tons and the production of millets by nearly four lakhs tons. Allotments by the Government of India from the All-India pool will be mostly in the shape of wheat and milo, and the rice quota is expected to be less than two lakhs tons. As against this it may be noted that we have been lucky to some extent in seasonal conditions in the surplus districts, and there is no reason to apprehend that there will be any deterioration in procurement.

The Government of India have permitted this State to increase the procurement price of paddy by one rupee per maund up to the end of May this year, in addition to the increase of eight annas per maund sanctioned in December last. This will not affect the consumer's prices.

MADRAS INFORMATION

The recent general slump has resulted in considerable distress to those engaged in the large handloom industry of this State. My Government are giving anxious thought to this subject and will announce the measures which they propose to take after consulting all the interests concerned.

Urgent Piece of Legislation

There is an urgent piece of legislation to be put through at this meeting of the Legislature. It relates to immovable properties which were requisitioned for purposes of the State Government under the Defence of India Rules during the last War and which continued to be subject to requisition under Central Act XVII of 1947, the life of which was extended for a period of one year from 1st April 1951 by Madras Act II of 1951. As the work of de-requisitioning of these properties could not be completed before the end of March 1952, immediate action had to be taken to extend the life of the Central Act referred to, for a further period of one year from 1st April 1952.

The Requisitioned Land (Continuance of Powers) (Madras Amendment) Ordinance, 1952 (Madras Ordinance I of 1952), extending the life of the Central Act till 1st April 1953 in respect of immovable properties requisitioned for State purposes, was promulgated on the 31st March 1952. A self-contained Bill replacing this Ordinance will be introduced during the present sittings of the Legislature.

I have done. I am sure that your debates and deliberations in this and future sittings of the new Legislature of this State will be conducted with the same high sense of public duty and responsibility as in the past, and I pray that you may be guided by faith, courage and wisdom in your counsels.

House Rent Allowance Scheme Extended by Another Year

The Government have sanctioned the continuance of the scheme of House Rent Allowance to Government servants on a pay not exceeding Rs. 150 per mensem, employed in the Madras City, mofussil municipalities and taluk headquarters, for a further period of one year from April 1st, 1952.

Tractor to Supply Water

The Government have ordered that 20 small type (18.5 h.p.) tractors and trailers, available with the Agricultural Department, may be provided each with a tank and pump with pipes and fittings and employed for supplying water to the people in the areas which have been affected by adverse seasonal conditions and where water scarcity is acute. The Government have sanctioned an expenditure of Rs. 60,400 in this connection.

PROGRAMMES

Scarcity Conditions in Madras State

By SRI S. K. CHETTUR, I.C.S., Secretary, Revenue Department, Madras

I shall attempt to survey the nature and extent of the scarcity conditions existing in several districts of this State and then outline the measures which have been undertaken both by Government and by non-official agencies for their alleviation of distress. How far these measures have been successful, it is perhaps too soon to judge. There have been numerous criticisms that the Government have not faced up to the famine; that they have hesitated to declare as famine areas parts of the State which are really in the grip of famine and that their measures to meet the situation have been inadequate and ill-timed.

First, as to the areas in which these conditions obtain, it is now common knowledge that the whole of the Rayalaseema with the exception of Bellary District and portions of Kurnool District have been badly affected by a severe drought this year. This drought has itself come on top of four successive years of lean rainfall. In addition to the districts of Rayalaseema, very severe scarcity conditions obtain in North Arcot, Chingleput and the Dharapuram Taluk of Coimbatore District and to a lesser extent in portions of South Arcot and the Pudukottai Division of Tiruchirappalli; Vinukonda Taluk and Palnad in Guntur District have also been affected. Tanks, wells, rivers and in some cases even spring channels have completely gone dry. There is very little water for cattle and there is scarcity of drinking water for human beings.

Agriculturists Hard Hit

The ryots who subsist by agriculture have been very hard hit because the earth has yielded none of its usual crops and there is no use of trying to cultivate afresh as there is not sufficient water to bring any crop to fruition. As a result, the unemployment problem for the agricultural labourer is most acute. The income earning capacity of the ryots having thus fallen to almost zero, many of them are faced with the inability to buy even the essential foodstuffs for their daily life.

It was in this emergency that the State stepped in nearly eight months ago and devoted all its attention to the primary task of affording employment for the ryots and for the landless agricultural labourers, for it is common knowledge that there is no scarcity of foodgrains in the area. Those who have visited these districts can testify to the fact that there are several fair price shops from which grain of the variety popular in the area can be purchased. The effect, however, was that most of the ryots and the landless labourers were faced with the prospect of having nothing to do simply because the rain had failed for five successive seasons and the earth was too hard to till and even if tilled would have yielded no results.

Programme of District Work

This is exactly where the Government with wise prescience began amplifying their programme of district work to afford employment as early as in September 1951. The usual methods by which work is afforded is by amplifying the District Board programme for road works and also the rural water-supply scheme for the digging of new

wells. Side by side with this there would be in each district a considerable amount of normal work on irrigation projects and on repairs to major irrigation and minor irrigation tanks. The Government felt that this method of anticipating distress by affording employment was sounder than the method mentioned in the Famine Code of opening a test work with all concomitants of a costly organization to run it.

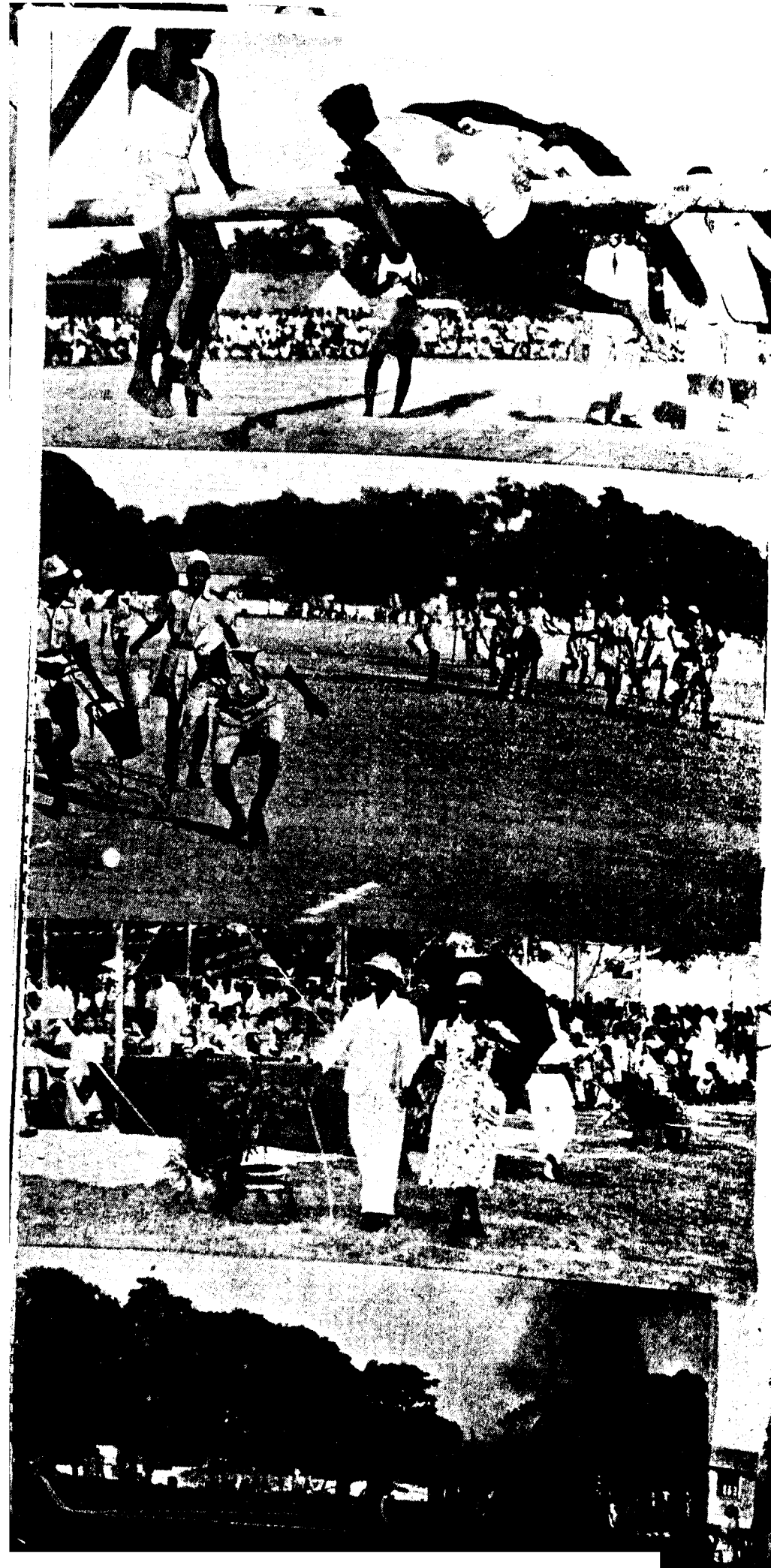
The Government also helped the ryot by liberal large-scale remissions both on wet and dry lands. In the case of wet lands all lands which yielded the crop below four annas were given full remission and those which yielded the crop between four annas and eight annas were given half remission. At the same time orders were issued for the suspension of the collection of kists in the affected areas. The Government also encouraged the ryot to apply for loans both for land improvement as well as for digging wells, and in addition to this offered to grant subsistence loans to enable the ryots to tide over the lean season.)

Grant of Loans

To quote voluminous statistics in a talk is tiresome; as one humourist said, the statistics that he could remember was the one that if you put all the persons who went to sleep in church end to end they would be very much more comfortable! But it has to be mentioned that Government envisaged the spending of Rs. 1.23 crores for the grant of loans under the Land Improvement and Agriculturist Loans Act and Rs. 52.37 lakhs for the grant of subsistence loans. These latter loans are also to be free of interest. In order to bring employment as close as possible to the doors of the villager, Government have recently decided that the silt in the bed of minor irrigation tanks would be scooped out and utilised to raise the bunds to a height of one foot and a width of two feet above accepted maintenance standards. As these minor irrigation tanks are studded all over the taluk in nearly every one of the affected districts, it follows that the work afforded by this measure will be within easy reach of almost all the villages in the area.

Further, Government have recently issued clear instructions to the Collectors to utilise this opportunity to improve conditions in the villages themselves. Thus ugly approaches to the villages are to be levelled and cleared up and made attractive. Mounds of earth will be put up around avenue trees; a common prayer hall or mantapam will be built for the common use of villagers and the choultries which have fallen into disuse and decay will be renovated or new ones built. Thus in every direction the labour of the villager will be utilised in activities which will ultimately yield him a new amenity or a much needed improvement in the conditions of his village life.

A suggestion has been made that we should utilise this opportunity to build a large number of new minor irrigation tanks by bunding up places where there are shallow depressions and converting them into tanks. But this scheme, though it sounds excellent at first sight, proves to be not feasible on closer examination as the indiscriminate setting up of bunds in various places will obstruct



POLICE AND FIRE SERVICE SPORTS

The annual sports of the Madras City Police and Fire Services were held recently on the Pudupet maidan, Madras City. In addition to the athletic events, there was an impressive demonstration of rescue work by the Fire Services personnel.

The pictures show (from top to bottom) fighting on the greased pole, the stirrup pump race, the fancy dress competition, fire fighting display and enactment of a typical rescue scene.

AGRICULTURE

25

MADRAS INFORMATION



GOLDEN JUBILEE: The Agricultural Research Station, Samalkot, recently celebrated its Golden Jubilee (1902-1952). Among those who participated in the pleasant function are (left to right): Sri Laksharaju Subba Rao, Sri M. Baptnedu, Sri N. S. Manti (Collector of East Godavari), Sri M. S. Sivaraman (Director of Agriculture), Sri K. Veerabhadra Rao, Sri Mulukutla Satyanarayana, Sri Jillela Venkata Bhanaji Raman, Dr. R. Nagan Gowda (Minister for Agriculture) and Sri Y. Bapanna.

Research in Other Crops

Inspired by the success scored in the solution of the sugarcane problem of the tract, the cultivation of other crops like paddy, plantain, pulses, oil-seeds, fibre crops, etc., were taken up from the beginning of the third decade of this century. Mr. Hilson, an ex-Director of Agriculture, who gave the first improved strains in the crops tackled by the Department in the early years, also produced the first strain in paddy crop Rasangi No. 2, on this station. The study of the paddy crop revealed that another station complimentary in its work was required to fulfil the needs of the deltas of Godavari and Krishna, the biggest rivers of South India. Accordingly Sri Neelam Sitharamaswamy Naidu, who as Village Munsif, Samalkot, was helpful to Government in the acquisition of the present site of the Farm and who with his fund of knowledge in local agriculture and the experience he had after joining the Department, selected the site at Maruteru in 1926 in the West Godavari District.

In 1927 Samalkot issued all its material in paddy for progressive selection work at Maruteru; Samalkot, in a way, has since been catering to the needs of the higher and the middle delta regions while Maruteru with its particular lie of the land and the more sticky soil condition confines itself in its activities to the middle and lower deltas. The two are complimentary in their functions, as already stated.

Paddy.—The Samalkot Farm has issued 12 improved strains of paddy which are in extensive spread not merely in the deltas of Godavari and Krishna, but also in the Yeleru basin and in far north from Srikakulam District and in the far west in Malabar. The strains are also in study in several other districts for utilisation in the local problems of such districts. To the ryot behind the plough the time and the effort needed to evolve a strain are matters enigmatic. Sometimes the examination of a lakh of individual seedlings, from particularly assembled material and subjected to the standard tests in the course of seven years, would have resulted in nothing worth release. A twenty per cent extra yield over the local, during at least three years, has been the criterion for release of an improved strain. These eighteen strains emanating from such hard tests occupy over fifteen lakhs of acres and cater to several kinds of soil, systems of cultivation and seasonal conditions. Some of the strains of outstanding performance during a whole decade, still need propaganda and adoption for wider spread.

Release of the paddy strains Nos. SLO. 1, 3, 5, 6, 7, 8, 10, 11 and 12 by Sri Rao Sahib G. Jogiraju, of Nos. SLO. 4 and 8 by Sri G. Ranganathaswamy and of Nos. SLO. 2 to SLO. 18, by Sri Mulukutla Satyanarayana cannot be mentioned, when the paddy work on this station is thought of.

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the flow of water to existing tanks and affect the catchment area for irrigation under them and consequently lead to a crop of law suits. Government, however, are fully alive to the need for a long-term solution to the problem of scarcity conditions in an area like Rayalaseema and it seems clear that there is a move towards undertaking various long-term irrigation projects in this area with a view to making the supply of water for irrigation purposes more definite and assured. But this long-range policy will necessarily take many years to implement.

Opening of Gruel Centres

It is necessary to examine the various forms of direct relief administered by Government in addition to those indicated above. As the ryot or landless labourer gets only one rupee a day as wages for his work, it is obvious that this will not help him to support his wife and children. Government have therefore opened a large number of gruel centres, the object of which is to feed the wives and children and other dependents of the ryots who are unable to work for themselves and earn a wage. In addition, there are people disabled either by illness or old age from the capacity to work, and these are also fed at the gruel centres. Gruel centres are also catering to the floating population of beggars in and around the village—the poor are always with us—who are helpless owing to the contraction of private charity. The earliest gruel centres were opened and run successfully in several districts out of the grant of one lakh and seventy-five thousand rupees made by the Prime Minister, and the allotments in each district were supplemented by private charity in the district, and the gruel centres were administered by non-official local committees. But the situation has now become so grave that Government have stepped in and have opened gruel centres out of the State revenues, and the Government of India have offered to pay half the cost up to a total of rupees 48 lakhs.

During H.E. the Governor's tour in Rayalaseema a new recipe was tried in these gruel centres in order to make the gruel more attractive, and it was discovered why a mixed gruel consisting of red cholam, a small quantity of rice, a small quantity of green gram and shavings of onions, when boiled and served with a pinch of salt or a flavouring of pickle was extremely palatable. His Excellency tasted the gruel and pronounced it good, though he added that he would not undertake to live continuously upon it. Through these gruel centres are distributed various gifts received from public-spirited bodies and associations, gifts such as multivitamin tablets, eggs, parcels of foods and gifts of clothing for the women.

Various philanthropic bodies like the Andhra Mahila Sabha, the Rayalaseema Famine Fund Committee, the Ramakrishna Mission and the Friends Service Unit are working in the areas, and the first named is arranging for work centres where the wives and daughters of ryots will be taught some useful trade like khadi spinning, mat weaving, basket making, embroidery, etc. The running of gruel centres and work centres cost considerable sums of money and it is only natural that in times of grave distress those who are wealthy and well-to-do should stretch out a helping hand to their brethren who are suffering. Hence the idea of forming the Madras State Peoples' Famine Fund would be a central reservoir of philanthropic efforts throughout the State.

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Army Aids Relief Work

Even more alarming than the scarcity of employment was the remarkable scarcity of water, particularly in the Rajampet and Rayachoti taluks of Cuddapah, in two or three taluks of Anantapur and in Cumbum and Markapur of Kurnool. Tahsildars had already been directed to deepen existing wells where necessary and to dig new wells where deepening proved unsatisfactory. Government diverted a number of drills and compressor sets in these areas. The Famine Commissioner launched an ambitious scheme by which Rs. 150 was to be given to the villagers of any village who required urgently to deepen an existing private or public well in order to obtain a supply of water. If this amount was not sufficient, the villagers should contribute the balance either in money or in labour.

Just at this time we received very timely and energetic help from the Army, who very kindly undertook to send a Company down to the area in order to dig wells expeditiously with mechanical drills and compressors. The entry of the Army into this area close on the heels of a visit by H.E. the Commander-in-Chief has had a good psychological effect on the morale of the villagers and reports to hand show that there is plenty of co-operation between the villagers and the Army in this matter of digging the wells. The gratitude of both the State and the villagers are due to the Army for this help in time of need.

In addition to this, the army has lent to the Famine Commissioner a large number of trucks, lorries and water tanks for the purpose of organising mobile units by which water is transported from a water source to a village or group of villages where there is no water at all. This scheme had been launched already in four districts and is working satisfactorily. In certain lucky areas which are close to the railway line, a certain quantity of water is being supplied to villagers along the lines from the tenders of the railway engines, and the Railway Board has authorised the continuance of this help.

Organised Attack

It is thus clear that considerable amount of organised attack on the scarcity conditions has been going on for the last eight months. It is this which has more or less nipped a possible famine in the bud. When I had the privilege of accompanying His Excellency on his tour in Rayalaseema, I paid particular attention to watching the faces and the physical conditions of the local inhabitants. The spectre of famine which is usually associated with gaunt sticking out ribs, emaciated faces and thin claw-like clutching hands was totally absent. It was only in cases of very old men and very old women that such conditions appeared and these were due to old age rather than to any famine. Yet it is true that a considerable amount of writing in the papers has been done in order to make it appear that there is a very severe famine in several areas. The newspapers occasionally reported one or two starvation deaths from certain areas. All these were duly investigated by the Collectors concerned and the evidence obtained from the local villagers that they died of natural causes such as fevers and other longstanding illness and not of starvation.

Government are, however, alive to the necessity for attending to the treatment of deficiency diseases in Rayalaseema. Recently a philanthropic gentleman from Madras

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GENERAL CARIAPPA VISITS FAMINE-STRICKEN AREAS: General K. M. Cariappa, C-in-C (Army), paid a two-day visit to the famine-affected area of Rayalaseema, where the Army is providing relief by deepening of wells and other facilities for the distribution of water. Travelling over 250 miles by road, the C-in-C visited nearly every famine-affected village in Chittoor and Cuddapah Districts.

The local leaders of Cuddapah District thanked General Cariappa for the ready help offered by the Army. Photo shows General Cariappa discussing the famine situation with the people of the affected area.

has equipped a mobile van with medicines and taken it to Cuddapah. There are bound to be some cases of malnutrition in the area and so the decision to form a Committee in Madras City for medical relief in Rayalaseema is no doubt a step in the right direction. Side by side with the steps taken to alleviate human distress were the measures to secure food for the cattle. Reserve forests were thrown open for grazing, and fodder has been purchased from the surplus districts and conveyed to the scarcity areas. Baled hill grass has also been supplied. Government have subsidised the sale of these at low prices.

Faith Will Fetch Rain

Speculation is rife as to how long we must expect these scarcity conditions to continue. The weather experts assure me that in May thunder showers may be expected in Rayalaseema, but that the south-west monsoon which is expected in June and July does not convey much benefit to Rayalaseema proper. This monsoon gives, however, a fair proportion of rain to Guntur District in June-July and if it is favourable this year we may expect scarcity conditions in Vinukonda, Palnad and in Narasaraopet to abate by the end of July. All the five districts of Rayalaseema normally get five to six inches of rain that the onset of the north-east monsoon in September should depend for their greatest rainfall on the north-east monsoon. North Arcot also like Madras benefits from this monsoon. So we may take it that general relief over the area will come from a satisfactory north-east monsoon.

The question whether the God Varuna will shower His gift of rain on these parched uplands in these seven districts is one which must necessarily agitate all thinking persons; but those who have the gift of faith may exercise more than thought; they may go down on their knees and pray to the God for rain or if they are more learned they may enter upon the 12-day Yagna by which the Goddess is propitiated and sends Her gifts of rain. I should like to close on the note of hope that the combined prayers and good wishes of all those who have watched the sufferings of people in this area would bring a change of season that will effectively end the drought now prevailing in the areas standing and usher in an era of greenness and plenty where the land is at present arid and barren and vile.

(By Courtesy, A.I.R., Madras)

Relief to Victims of Fire Accidents in Rayalaseema Districts

The Government have instructed the Collectors of the Rayalaseema districts to make a liberal use of their discretion to relax the limit of the ceiling rates of assessment which entitle the victim of a fire accident in Rayalaseema districts to the grant of relief in deserving cases.

Committee on Synthetic Rice

A Committee has been set up by the Ministry of Natural Resources and Scientific Research, Government of India, to investigate the possibility of large-scale production of synthetic rice and to formulate a detailed scheme for achieving the most economical and most expeditious development in its manufacture.

The Chairman of the Committee is Sri Keshava Deva Malaviya, Deputy Minister for Natural Resources and Scientific Research, and the members are Lala Sri Ram; Sri S. V. Ramamurti, Sri P. A. Gopalakrishnan, Joint Secretary, Ministry of Food and Agriculture, Government of India; Sri S. Jayasankar, Joint Secretary, Ministry of Finance, Government of India; Sri S. Anantaramakrishnan, Sheriff of Madras; Dr. C. G. Pandit, Secretary, Indian Council of Medical Research, New Delhi, and Dr. V. Subramanyan, Director, Central Food Technological Research Institute, Mysore.

Green Manure.—A calendar of green manure crops to fit in between the several paddy seasons, in soils of different kinds, under the permanent and rotation zones and in the single and double crop lands has been evolved. Pillipesar introduced after tests in this farm is now in spread throughout all the districts of the State. Glyricidia and Sesbania in the present times give better and more quantity for utilisation in the paddy fields. Under observance of reduced seed rates, economic spacing and planting, rotations, fertiliser practice and cropping with the improved types, fifty bags (of two Imperial maunds) of paddy are now produced as revealed by the crop competitions.

Bananas.—Cultural varietal and manurial trials on bananas were pursued up to the year 1949, with over hundred varieties raised on this station. Hybridisation with the seeded and wild types was pursued. The limited size of the Farm and its multipurpose nature could not find room for the pursuit of work on this crop subsequent to 1949. A separate Banana Station, subsequently opened in Tanjore District, specialises in this crop.

The varieties assembled and raised at Samalkot were sent to the Central Farm, Coimbatore, for taxonomical studies by the Systematic Botanist.

Experimental work on banana on the Samalkot Station added several crores of rupees to the ryots of the Circars coast. In these parts, perennial gardens alone were in existence. The station introduced the culture of the crop for a period of three years on ordinary high level paddy lands. It introduced the Karpurachakrakeli for the trade against the "amrutapani" of the old perennial plantain gardens; it also introduced the "tholakari" system of planting against the usual "seethakattu", to tide over the cyclonic damages of October-November and also lessen

the period of culture by fitting in the "tella-chakrakeli" into this system. In all these ways, as much as 10,000 acres are in the annual crop account of these coastal districts. Regular export trade to stations in Bengal, Bihar, Madhya Pradesh and Orissa has been built up, not to mention occasional despatches to Uttar Pradesh. Sri S. V. Ramamurti, an ex-Director of Agriculture, helped the building up of this trade, by securing special rates in railway transport, in his tenure of office.

The improvement of the tests and the keeping quality of the several varieties were also studied.

Figs were prepared out of Tella-chakrakeli, Karpurachakrakeli and Mauritius, Sirumalai and Yenuga Arati. Figs prepared from Tella-chakrakeli are the sweetest and the best.

Sunhemp Scheme.—A five-year scheme of the study of the sunhemp crop for fibre production was taken up during the year 1937-38. A series of experiments were conducted during the five years with several varieties of different durations, from various parts of India, to know the proper time of sowing, the optimum seed rate, the effect of application of different kinds of manure and the state in the growth of the crop at which the harvest is to be effected, for the best yield and quality of fibre. Various methods of retting were also tried to secure fibre of good colour and strength.

Sunhemp seed for fibre production is obtained locally from parts of Orissa. The experiments in the scheme worked out during the five years showed that the type Cawnpore No. 12 was best from all viewpoints. With the war and financial stringency work was stopped from 1942, at the stage when this type should have been spread into the sunhemp fibre producing tracts of the State.

Pulses.—Studies in greengram, blackgram, redgram and soya beans were undertaken from 1935-36. Material from this Farm was transferred in 1943, for work at the Pulses Research Station opened at Vizianagaram, for the northern district.

Other crops.—In the period of the economic depression the cultivation of various crops like Egyptian cotton, Cambodia cotton, linseed, wheat, onion, groundnut, etc., in the rice fallows and as alternatives to paddy were tried with varied success. The Punjab-American cotton, the type 216 F and groundnut in the rice fallows are now successfully grown and they hold their own with the assertion their prices induce in the commodity market.

Coconut Nursery.—With earlier beginnings with choice material and the avenue planting in 1941 from the approach to the Farm, the foundation was laid for work on coconut. A comprehensive scheme for the distribution of selected coconut seedlings under the auspices of the I.C.A.R. and the Madras State is now in operation and over 20,000 coconut seedlings are being annually distributed to meet the requirements of ryots.

Co-ordinated Crop-weather Scheme.—This scheme was started in 1950 and is now in operation on paddy and sugarcane, to find out the influence of the weather elements on the growth and yield of the crops and the incidence of pests and diseases. The Farm is equipped for the purpose with a small meteorological observatory.

Buffalo herd.—The care and management of a buffalo herd for the dairy and draught work and for stud to

improve the local stock, continued on this station, till 1922, when the herd was transferred to Lam at Guntur, with the acquisition of a farm at that place in that year.

The Laboratories

Small laboratories were functioning, the biological for sunhemp work, the chemical for sugarcane work and the pathological for plant protection work. Recipes to tackle plant pests and diseases in these districts were standardised with work by a Mycological and an Entomological Assistant stationed at the Farm till the year 1945. With the experience derived from the Farm Apiary bee-keeping schemes were worked, for the extension of this side industry to farming, in East Godavari in 1930 and in West Godavari in 1940. The present Government Entomologist Sri V. Thirumalarao who was long connected with this station was responsible for most of these activities.

The Juvenile Labour School: It has been realised that the proper village guide for agricultural work is the actual worker on the Farm for the long years. One want to be supplied to this class is education. To meet this need and to possess the trained personnel, for the cadre of maistris, in the sheet-anchor of the activities of the Department in the villages, a Juvenile Labour School was started on the Farm, in the year 1948 under the perseverent effort of Sri Mulukutla Satyanarayana, the Farm Manager at the time. While in a flourishing state, the school was ordered to be transferred to the District Board in 1951-52.

Training of Personnel: The station has been functioning as the training ground for agricultural and rural work for members of several departments, ever since its start. Training has been imparted to several batches of maistris, fieldmen, school teachers, Tahsildars, Revenue Divisional Officers, I.C.S. and I.A.S. probationers and several more.

Another achievement of the year 1942 was the opening of a post-office on the Farm to cater to visitors and the residents on the Farm.

Lines of Work

Lines of work discontinued or yet to be undertaken, for which the expansion of the station in extent and equipment are the primary needs:

With 41 acres owned by the State and 16 acres held under lease from 1913-14 to 1948-49, the extent of the Farm for a long time used to be 57 acres. From 1949 the Farm has only the present extent of 41 acres. To meet the dire needs of the experimental technique on problems relating to the staple crops of the Division, Government sanctioned the acquisition of adjoining land to the west of the Farm in 1939, to make up for a total of 1,000 acres. The amount required for the acquisition was also provided in the Budget of 1939-40. With the outbreak of World War II in September 1939, the acquisition proceedings by the Revenue Department came to an end.

The first soil survey for a Farm of this State was conducted for Samalkot in 1941-42. The Government Agricultural Chemist who conducted the survey reported that the land proposed for acquisition would be fit for manurial and other experiments, the existing Farm land and that proposed for acquisition differing only in the added fertility of the former under departmental treatment.

Better Farming

With assured water-supply for 11 months in the year and the varied nature of the Farm soils permitting farming

under dry, garden and wet conditions, problems of many a kind relating to the crops under cultivation in the uplands and delta of the east coast can easily be tackled. The following have yet to receive attention on the station, to establish better farming in the districts and secure greater returns from agriculture:—

1. The waters of the Rivers Godavari and Krishna flow to waste from November to the middle of January, as the adverse weather conditions of the period preclude the raising of paddy crop in between the 'sarwa' and the 'dalva' seasons. This problem of the intermediate season paddy has been engaging the staff of the station during the past four decades. Neither soil treatment, nor the evolution of a paddy type to fit in the period, could meet with success. As the solution of this problem will benefit fifteen lakhs of acres, this has to be pursued till success is met.

2. Types of paddy have to be evolved and systems of cultivation defined to suit:

(a) Replanting of areas devastated by unexpected floods from the rivers and uncontrolled streams as Budameru, Thammileru, Rallamadugu, etc., in the months of August and September.

(b) Planting of tank ayacuts receiving belated water supplies from October onwards.

3. Evolution of types from dry paddy varieties to suit the Agency and Uplands.

4. Evolution types to fit in the semi-dry system of paddy cultivation started with drill sowings and intercultured by bullock hoes.

5. Evolution of types to withstand the stem-borer and "kedu" and to suit swamp, flood and salinity.

6. Standardising the culture of canes, to meet varied investments, for producing jaggery of good grain, colour and keeping quality for the soils of the Yeleru basin and of the Godavari and Krishna deltas that support five sugar factories.

7. Studies in plantain to secure ripening every month to meet the market needs uniformly.

8. Bio-chemical and agronomique studies in plantain to preserve the quality of fruit for more than a week to withstand transport to the farthest ends of the country.

9. Systematisation of crops in rice fallows.

10. Fundamental soil fertility studies to arrest depletion of plant floods through forced cropping and arrest deterioration in the crumb structure of the soils.

11. The continuance of the sunhemp fibre studies seed multiplication and distribution of Cawnpore No. 12.

Problems are in legion; resource is not lacking to wrest out wealth from the land. Men and material require to be provided.

The centre of gravity of food production for the Madras State to keep its population going, lies at the present time in between the Godavari and Krishna deltas. Any attention to this zone endowed with Nature's blessings will increase the outturn of food and availability to other zones at relatively cheaper cost.

Army Goes All out in Rayalaseema

More men and material of the Army have been pressed into service in the water scarcity areas of Rayalaseema where the Army is conducting an "Operation Famine Relief" to help the civil authorities. More Army engineers arrived recently in Anantapur. Fifteen more compressors for widening and drilling wells with a large number of force and hand pumps have been sent to Cuddapah for distribution in the various water scarcity zones, while thirty more water tankers for carrying water are being sent. In addition 500 new barrels of 34 gallons capacity have been supplied for carrying water by hand or in bullock carts by the villagers.

The Army is determined to bring water to the arid and parched land of Rayalaseema with the greatest speed and efficiency. They commenced work on April 15 after General Cariappa, Commander-in-Chief, Indian Army, had toured the stricken areas. Within the first ten days of their work in spite of the present shortage of equipment and with the engineers still moving in from all parts of the country—the Army has successfully deepened six wells, increasing their capacity ranging from 200 gallons to 400 gallons of water per hour. The wells have had to be dug between three to six feet. Two more wells were deepened, one about seven feet and the other about six feet six inches but the work had to be abandoned due to hard granite base.

The troops are living in "War" conditions. There are no holidays for them. Sundays are also working days. They have been located in villages nearest to their work and housed in school and college buildings which are lying vacant due to summer holidays. Strict instructions have been issued to the men to carry their Army rations and cook their own food to avoid their being a burden on the villages. Even the drivers who man the water-tankers which go about distributing water carry their own food and a day's supply of water. They are not allowed to take water from the water-tankers.

Government Loan for Water Supply in Chittoor Municipality

The Government have sanctioned an advance of Rs. 60,000 as loan to the Chittoor Municipal Council, for meeting its expenditure on the emergency measures connected with water-supply.

This was in response to the resolution passed by the Municipality, requesting the Government to sanction as a special case a loan of Rs. one lakh and an equal sum as grant to meet the expenditure involved in undertaking emergency measures to meet the water scarcity in the Municipality. The Municipal Council will be permitted to draw the amount at Rs. 10,000 per month according to necessity and it will not be permitted to draw any amount, if the water position improves on account of good rain in the meantime.



WELL INSPECTION: General Cariappa inspecting a dried up well along with the local officials, in the distressed areas.

These men are conscious of their responsibilities. They work in two shifts and the work is carried on incessantly from ten to twelve hours a day. Practically all the drivers of water-tankers had themselves volunteered to work.

The task of the Army is twofold: to deepen and widen wells and to distribute water in the scarcity areas. The Army has so far been called upon to deepen 265 wells in Kurnool District, 66 wells in Cuddapah District, 300 wells in Chittoor District and 44 wells in Anantapur District.

Each District Collector has provided a list of wells which have to be deepened in their order of priority. These are surveyed by the Army sappers before commencing their work. The object is to provide each village with one or two wells to satisfy their needs. Each Engineer unit which goes out to deepen wells is equipped with such instruments as a rope ladder to descend into the wells, hammers, pickaxes, drilling machines, pneumatic hose and compressor machines. They are also supplied with explosives.

For the distribution of water there are a number of Army trucks which have been fitted with water-tanks with a capacity varying from 200 to 500 gallons. These tankers collect water from "water-points" or reservoirs or wells and go into the interior of the villages to distribute water. Before the water is distributed, it is properly treated with bleaching powder.

For purposes of administration and work three zones have been created. These are the Cuddapah, Chittoor and Anantapur zones with the Kurnool District coming under the Cuddapah zone. The headquarters is Madras where policies are laid down and overall action planned in consultation with Sri V. S. Hejmadi, Famine Commissioner, Madras. Each zone has a wireless radio link and Cuddapah has a direct telephone and rail communication with Madras. There are at present two officers in control of the work at Cuddapah. Lieut.-Col. C. W. Muelleneus has overall administrative control while Lieut.-Col. Talwar is commanding the Engineers.

Artesian Wells in Madras State

In July 1950, the Madras Government sanctioned Rs. 8,08,000 for sinking 101 artesian wells in South Arcot District under the Intensive Cultivation Schemes, and the Director of Industries and Commerce was put in charge of executing the artesian wells scheme as expeditiously as possible so that the entire work might be completed by the end of June 1951. It was also the intention of the Government that at least one crop of paddy should be raised by the ryots every year in the lands benefited by the artesian wells. The Government also considered it possible for the ryots to grow at least one short-term paddy every year as plenty of water supply from the artesian wells would be available all the year round. Up to March 1952, 67 wells were completed under the scheme, bringing 2,647 acres of land under Intensive Cultivation and resulting in an additional production of 1,420 tons of foodgrains. It would be of interest to note the following details on artesian wells:—

1. The life of artesian wells depends on various factors. Wells may stop flowing either due to the exhaustion of the artesian spring or due to corrosion of the casing pipes which are generally of steel. In the artesian basin of South Arcot, there are artesian wells from where water has been continuously flowing for as many as 20 years, while in a few cases artesian wells in the same basin have collapsed in the course of five to ten years.

2. It is possible to shut out water from artesian wells during specific periods without affecting the flow of water from the well. This practice is in vogue in some parts of India and in the United States of America. In South Arcot District steps have not so far been taken to shut out water. There is, however, a general impression that such shutting out, even temporarily, will tend to reduce the flow of water. Proposals for undertaking research in this direction are under the consideration of Government.

3. The minimum distance between the two artesian wells in an artesian basin will depend on various factors. The principle factor is the intake of water by the aquifer.

The number of sub-artesian wells put down by the Industries Department in the various districts will be over 25,000. The important successful sub-artesian wells occur in the following districts:—

Name of District.	Name of Taluks.
Chingleput ..	Kancheepuram and Ponneri.
Chittoor ..	Chandragiri, Puthur and Kalahasti.
North Arcot ..	Gudiyattam, Cheyyar and Tirupattur.
South Arcot ..	Tindivanam, Villupuram, Cuddalore, Chidambaram and Vriddhachalam.
Tanjore ..	Mannargudi, Shiyali and Tanjore.
Coimbatore ..	All taluks.
Nellore ..	Gudur and Kovur.
Guntur ..	Ongole and Tenali.
Krishna ..	Krishna Basin.
Godavari ..	Godavari Basin.
Visakhapatnam ..	Anakapalle and Visakhapatnam.

About 55 artesian wells have been sunk for private parties in South Arcot. Most of these were sunk by departmental sets but a few were sunk with private hand-boring sets owned by boring contractors.

Hand-boring sets and power drills are made available by the Industries Department to people who want to use them for sinking artesian wells sanctioned by Government for implementation in the South Arcot District. The Industries Department have been sinking such wells for private parties during the past 25 years.

Artesian wells also occur in the East and West Godavari Districts. Sixty-four wells have been put down by Government for private parties. Proposals for putting down 100 artesian wells at Government cost in the East and West Godavari Districts are under the consideration of the Government.

The artesian well water from South Arcot has been analysed by the Chief Water Analyst, King Institute, Guindy. The analysis indicated that the artesian well waters are acidic in character, the PH ranging from 6.4 to 6.6 and that the water was super-charged with carbon dioxide, the carbonic acidity ranging from 11.0 to 23.0 parts per 100,000 as Co₂. It has also shown that these waters are aggressive in character and will corrode linking pipes.

No adverse effects on crops have been reported so far from the artesian area. On the other hand, reports received in this office indicate that the artesian water in South Arcot is very good for cultivation.

Pudukottah Channel

Pudukottah State is situated close to the Cauvery Delta and yet it did not get the benefits of irrigation from Cauvery so far. Not even after the construction of the Mettur Dam and excavation of the Grand Anicut Canal which is taken just outside the limits of the State; the dream of the people of this State for a share of the waters was taken up after the merger of the State with Madras and has resulted in the Pudukottah Canal Scheme, benefiting 2,300 acres of Pudukottah Taluk and 4,000 acres in Pattukottai Taluk.

The new channel, now named as "Pudukottah Channel" is an enlargement and continuation of an existing small channel named "Olavayal main channel" taking off from Grand Anicut Canal at R.D. No. 20/34 and also the Olavaya No. 2 Channel, irrigating at present an area of 1,278 acres. This channel is now proposed to be remodelled and extended for a length of 12 miles with the necessary cross-masonry works and distribution systems to benefit 6,300 acres of new ayacut.

In order to bring the channel to beneficial use immediately the scheme was divided into two stages. The estimated cost of the scheme was Rs. 10,41,510 out of which the first stage of the scheme for a length of five miles, irrigating an extent of 2,300 acres in Pudukottah Division of Tiruchirappalli District and costing Rs. 4,40,500, has been completed.

The work in the second stage which consists of extending the channel for another seven miles for irrigating the balance of 400 acres in Pattukottai Taluk of Tanjore District has been taken up, and it is expected to be completed before the next irrigation season.

Farming in Japan

By SRI H. G. PATIL, Superintendent, Agricultural School, Kospad

Many things in Japan impress a visitor. But nothing more than the way the industrious farmer goes about his job. It would surprise many if I say that excepting in the low-lying paddy lands, the soils of Japan are generally poor, much more so on hill slopes. Yet, with a lot of hard work, skilful management of soil and by supplementing rains with irrigation, the Japanese farmer succeeds in raising good crops generally.

Analysis of the soils of Japan shows that they are generally deficient in phosphorus and potash. But the productive capacity of all soils is maintained at a very high standard, thanks mostly to what the farmer does to his land. He never thinks of raising a crop without adequately manuring the land first with compost or other manures. The soils are thus given no opportunity to get exhausted. The climate in the country favours agriculture, and the farmer with his system of following rotational cropping and improved cultural methods, keeps up the standard of fertility and raises big crops.

The country is mountainous and only about 16 per cent of the total land area is available for cultivation. But every inch of this is brought under cultivation, and no land is allowed to lie fallow or unproductive.

Terracing

Most of the hill slopes are skilfully treated for the raising of crops. A great amount of labour is spent in the construction of high terraces even on steep slopes and new fields are fashioned out of these. Where the steep is great, the farmer constructs stone walls raised four feet to six feet high round the terraces. To guard against soil erosion on such slopes, the water outlets are paved with stones. A variety of crops is raised on these terraces, offering a picturesque sight to the eye.

The famous 'Unshu' oranges in Shizuoka are mostly grown on stone-walled terraced fields, and a single row of trees is grown on the terrace. Other fruits are also grown on such land, and since rainfall is received throughout the year, no irrigations are needed for the crops.

No Fences

Surprisingly enough, fields are not fenced in Japan. Land is limited, and the farmer does not like to waste any available space. Bunds are used for the growing of crops, and so no space is left for fences. No stray animal problem exists for the farmer, however, because animals are never let loose to graze. When animals are to be taken from one field to another, the farmer secures mouth-pieces on them so that they may not damage the crop of his neighbour. He has great respect for another's property, and hence there are no thefts of crops and no damages done to them in any way.

Even children have developed this trait, they neither pluck fruit from another's garden, nor even damage trees or plants intentionally. Hence, farm protection is rendered unnecessary, and the only demarcation between one farm and another is the narrow strip of uncovered land and between them. There is no encroachment on one

another's land and disputes, if any, are settled amicably. Taking the land dispute to courts is thus unknown in Japan.

Farm Roads

Every farm in Japan has well laid-out roads for transporting manures and farm produce in hand-carts. Roads are innumerable on a farm, no two fields being without a road. One remarkable thing that the farmer has done is to exchange bits of land with his neighbour to make his fields all rectangular, with the boundaries in straight and parallel lines. Straight fields and straight roads offer a beautiful and pleasing sight. When a road has to be newly laid, the farmers join together, plan the new road, and when the alignment is over and the pegs are driven in, every farmer whose lands are affected gives up the bit which will be covered up by the road without a hitch.

I saw a road being constructed by the side of the farmhouse where we were staying, and was struck with the smooth way in which the farmers all joined together and agreed to part with bits of their own lands on which the road was to run. A small fund was raised with each farmer contributing to it according to his capacity, and this was used for compensating those who had given up the required pieces of land.

Specialised Art

Agriculture in Japan is horticulture. Every inch of the ground cultivated is given a thorough tillage. You cannot find a neglected bit of land or a half-hearted attempt at cultivation anywhere there. The fields are very well weeded indeed. No weeds are to be seen in a field of crop. This is, indeed, creditable, considering that most of the tillage is done by hand. The countryside looks like a vast well-worked garden.

The soil is dug by hand with a long fork, which penetrates well into the moist soil. It is turned over and later on worked to a fine tilth. Except rice, all crops are grown on ridges. The ridges are worked by hand-hoes and other hand tools. Inter-culturing is done by the hand fork, and the crop is earthed up from time to time. When the ridges are occupied by one crop, the furrows are dug over for inter-crops. Before the crop on the ridges attains maturity, the crop on the furrows is sown in straight lines and at regular intervals. After the ridge-crop is harvested, the crop in furrows comes up. Later, the ridge is dug over and the crop in the furrow is earthed up. In course of time, the furrow becomes a ridge, and what was once the ridge becomes a furrow. A crop is sown in the new furrow in the same way and at proper time. The process continues the year round. Thus not only is the soil kept well-pulverised but the best returns are taken from the land by not wasting time in waiting till the harvesting of the first-sown crop.

After Wheat

In the uplands, wheat is harvested in May. In April either tobacco is planted or groundnut or soya bean is sown in the furrows between the wheat lines. Sometimes,

rice is also dibbled between these lines. Thus, the inter-crop gets a month's start by the time wheat is harvested. Wheat straw, after the crop is threshed, is buried in the furrows where the new crop has been sown, and covered with the earth from ridges on which wheat was standing. In this operation, organic matter is added to the soil, the soil itself is pulverised and aerated, and the new crop gets an earthing-up.

In the case of wet paddy, where the soil is deep, the moist stubble soil is turned over into deep blocks with the long fork in April-May. In the winter, 30 to 40 per cent of the wet rice fields are utilised for the growing of winter crops like wheat, barley, etc. The surface soil is drawn up into high and broad ridges on which two rows of these crops are grown. The ridge is naturally well drained, and this favours the growth of the new-sown crop. The job is quite strenuous, but nothing will beat the farmer in his patience and hard work. These ridges are levelled up after the crop is harvested in May, and the soil is got ready for the rice crop.

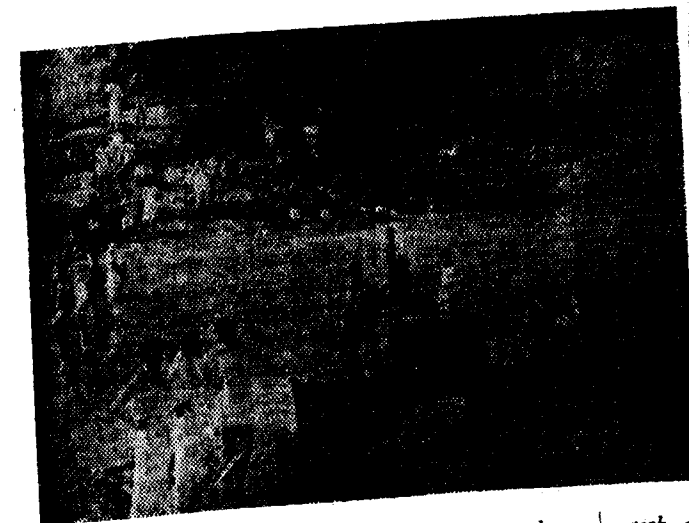
Neat Plots

The neatly-laid small plots with straight rows of plants are typical of Japanese agriculture. The usual practice of sowing is dibbling of seed at regular interval and in straight lines, and broadcasting is done only for raising a rice seed-bed. The straight lines save seed, and permit easy inter-culture and manuring which are done several times during the life of the crop. Tillering is encouraged, and plants get enough space, sun-light and air. The system permits of a second crop being sown when the first is still in the field. Individual attention to plants can also be paid in such a system. In the field, stones or weeds are rare. All stones are carefully picked up and put on the field borders to prevent soil being eroded. On the hill-sides they go to form the terrace walls. Fields are levelled

perfectly, and one never comes across a field with an uneven surface in Japan.

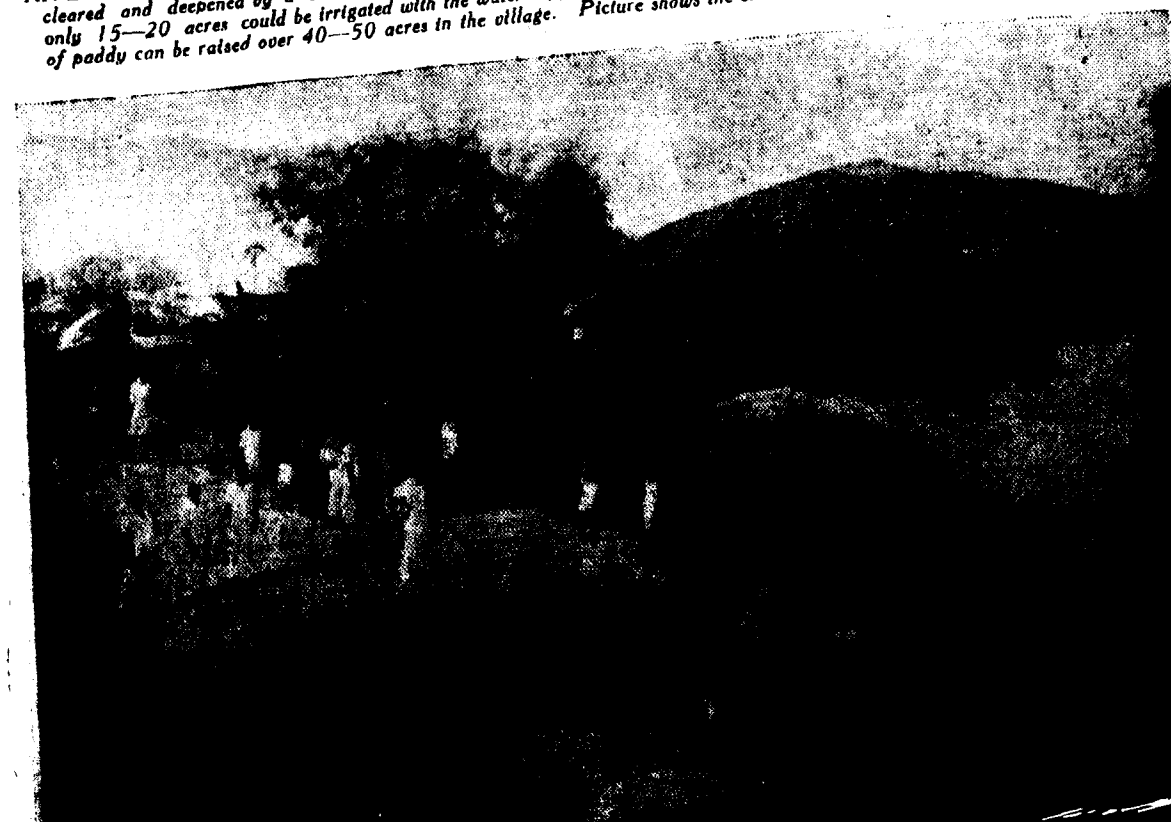
The Japanese farmer improves sticky soils in texture by adding to them sandy or red soil from the hill slopes. Leaf-mould is available in large quantities in the innumerable private-owned forests there. It is collected and applied to such soils or those which are poor. The continuous addition of leaf-mould to the soil for generations has enabled the farmer in Japan to increase the fertility of the soil.

(The Farmer)



HELP TO RYOTS: Finishing stage of the clearance work at Kavetipuram. Two oil-engines hired out by the Agricultural Department are being engaged in pumping out water for the crops. This is of immense help to the ryots of the place affected by seasonal conditions.

RIVER PUMPING INSTALLATION: A kassam (spring channel) in Kavetipuram, Chittoor District, was cleared and deepened by a bull-grader belonging to the Agricultural Department. Before the work was undertaken, only 15-20 acres could be irrigated with the water-supply available and even that for one season only. Now two crops of paddy can be raised over 40-50 acres in the village. Picture shows the clearance work at the beginning stage.



Electricity Extension Schemes Sanctioned

The following extension schemes were sanctioned by the Government :—

Mettur Electricity System.—(1) Extension of supply of electricity to 14 agricultural services and one industrial service at Tiruvannainallur village in Tirukkoilur Taluk, South Arcot District, at an estimated cost of Rs. 52,800; (2) Extension of supply of electricity to 42 agricultural pumpsets at Sengunam and Pottarai villages in Polur Taluk, North Arcot District, at an estimated cost of Rs. 1,19,600; (3) Extension of supply of electricity to 73 agricultural pumpsets and one industrial service at Valpady, Mothur, Kallithangal Kalpundi and Karamedu villages in Arni and Cheyyar Taluks, North Arcot District, at an estimated cost of Rs. 1,87,000; (4) Extension of supply of electricity to 50 agricultural pumpsets and two industrial loads at Pannaiyur village in Arni Taluk, North Arcot District, at an estimated cost of Rs. 1,33,500; (5) Extension of supply of electricity to 40 agricultural pumpsets at Kannikapuram, Karthikayapuram, Tiruttani Rural, etc., villages in Tiruttani Taluk, Chittoor District, at an estimated cost of Rs. 1,20,200; (6) Extension of supply of electricity to 48 agricultural pumpsets at Kilanathur village in Tiruvannamalai Taluk, North Arcot District, at an estimated cost of Rs. 1,03,800; (7) Extension of supply of electricity to 69 agricultural pumpsets at Veeranarayanapuram and Mudur villages in Arkonam Taluk, North Arcot District, at an estimated cost of Rs. 1,40,500; (8) Extension of supply of electricity to 40 agricultural pumpsets at Kilapadi and Olali villages in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 1,12,400; (9) Extension of supply of electricity to 40 agricultural pumpsets and one industrial load at Ettikuttaipatti village in Omalur Taluk, Salem District, at an estimated cost of Rs. 1,01,700; (10) Extension of supply of electricity to 46 agricultural pumpsets and two flour mill loads and 34 domestic services at Chinnavarikkam and Periaravikkam villages in Gudiyatham Taluk, North Arcot District, at an estimated cost of Rs. 1,36,400.

Papanasam Electricity System.—Extension of supply of electricity to 79 agricultural pumpsets and 69 house service connections at Kambaneri Pudukundi, etc., villages in Tenkasi Taluk, Tirunelveli District, at an estimated cost of Rs. 1,86,100.

Madras Electricity System.—(1) Extension of supply of electricity to 19 agricultural pumpsets, six industrial services and 49 domestic services and 40 street lights at Madhavaram and Polal villages at an estimated cost of Rs. 1,51,600; (2) Extension of supply of electricity to 45 agricultural pumpsets and four industrial services at Aryaperumbakkam, Kilambi and Baluchettichattram villages in Kancheepuram Taluk, Chingleput District, at an estimated cost of Rs. 1,37,200.

Mettur Electricity System.—(1) Extension of supply of electricity to 30 agricultural pumpsets, four industrial loads and 46 house service connections at Nerur village in Karur Taluk, Tiruchirappalli District, at an estimated cost of Rs. 1,21,700; (2) Extension of supply of electricity to 80 agricultural pumpsets and 23 house service connections at Valkadai, Kalanipakkam and Naval

villages in Cheyyar Taluk, North Arcot District, at an estimated cost of Rs. 1,84,100.

Papanasam Electricity System.—Extension of supply of electricity to 68 agricultural pumpsets and 63 house service connections at Mahandravadi and Kilanilidanallur villages in Pazhamcottai Firka, Sankarankoil Taluk, Tirunelveli District, at an estimated cost of Rs. 1,93,000.

Pykara Electricity System.—(1) Extension of supply of electricity to 39 agricultural pumpsets in Kadambadi village, Palladam Taluk, Coimbatore District, at an estimated cost of Rs. 1,07,950. (2) Extension of supply of electricity to 61 agricultural pumpsets in Kanur village, Avanashi Taluk, Coimbatore District, at an estimated cost of Rs. 1,60,600.

Mettur Electricity System.—Extension of supply of electricity to 42 agricultural pumpsets and one industrial load at Karapattu, Kilathaniyalampattu and Semangalam villages in Tirukkoilur Taluk, South Arcot District, at an estimated cost of Rs. 1,39,500. Extension of supply of electricity to 108 agricultural pumpsets and four additional loads and one industrial service at Takkolam village in Arkonam Taluk, North Arcot District, at an estimated cost of Rs. 1,94,700. Extension of supply of electricity to 53 agricultural pumpsets and five industrial loads at Koratai and Adhiyur villages in Tirupatur Taluk, North Arcot District, at an estimated cost of Rs. 1,57,300. Extension of supply of electricity to 45 agricultural pumpsets and one industrial service at Periagaram village in Polur Taluk, North Arcot District, at an estimated cost of Rs. 1,22,400.

Extension of supply of electricity to 55 agricultural pumpsets at Gudalur, Vakkilapattu and Serpapattu villages in Chengam Taluk, North Arcot District, at an estimated cost of Rs. 1,96,500. Extension of supply of electricity to 48 agricultural pumpsets and two industrial services at Karpundi and Kuralpakkam villages in Polur Taluk, North Arcot District, at an estimated cost of Rs. 1,58,300. Extension of supply of electricity to 29 service connections at Kavettirangampalayam, Konagapadi and Karukkalvadi villages in Omalur Taluk, Salem District, at an estimated cost of Rs. 1,28,200. Extension of supply of electricity to 57 agricultural pumpsets, five industrial loads and 29 house service connections at Kamalapuram and Pottipuram villages in Omalur Taluk, Salem District, at an estimated cost of Rs. 2,23,500.

Papanasam Electricity System.—Extension of supply of electricity to 50 agricultural pumpsets and 216 house service connections at Mallankinar, Reddiarpatti, Koilpatti, District at an estimated cost of Rs. 1,54,800. Extension of supply of electricity to 91 agricultural pumpsets and 74 house service connections at Sayamalai village in Pazhamcottai Firka, Sankarankoil Taluk, Tirunelveli District, at an estimated cost of Rs. 1,87,200.

Pykara Electricity System.—Extension of supply of electricity to 57 agricultural pumpsets at Velrasikalipalayam and Vadamalaipudur villages in Palladam Taluk, Coimbatore District, at an estimated cost of Rs. 1,28,800.

A Saint Gave India Coffee

To-day, India is drinking more coffee than it used to five years ago.

It all started with a humble and anonymous plant that once grew uncared for and wild in the hilly regions of Abyssinia but which has since then elbowed its way into commercial prominence in the modern world—the coffee plant.

At present, along with the other countries of the world, coffee is grown widely in certain areas of India, too. The growing of coffee might as well be called the story of the 25th parallel, because the limits of cultivation of the coffee plant may be put down roughly as the 25th parallel of latitude north and south.

The coffee plant is supposed to have been introduced into India by a Muslim saint who came from Mecca and made his home in Mysore. Some of the hilly areas of Mysore where coffee plantations thrive even today bear his name—Baba Budan.

A small tree with many branches, the coffee plant usually reaches heights ranging from 15 to 20 feet. The fruit is red, and contains two inter-linked seeds. These separated, constitute the commercial coffee berry. And this, roasted and ground, produces the coffee powder for domestic use.

A slightly temperamental tree, coffee grows well on altitudes ranging from 2,500 feet to 5,000 feet. Usually, hilly slopes offer the ideal location for coffee plantations. The coffee tree requires abundant rainfall—anything up to 150 inches. In a way, the coffee tree seems to be allergic to heavy clouds.

As a commercial product coffee occupies a prominent place in Indian economy. In 1949-50, there were 10,218 coffee plantations in India, according to the Directorate of Economics and Statistics, Ministry of Food and Agriculture. These plantations covered an area of 386,025 acres, showing an increase of over 1,000 plantations and over 20,000 acres as against the previous year.

The area actually under coffee in 1949-50 was 218,023 acres. Madras, Mysore and Travancore-Cochin showed an increase in production during 1949-50, Mysore accounted for 48 per cent, Madras 28, Coorg 20 and Orissa and Travancore-Cochin together four per cent.

Coffee plantations in India gave employment to some 177,297 people in 1949-50. These constitute permanent garden labour and both permanent and temporary outside labour.

India exports a substantial quantity of coffee. The best customer in 1949-50 was the United Kingdom, followed by Switzerland, Italy and Turkey. In 1949-50, Indian exports of coffee touched 55,526 cwt. but in the previous year India had exported only 626 cwt.

Coffee consumption in India has gone up in recent years. A noticeable increase is seen in the home consumption of coffee during the past few years. From 12,793 tons in 1946-47 it rose to 15,094 tons in 1947 and to 19,061 tons in 1948-49.



COFFEE GARDEN WORKER: Yes, where to start now? Sickle in hand ready for the day's work, is this typical coffee garden worker in a South Indian plantation. Against the cold of mountain slopes, he wears a thick blanket as apron-cum-slipover.

Crop Competition Fortnight

The Government have directed that the fortnight from June 1, 1952, to June 14, 1952, may be observed as the Crop Competition Fortnight in all the districts in the State.

In districts where harvesting of the competition plots in respect of the competition of 1951-52 is over, arrangements are to be made to have the prizes distributed during this fortnight.

Scientific Blending of Natural Food Components

By DR. V. SUBRAMANIAM, D.SC., F.R.I.C., F.N.I., Director, Central Food Technological Research Institute, Mysore

The blending of different components such as starch, proteins, fat, etc., so as to conform to our requirements and dietary habits offers several practical problems, and it is in this direction that considerable amount of technical and engineering skill is needed. The resulting products should also be very cheap, easy to handle, transport and store for reasonable periods.

During 1949, the Food Technological Research Institute in Mysore made rice-like grains out of maize and jowar. So far all known attempts have been directed towards the production of grains like rice, which is in short supply and generally the other grains have been used for the purpose.

Although tubers are potent sources of starch, they have not so far been utilised for the above purpose for two reasons: (1) The tubers contain starches which by themselves cook to soft, glassy and sticky products which are not acceptable to grain eaters. (2) Most tubers are deficient in protein and cannot by themselves replace grains. Even when the proteins are obtained from other sources, the blending offers difficulties.

Principle and Procedure

It has been shown by different workers that the nutritive value of tubers—particularly that of tapioca and sweet potato—can be very much improved and even raised to a higher level than grains through incorporation of seed-cakes, particularly those of groundnut and coconut. The work done in the Food Technological Research Institute has shown that about 10 per cent of such a cake incorporated with tapioca or sweet potato flour, together with

calcium in some suitable form is sufficient to produce an over-all nutritive value which is somewhat higher than that of rice.

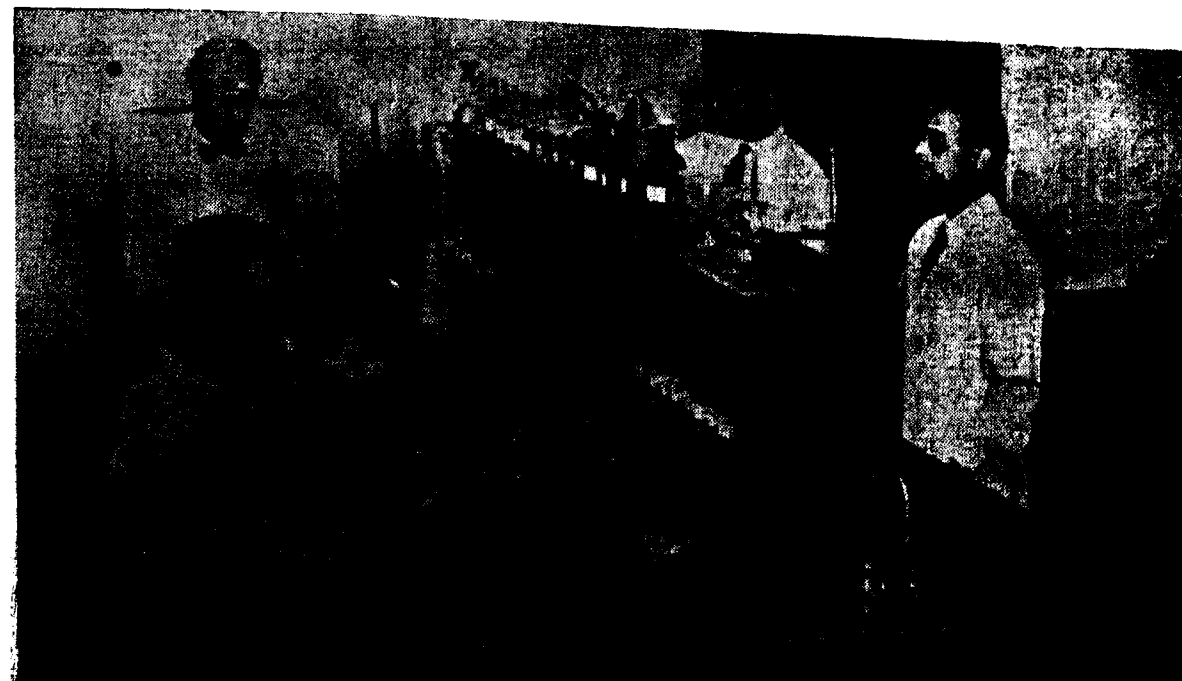
The technical problem finally resolved itself into that of correctly blending the tuber material with the cake and calcium and then processing the mixture to obtain a hard grain that can be cooked and consumed the same way as rice. After overcoming the various difficulties, the procedure that was ultimately developed in Mysore may be outlined as follows: Mature tapioca tuber is cleaned and both the outer skins are removed. It is then cut into chips which can be dried in the sun or a drier. The chips should be well dried so as to facilitate long storage. To make the grain, the chips are ground to fine flour and to 90 parts of this flour 10 parts of specially prepared groundnut cake well stirred up with 80 parts of water are added.

It is very important that the groundnut cake should be well incorporated with the tapioca flour. Calcium in the form of creta or a soluble salt like chloride is added along with the cake suspension. The dough is then rubbed over sieves when it breaks into fine granules. These granules are then transferred to trays which can be shaken either by hand or by machine. During the shaking, round grains are formed exactly in the same way as in sago manufacture.

Cooks More Easily than Rice

The grains are white to yellowish white in colour, but as such they have no strength. The required toughness is imparted by roasting the grains, preferably in a closed

SEARCH FOR NEW FOODS: Processing groundnut milk at one of the laboratories of the Central Food Technological Research Institute, Mysore. The Institute aims to secure through the services of food technology a better conservation and more efficient utilisation of food material available in our country.



atmosphere, when the starch gelatinises and blends well with the protein. Subsequent drying accompanied by a short period of dry roasting yields a grain which is as hard as rice and can be cooked in the same way.

To cook the grain, the best procedure will be to bring five parts of water to boil and then drop one part of grain into it, preferably in instalments so as not to interrupt the boil. The subsequent operations are the same as in the case of rice. The grains are stirred and samples examined for cooking. Usually the cooking is complete in less than eight minutes which is about one-third of the time it takes for rice. The gruel, which should be thin, is then drained out and the grain is ready to serve. The cooked grain has the desired taste and flavour and can be served with savouries, sweet, etc., according to requirement.

Investment and Cost of Production

The related processes have been worked out and the equipment designed so as to be worked either on a cottage scale or in a factory. With a capital of about Rs. 7,000 a small-scale equipment capable of producing 3 to 5 cwts. of grains per day can be set up. At a cost of about a lakhs of rupees, improved types of equipment designed to produce five to seven tons per day can be set up.

Tapioca is preferred to sweet potato as the raw material because of its colour, neutral taste, and easy digestibility. Sweet potato has a tendency to turn dark and spoil more quickly. Tapioca can be grown on even poor soils and the yield ranges from three to ten tons per acre. On an average, we can expect at least three times as much of dry food per acre in the form of tapioca as of grains. Approximately three tons of tuber will yield slightly over one ton of grain. Groundnut cake of the desired quality can be obtained at about Rs. 300 per ton. It is reckoned that with the processing, the cost of the finished grain will not exceed 2½ to 3 annas per lb. With improvements in production and processing, the cost will come further down.

The advantages of such a processed product are fairly obvious. We can produce at least three times as much food per acre as we are now able to obtain. If it is applied on a sufficiently large scale, the country will save huge sums of money which are now being spent for purchasing food from abroad. There will be nation-wide development of a new activity and there will be more production work and employment. The savings can be utilised for other developmental projects, resulting in improved living conditions for the people.

Travancore-Cochin has at present a large deficit of foodgrains which has to be met from outside the State. The State has an abundance of the tuber and can produce a great deal more if there is an incentive for production. By partial utilisation of the tuber for processing, both the grower and the consumer will benefit and the money that would have been spent on the purchase of grains would be saved.

The progress in Travancore-Cochin will be watched with great interest not only by the rest of India, but also by the other parts of the world which are similarly placed in regard to foodgrains. Madras, Mysore, Bombay and Hyderabad can easily follow as they not only have the facilities to grow the tuber, but also an abundance of groundnut cake which can be used for the purpose. The use of the cake, even partially, for food processing, as is already done in other countries, will be a stimulus for the production of good white cake free from the outer skin, grit and other impurities.

The concept of the synthetic grain is based on a well-known scientific principle. The processing today appears to be novel because it has not so far been attempted. In course of time, however, it is bound to develop and several improvements will follow. It is not too much to predict that the synthetic grain of tomorrow will be more attractive and more nutritious than any of the natural grains. The first process developed by Indians is now being given free to the world.

GROUNDNUTS IN INDIA: Bags of groundnuts ready for transport at a village market. India grows a great proportion of the world's oilseeds. Groundnut cake is used in the manufacture of synthetic grains.



Treasure from Trash

By Sri S. V. PARTHASARATHY, Sugarcane Specialist-in-charge, Anakapalle.

It is well-known that organic matter in the soil is important not only to keep up good physical structure of the soil but also for providing food for the various micro-organisms that help to release the nutrients for direct consumption by the plant. Any sound system of agriculture should therefore aim at restoring as much as possible of this valuable constituent of the soil; unlike in the case of the mineral nutrients of the soil removed by the plant, which can be made good by addition of suitable commercial fertilisers, the only way of restoring the organic matter is by incorporation into the soil of the plant animal residues rich in the same. The practices of raising special green manure crops and use of animal refuse like cow-dung to enrich the soil organic matter are in vogue since times immemorial.

Sugarcane is a gigantic crop, yielding on average in this State about 30 tons of cane, five tons of trash, and three tons of tops per acre; it grows on the soil for nearly one year. Almost all the portion of tops and trash are waste-products, when the cane is harvested. The green tops are best used as fodder for cattle and returned to the soil through the manure-pit. Trash, however, is bulky and rather difficult for conversion into manure. The easiest way—and this is generally adopted by ryots—of clearing the valuable organic matter, and in this State, more than two lakhs tons of material are lost in this way. The trash can be converted into useful compost, the procedure for which is outlined below.

The cane trash is gathered up either to one corner of the field or to any other convenient place. Pits measuring 20' x 10' x 21' or of any convenient dimensions are to be dug. The trash is first laid into layers of one foot thickness and cow-dung water is sprinkled to moisten this layer. Over this, a layer of green leafy material is spread into a thin layer, the process is repeated and finally covered with a thin layer of soil. In factory areas, where press-mud is available as a factory waste, it can also be spread in intermittent layers, while preparing the heap. It was found that if pig-dung is used, instead of the usual cow-dung, the compost is ripe in a shorter time.

If there is not enough rain, the heap is turned over twice or thrice and moistened with cow-dung water every time. Normally in about five or six months time, the compost will be ready. In areas where the subsoil water is very near the surface the trash is heaped above ground instead of commencing in pits. The decomposition of the trash depends on the moisture condition inside the aeration.

CHANGE OF ADDRESS

The Office of the Women's Welfare Officer is now shifted from the Government House to the following address:

Door No. 7, Dhanala Aravamudha Naidu Garden Street, Egmore P.O., Madras-8.

After the decomposition has progressed some time, if the heaps are turned more often and wetted to proper levels, the compost will be ready sooner than when it is left in the heap.

Trash compost is valuable bulky organic manure and compares favourably with the farmyard manure. The composition of the manure are compared below:

	Nitro- gen. PER CENT.	Phos- phoric acid. PER CENT.	Potash. PER CENT.
1 Trash compost with pig-dung as starter.	0.76	0.68	0.74
2 Trash compost with cow-dung as starter.	0.57	0.60	0.99
3 Cattle manure	0.48	0.22	0.31

The procedure is simple for any ryot to adopt. However, the difficulties expressed by the ryots quite often are: (1) Cost of gathering and transporting the trash out of the field; (2) lack of labour during the busy harvest season, and (3) lack of water to moisten the heaps when they are turned. It must be said that even in the face of these difficulties, the upkeep of the soil fertility by conserving its organic matter through the use of materials like the cane-trash compost is by far more important in the long run. By composting trash from one acre, it is possible to add over two tons of organic matter, and about 60 lb. of nitrogen to the soil. The compost thus also serves to enrich the nitrogen status of the soil, which is so badly needed in our State.

The Sugarcane Development staff have been doing intensive propaganda in educating the ryots on the value and methods of composting trash. This practice is becoming popular particularly in factory areas, where trash is not at all required for boiling the juice. In the year 1949-50, 500 tons of compost were prepared from cane-trash, and in 1950-51, 4,822 tons were prepared. The Agricultural Department also offers one rupee per ton of compost as subsidy.

Here is what a cane-grower of the South Arcot District has to say about compost from trash—"I own 20 acres of cane, and the trash that remains after the labourers take (for roofing) is intensively composted in 10 to 12 pits.

Composting is done with trash, cattle dung, and green matter. The cost of digging a pit (20' x 15' x 3') is Rs. 12 and cost of removal of compost works up to Rs. 40. I nearly got 50 cartloads every year by this method. The effect of using the compost is seen in the improved retention of moisture and yield. The soil owes its fertility entirely to the compost I have applied."

Satyamangalam Agricultural Station

The Government have sanctioned the continuance of the Agricultural Research Station at Satyamangalam in the Lower Bhavani Project area and also the staff connected with it for a period of one year from August 7, 1952.

Oil Engine and Electric Motor Pumpsets

Owing to adverse seasonal conditions in the districts of Chittoor, Cuddapah, Chingleput and North Arcot and in certain portions of Anantapur, Kurnool, Nellore and Coimbatore Districts, it has been decided to purchase and supply 240 oil engine and 50 electric motor pumpsets under hire-purchase system at a total cost of about Rs. 12 lakhs as part of the measures to relieve the distress in those areas. The Government have authorised the Joint Director of Agriculture to distribute the oil engine and electric motor pumpsets to the applicants as detailed below:—

1. In accordance with the order of priority within each district in the case of entirely affected districts by adverse seasonal conditions; and

2. In accordance with the order of priority within the areas affected by adverse seasonal conditions in each district in the case of partly affected districts, a single priority list for all the affected areas in each district being maintained for this purpose.

District.	Number of Oil Engine pumpsets.	Number of Electric Motor pumpsets.
Chittoor	70	16
Cuddapah	40	1
North Arcot	50	15
Chingleput	30	18
Anantapur	10	1
Kurnool	15	..
Nellore	10	..
Coimbatore	15	..
Total	240	51

Oil Engines under Hire Purchase System

The Government have directed that the collection of instalments due in Fasli 1361 towards the cost of oil engine and electric motor pumpsets, supplied to the ryots under the hire purchase system in the areas affected by adverse seasonal conditions, be postponed by one instalment period, i.e., one year, without any additional interest being charged for the period of postponement. The remaining instalments will also be postponed by one year without any interest for the postponed period.

Oil Engines in Power Cut Areas

In places where the cut in the supply of electric power operates the Government have ordered that permission and licence may be granted by local bodies and their executive authorities to the owners of factories, workshops and work places, for the installation and working of oil engines, provided that the factories, etc. are situated in non-residential areas.

Bulldozer for Deepening Well

The Government have ordered the supply, as a special case, of a bulldozer to the Managing Trustees of the Narasaraopet Town Water-supply Improvement Scheme Trust on hire, for deepening the 'pedda' tank, so as to relieve the present acute water scarcity in Narasaraopet town.

Mohwa Hand Decorticator : Last Date Extended

The Indian Central Oil Seeds Committee has notified that the last date for receipt of entries for the best model of Mohwa Hand Decorticator, for which a prize of Rs. 2,000 has been announced, has been extended from April 30, 1952, to 31st August 1952, by which date full particulars regarding the design, performances, etc., of the Decorticator should be received by the Secretary, Indian Central Oil Seeds Committee, Room No. 345, Block No. 9, Shahjahan Road, New Delhi-2.

Intensive Cultivation Schemes

It has been decided by the State Government to continue all existing Grow More Food Schemes in this State during 1952-53 also in accordance with the Five-Year Agricultural Plan. As it is necessary that all Intensive Cultivation Schemes which were in operation in 1951-52 should continue to be executed even after 31st March 1952 without break, all Collectors and Heads of Departments have been permitted to proceed with the execution of all the Intensive Cultivation Schemes (including works, supply and miscellaneous schemes) which were undertaken by the State Government in 1951-52 in pursuance of the drive for self-sufficiency in food.

Progress of work under Intensive Cultivation Schemes during February 1952.

1. *Irrigation Schemes.*—A total of 471 wells under the Scheme for sinking of new wells and repair to old wells, 48 tanks under construction of new tanks and repairs to old tanks and four irrigation tube wells were completed.

2. *Land Improvement Schemes.*—5,500 acres were improved under clearance and reclamation of waste lands.

3. *Distribution of Fertilisers.*—4,195 tons of ammonium sulphate and 127 tons of other chemical fertilisers were distributed.

4. *Distribution of manures.*—6,519 tons of rural compost, 8,878 tons of urban compost and 92 tons of green manure seeds were distributed.

5. *Distribution of improved seeds.*—562 tons of paddy seeds and 24 tons of other seeds were distributed.

Vanamahotsava 1950 : Presentation of Silver Shield

The Executive Committee for Tree Planting has decided to arrange a suitable function at Madras for the presentation of the State Silver Shield, for the best district in Madras and Coorg for the year 1950-51, to South Kanara. An exhibition of articles, connected with National Tree Planting Scheme, is proposed to be arranged on this occasion.

Gosamvardhana

India has been known for centuries for the high regard and respect she has paid to 'mother cow' whose protection has been an article of faith with the Hindus. According to Hindu mythology it was during this period of the year that Lord Krishna, protector of the cow, saved Brij Bhoomi (Mathura-Brindaban pasture land) from the wrath of Lord Indra who, out of arrogance, tried to deluge the whole area by a torrential downpour. Lord Krishna raised the Govardhan Mountain, sheltered millions of cows and herdsmen underneath it and saved them from inundation. It was on Gop-Ashtami Day that Lord Krishna, who was formerly only a keeper of calves, became a cowherd and assumed the title of 'Gopal'. Emperor Dalip, a forefather of Rama, offered his own life in lieu of his preceptor's cow, Nandani. Arjun courted exile for twelve years in order to rescue a Brahmin's cow.

Recognizing the intimate bearing of cattle welfare on the prosperity of "this land of milk and honey", our ancestors set apart a few days in the year to focus public attention on the part the cow has played in national economy. It has been customary since then to celebrate the Gop-Ashtami or Gosamvardhana Week, commencing on the first of the Kartik month of the Hindu Calendar.

Reorganising Gaushalas

Several countries in the world have been inspired and prompted by India's ideal of cow worship, and, emulating her example, have achieved notable success in cattle development by modern scientific methods. Taking the cue from the great heritage of gaushalas (home of cows) and pinjrapoles (place for disabled cattle), handed down to us as symbols of the depth of India's reverence and devotion for the cow, the Government of India established in 1944 a Cattle Utilisation Section in the Ministry of Agriculture. Its aim was to reorganise these institutions

on utilitarian lines and take other steps for improving the cattle industry.

India is predominantly an agricultural country and cattle play an important part. Bullock-power is available for the various agricultural operations and for a large majority of the people the only source of animal protein in their diets is milk and its products. It has therefore been rightly said that the cow and the working bullock bear on their backs the entire structure of the country's agriculture.

Though India has over 18.5 crores of oxen and buffaloes, the production and consumption of milk and its products per head in the country is probably the lowest. This is due to the low productivity of the Indian cow.

Milk and Breeding Centres

It is estimated that there are at present 3,000 gaushalas and pinjrapoles all over India maintaining 600,000 head of cattle at an annual cost of about Rs. 7 crores met from private charities on a voluntary basis. It was primarily with the object of arresting any deterioration of the cow as a giver of milk and protecting her from indiscriminate slaughter, that these gaushalas and pinjrapoles were founded from time to time during the past two centuries.

After a hurried survey, Government found that these institutions apart from being merely concerned with humanitarian activities, could, if organised on proper lines, supplement their efforts by converting themselves into milk-producing and cattle breeding centres. Though suffering from apparent drawbacks, they could serve as sanctuaries for the preservation and betterment of the cattle wealth of the country. They could as well provide asylum to milch cattle from cities and towns during dry periods.

MODERN PINJRAPOLE: The young stock belonging to the Delhi Pinjrapole. This is what a pinjrapole can achieve under the improvement plan.



Mohwa Hand Decorticator

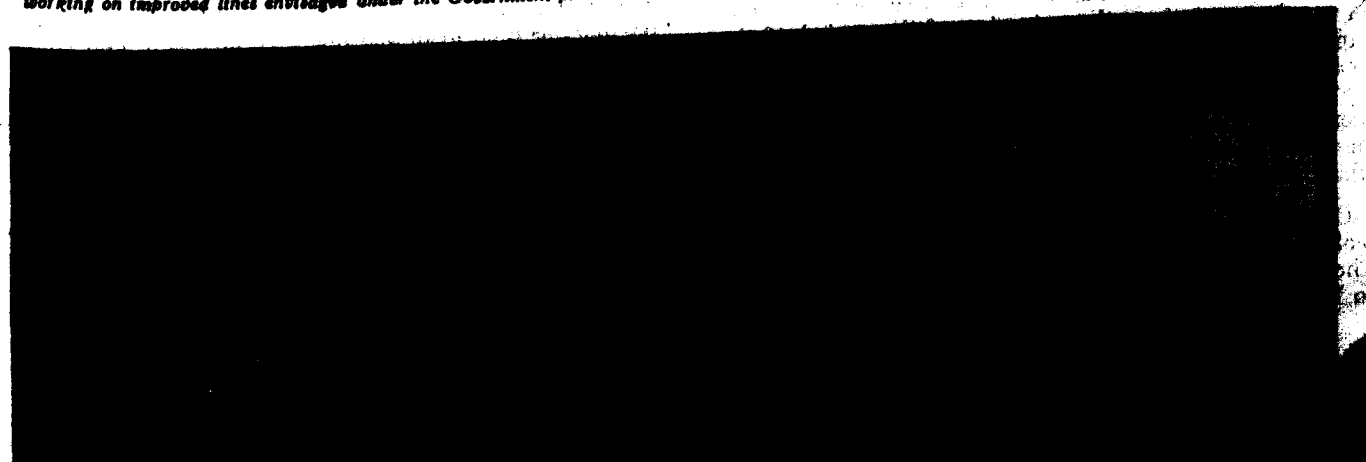
The Indian Central Oilseeds Committee have announced that the last date for receiving entries for the competition in respect of the best model of Mohwa Hand Decorticator has been extended up to February 28, 1953, by which date full particulars regarding the design, performance, etc., of the decorticator should be sent by intending competitors to the Secretary, Indian Central Oilseeds Committee, Room No. 345, Block No. 9, Shahjahan Road, New Delhi.

Because of a wide diversity of conditions, it has not been possible to work out a common plan for all the gaushalas and pinjrapoles, but a model scheme has been drawn up. Efforts have been made to bring the various gaushalas and pinjrapoles in each State together under a non-official federation and to have a uniform standard of working. The Government of India this year constituted the Central Council of Gosamvardhana, in replacement of the Gaushala Development Board set up in 1949, for greater co-ordination of the activities of these institutions throughout the country. A corporate body registered as a society, the Council consists of Members of Parliament, and representatives of the Central and State Governments and Gaushala Federations. Under its purview come all measures necessary for Gosamvardhana, including the setting up of key village centres for cattle-breeding on scientific lines and gosadans for infirm and decrepit cattle.

Key Village Scheme

The key village scheme envisages, among other things, the setting up of a network of 600 model villages in suitable localities all over India, the programme including the (1) castration of all scrub bulls and their substitution by those of approved breeds, (2) adoption of the technique of artificial insemination to make the widest possible use of available superior bulls, (3) establishment of calf-rearing farms, (4) control of animal diseases and (5) introduction of improved fodder.

PRIZE SPECIMENS: Rani, the Hariana breed champion cow, and a pedigreed bull belonging to the Delhi Pinjrapole. This pinjrapole is working on improved lines envisaged under the Government plan.



The Gosamvardhana Council has also undertaken the opening of gosadan segregation camps for unproductive cattle. This is an adjunct of the scheme of key villages, from where all economically useless bulls are to be isolated and castrated. Such cattle can advantageously be maintained, without much cost, on grazings in forests or other waste land, where they might even prove useful in fertilising the soil. Government propose to start 160 gosadans in the course of the next four years, and each unit of gosadan will be able to accommodate 2,000 cattle, the total cost spread over the entire period being about Rs. 2 crores. The expenditure will be shared equally by the Central and State Governments. Already, six such centres have started functioning in the States of U.P., Bihar and Madhya Bharat, and sanction for 15 more has been given.

The Council also advises and assists the Gaushala Federations and the State Governments in (1) taking effective measures to prevent the slaughter of useful bovine cattle, (2) salvaging of dry cattle from towns, (3) segregating useless cattle, (4) organising short-term training courses for gaushala workers in animal husbandry and dairying, (5) upgrading productive cattle by scientific breeding, (6) preventing and eradicating infectious and contagious diseases among cattle and (7) providing technical assistance, veterinary aid, approved bulls for stud purposes and other facilities like grazing and land for fodder cultivation.

Village Livestock Improvement Scheme: Two more Firkas selected

The Government have directed that the Village Livestock Improvement Scheme be introduced in the Dendulur firka in West Godavari District and Malli firka in Ramnathapuram District in the current year. The scheme will be worked by the Department of Animal Husbandry.

The scheme will be started with six breeding bulls in the Dendulur firka and three breeding bulls in the Malli firka. No service fees will be charged. 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 calf will be paid for two years, commencing from the seventh month. The payment will be confined to 50 heifer calves per centre. The subsidy will be continued until the fourth generation.

More Fish to Meet Food Deficit

By SRI K. N. ANANTARAMAN, I.C.S., Director of Fisheries, Madras

"The development of our fisheries is now absolutely essential in connection, whether direct or indirect, with our food supply; when we despair of food independent of climate for a rapidly increasing population, of industries for non-agriculturists, of manure for deteriorating soils, we may thank God that we have got yet our fisheries to develop."

This was written 50 years ago in 1899 in Bulletin No. 1 of the Madras Fisheries. Even now after the lapse of 50 years the statement is more or less correct.

The State has probably the biggest and the oldest Fisheries Department in the country, thanks to the untiring efforts of Sir Frederick Nicholson. The State has got a coastline of 1,700 miles. The surrounding seas teem with valuable fish. Sardine, Mackerel, Soles, Caranx and Seer are some of the most abundant species. The State has also many tanks, lakes and rivers abounding in fish. The fisheries in huge reservoirs like the Mettur Reservoir, Hope Lake, Periyar Lake, Veeranam Reservoir can be developed intensively to supply fish to the surrounding districts. Brackish water lakes, like the Pulicat and Collair lakes, also afford room for development. Faced with deficit in agricultural food production, the Japanese have looked over their rigidly restricted mountainous islands to the ocean for balancing their country's food budget. Madras with its large fish eating population can meet the food deficit in the same way by intensive exploitation of the Marine Fisheries and by the development and exploitation of the Inland Fisheries.

Backward Group

The Fisheries industry is practically in the hands of about five lakhs of fishermen scattered in isolated hamlets along the long coastline. A few of the inland fishermen have other subsidiary occupations. They belong to different communities. Most of the fishermen are illiterate and economically very backward. There are a number of middlemen who advance loans to the fishermen during the slack season. They take the catches from the fishermen at prices fixed by themselves. The capital invested in the fish trade is comparatively very small. The fisherman is in perpetual economic bondage to the middlemen. The only practical method to remedy this state of affairs is to make the fisherman himself fully realise the difficulties and later remedy them by co-operative methods.

The eradication of illiteracy was one of the steps taken by the Government in this direction. Most of the fishing villages are scattered in isolated places on the coast, miles away from other villages. Schools had therefore to be started in the fishing villages. Considerable attention was also paid to subjects like boat building, elementary navigation, natural history of the important food fishes and net making, etc. It is the aim of the Government to make them adopt modern methods in catching, preserving and marketing the fish. There are at present 60 elementary schools, ten higher elementary schools and one high school. There are 10,000 boys and 5,000 girls in these schools. The annual expenditure on these schools is Rs. 3½ lakhs.

Fostering the Co-operative Movement

The Fisheries Department has also been devoting great attention to the fostering of the Co-operative movement among fishermen with a view to free them from the grip of the middlemen. Loans are issued to members to clear off the prior debts and for buying boats and nets. Co-operative societies also run provision stores and ration shops. Some of the co-operative societies have taken on hire vans from the Government to take the catches of the individual members to the markets. Many of the co-operative societies run yarn depots for supply of yarn to the members for the making of nets.

At present there are about 350 co-operative societies with a membership of over 50,000 and a share capital of Rs. 5 lakhs. In many of the societies, officers of the Fisheries Department serve as Honorary Secretaries, maintaining all the accounts.

Stocking of Inland Waters

One of the important schemes sanctioned by the Government is for the intensive stocking of inland waters with quick-growing species of fish. We have got nearly 8½ lakhs of acres of inland waters, of lakes, tanks and reservoirs. An acre of water, if properly stocked with fingerlings or fish seed, will yield after eight months 1,000 to 1,500 lb. of food fish. The advantages of developing inland fisheries, though fairly known to most of us, are still worth mentioning. Fish can be had in the interior districts whenever we want it. Fish is a commodity that gets easily spoiled. It is therefore desirable to produce fish as close to the places of consumption as possible. The problem of 'glut' does not arise in the case of inland fisheries as we can take out whatever quantities we want. In marine fisheries, fish come in shoals and very often arrangements for the distribution break down, resulting in glut in the local markets. In such cases lot of the fish is no doubt cured. But still in the case of marine fish, we do not have any control over the rate of supply.

The Department has been conducting an elaborate investigation on the suitability of every tank for pisciculture. The area of the waterspread, the duration of water during the year, the present fauna of the tank, the P.H. of the water are all recorded.

Though there are many varieties of edible fish, the most important species suitable for stocking inland waters are Labao and Cirrhina and a few estuarine species like Etroplus and Chanos or the Milk fish. Most of the carps breed profusely in the rivers and in traps in paddy fields. Even 500 of these fingerlings will not weigh a pound. If stocked and protected the same number of fingerlings would yield 500 lb. of good fish.

Destruction Halted

By constant propaganda and enforcement of the Fisheries Act, this thoughtless destruction of the potential wealth of the country has been stopped to a considerable extent. The fingerlings swim down to the channels and congregate in large numbers whenever the sluice gates of regulators

are slightly opened, as all fish have a tendency to swim against the current. These fingerlings are gathered by the subordinates of the Fisheries Department in large numbers at such centres, sent by motor vans in tin carriers to central nurseries and from there by train to the stocking tanks. The tanks are cleared of predaceous fish, fish which live on other fish, like the carnivora of forests, and then the stocking is done. Great care is needed in handling the fingerlings at every stage as they are extremely delicate. The water in the tin carriers in which they are being transported to stocking places, has got to be changed regularly and the temperature kept down.

Government have sanctioned a scheme to stock 500,000 acres with five crores of fingerlings. Some of the demonstration tanks yielded as much as 2,500 lb. of fish per acre. The Dykes Pond at Visakhapatnam, the Mariamman Gundam at Kurnool and the Vellore Fort Moat, which are all maintained by the Department, have yielded good results. About ten lakhs of fingerlings were introduced in the Kadamba tank at Tirunelveli District.

In some places, private persons have taken up pisciculture. In East Godavari District, Peddapuram Taluk, one prominent ryot has stocked a 100-acre tank with fingerlings taken from the Department. The growth of fish has been quite good and he is getting offers of Rupees 30,000 to Rs. 40,000 a year for the fish. A scheme for intensively exploiting the Mettur Reservoir has been sanctioned. About 6,000 lb. of fish are taken out every day. Considerable attention is also paid to the replenishing of the stock. The rich fisheries of the Veeranna Reservoir in South Arcot District are also exploited by over 500 licensees. This reservoir has been stocked intensively by the Department.

Scheme for Providing Quick Transport

Most of the fishing villages are situated on the sea coast far away from metalled roads. There are not adequate facilities for taking the catches in time to the markets. Fish is a commodity which is subject to rapid spoilage.

COROMANDEL FISHERS: A typical catamaran of the Madras Coast, with the crew of three ready for the day's work. Towing by motor vessels gives these fishermen greater facilities for deep-sea fishing.



The principal causes of fish spoilage are by bacterial action and autolysis. Under ideal growth conditions bacteria multiply about once in every 20 minutes. At that rate a single bacterium will multiply into 68,000,000,000 (sixty-eight thousand millions) in 12 hours. Ideal conditions such as high temperature exist in our country. Autolysis is the self-digestion of the fish by enzymatic action.

The quantity of fish lost by spoilage can be roughly estimated at about one-third of the total landings. Even after the fish are brought to the roadside, there are no arrangements to take the fish speedily to the markets. In this race between the bacteria which decompose the fish, and man who is eager to take it as food in the best condition, every minute counts. Government have sanctioned the purchase of fourteen motor vans for conveying fish from the fishing hamlets to markets in cities and towns.

Mechanising Indigenous Craft

Though the State has 1,700 miles of coastline and though our seas teem with valuable species of fish, our fishermen are able to take out only a fraction of the valuable wealth. Though they are not lacking either in industry or in ingenuity, they are able to exploit only a narrow fringe of the sea close to the shore with the help of the dugouts, the dhonies and the catamarans. Considerable amount of energy is expended in reaching the fishing grounds. As the fisherman has to depend either on the wind or on his own efforts to return, he is not able to devote much time and energy to actual fishing. The only remedy is to mechanise the indigenous craft or to devise such craft that are within the purchasing capacity of the ordinary fishermen. The Special Officer, Craft and Tackle, of the Fisheries Department, has designed a boat 24 feet in length costing Rs. 3,000 and fitted with an engine costing an extra Rs. 3,000 which is thoroughly seaworthy and economical to maintain. The engine is run on diesel oil. The boat is capable of a speed of eight knots an hour. The running expenses are about six pias a mile.

It is hoped that well-to-do fishermen and fishermen's co-operative societies could adapt these mechanised boats, and extend the zone of operation and the quantity of catches.

Supply of Yarn, Sailcloth and Catamarans

While the prices of provisions and cost of boats and tackle have gone up, there is not much corresponding rise in the price of fish that the fishermen gets. Most of the rise in the price is appropriated by the middlemen. In order to help the fishermen, Government have sanctioned a scheme for supplying yarn for repairing their nets, sailcloth, the craft and timber for their catamaran at 75 per cent of the cost price. About Rs. 8 lakhs worth of yarn have been distributed to the fishermen at 75 per cent of the cost price. The timely and adequate supply of yarn has gone a long way in helping the fisherman to pursue his occupation successfully.

Salt at Subsidised Rates

Though the total quantity of fish landed is not adequate, if properly distributed to all the fish eating sections of the population, yet during seasons of glut fisheries, considerable

quantities of fish could not be conveyed in a fresh condition to the interior and sold. This is due chiefly to the want of an adequate supply of ice, facilities for refrigeration and quick transport. In the absence of these facilities, the next best course is to cure the fish by salting it. Salt is very cheap but a very efficient preservative. In the West Coast the Fisheries Department is maintaining a large number of fish curing yards where the curing is done under the supervision of experienced officers of the Department. Only good fish is admitted into the yard, pure salt is supplied at concessional rates in adequate quantities and the finished product is let out only after inspection.

When duty on salt was being collected, salt at concessional rates was supplied to the fishermen to induce fishermen to bring their fish to the yards instead of allowing them to cure it with impure salt under unhygienic conditions. After the removal of the salt duty the concession was suspended. But it was found that the curer resorted to impure salt and cured it outside the yard. Cured fish is the only source of cheap protein for the poorer classes in the interior districts. The cured fish which was produced

(Continued on page 24)

Food Offences and Punishments Awarded

During the fortnight ending February 29, 1952, 611 cases of prosecution against food offences were disposed of in the Madras State, except in the district of Guntur. The accused persons in these cases were people of all classes. Fines ranging from Re. 0-8-0 to Rs. 300 and sentences of imprisonment up to six months were imposed.

Kaliyaperumal of Tanjore District was fined Rs. 200 for illicit transport of rice. For attempt to transport rice without a permit from West Godavari District to East Godavari District, B. Ayyanna of Razole and Ch. Lakshmi Reddi of Arthamur were each sentenced to imprisonment till the rising of the Court and fined Rs. 200 or five months' simple imprisonment. A fine of Rs. 300 was imposed on P. Ahmed Thuvur, cultivator, Ernad Taluk, Malabar, for failure to sell surplus paddy. M. Subbayya of Krishna District, a dealer in foodgrains, was awarded rigorous imprisonment for six months, for non-maintenance of accounts.

During the same fortnight, other departmental punishments such as warnings, fines, forfeiture or enhancement of security deposits, suspension or cancellation of retail and wholesale licences, etc., were also awarded to persons who were dealing in foodgrains in 247 cases.

During the fortnight ending March 15, 1952, 464 cases of prosecutions against food offences were disposed of in the Madras State, except in the districts of Chittoor and Nellore. The accused persons in these cases were people of different

social standing. Fines ranging from Re. 1 to Rs. 500 and sentences of imprisonment up to six weeks were imposed.

K. Venkatakrishnaiah, cultivator, Korimerla of Krishna District, was fined Rs. 500 and Ponnuswami Nadar, Palanivel, Ramasubramania Pillai and Sappania Pillai of Tiruchirappalli District were each fined Rs. 200 for failure to surrender surplus paddy to Government.

A. Basaviah, N. Ragaviah, and Pyaperu of Guntur District were each fined Rs. 200 or rigorous imprisonment for three months, for running a mill without licence, hulling paddy without permits and non-maintenance of accounts. In the same district, Dronadula Reddi Periareddy, cultivator, Marikapudi, was fined Rs. 200 or three months' rigorous imprisonment for being in possession of 42 maunds and 10 seers of rice without a licence. In East Godavari S. Subbarao and two others were fined Rs. 500 or three months' rigorous imprisonment respectively for unauthorised possession of foodgrains. For unauthorised transport of foodgrains, G. Neekaraju of the same district was fined Rs. 200.

During the same fortnight, other departmental punishments such as warnings, fines, forfeiture or enhancement of security deposits, suspension or cancellation of retail and wholesale licences, etc., were also awarded to persons who were dealing in foodgrains in 192 cases.

Aid to Deep-Sea Fishing

Madras State has a long coastline, and the fishing resources off the coast are well-nigh inexhaustible. However, the sea fishers of Madras both on the Coromandel and West Coasts, using the traditional catamaran, are unable to exploit fully the bounty of the deep waters, for reasons of practical limitations. The catamarans cannot go too far out into the sea; the time and energy expended in reaching the usual fishing grounds preclude the men from exploring fresh spots; while the deep-sea teems with fish wealth, the sea fishers are unable to reach the farther ground due to lack of time and energy.

The Fisheries Department of the Government of Madras has tackled this problem and with a view to providing the fishing folk with full facilities for deep-sea fishing, has worked out a scheme to overcome the existing handicaps. The Fisheries Department has stationed three motor fishing vessels (M.F.V.) at Madras for conducting exploratory and experimental deep-sea fishing operations off the Madras coast. The vessels tow the catamarans to distant fields, collect the day's catches and bring back the catamarans, thus saving time and energy.

Details of Vessels

The details of the vessels are as follows:—

1. M.F.V. *Vizianagar*: Sixty feet long, 20 feet beam fitted with 88 B.H.P. Kelvin diesel engine, with a speed of eight knots; a crew of six, spacious deck for operating all kinds of tackle, insulated boxes to stow the catches.
2. M.F.V. *Madras*: Fifty-five feet length, 14 feet beam, fitted with a 60 B.H.P. Atlantic diesel with a speed of eight knots, and a crew of six.
3. M.F.L. 3 (Motor lugger): Twenty feet length, 7 H.P. Victor diesel with a speed of six knots. Built by the Department.

The former two vessels are working under the deep-sea fishing scheme of the Madras Government, in experimental deep-sea fishing, on the following lines:—

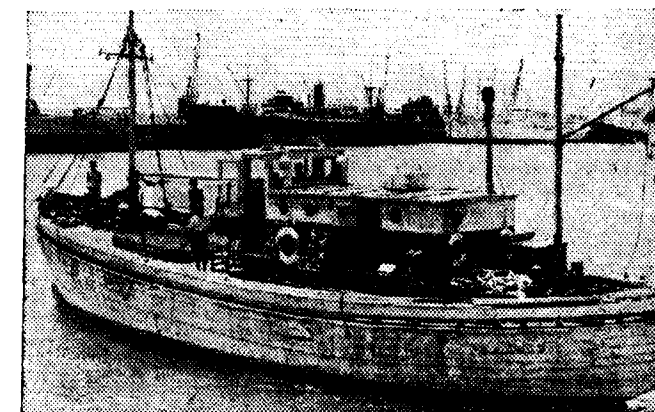
1. To popularise these vessels for deep-sea fishing with indigenous gear.
2. Survey and marketing of rich fishing grounds in the deep seas.
3. Aiding fishermen to reach the distant grounds by towing number of indigenous craft.
4. For the collection of scientific data.

The lugger functions under the Intensive Cultivation Scheme to popularise and develop indigenous craft and tackle.

The Deep-Sea Fishing Operations are directly under the charge of an Inspector and Sub-Inspector of Fisheries at Madras. Both have had special training in deep-sea fishing techniques.

Daily Routine

The fishing vessels leave Madras Harbour daily early in the morning, towing a number of catamarans to the new fishing grounds. Each vessel can tow eight catamarans with three fishermen in each, though three to five catamarans is the normal complement. Some of the fishing



POWER VESSEL: One of the motor fishing vessels of the Madras Fisheries Department. Such motor boats are instrumental in exploiting sources untouched so far.

grounds which have recently been surveyed have never been visited by the local fishermen in the course of ordinary fishing. The catamarans thus reach fishing grounds lying in varying depths between 13 to 60 fathoms, about 15 to 30 miles off the shore.

The catamarans then disperse themselves to vantage positions and start fishing with line and net. Fishing hours are thus doubled and the strain of sailing to and fro completely removed by the power boat towing scheme. The daily catches, which range from 1,000 to 1,200 lb. are collected in the fishing vessel and speedily brought to the shore. By evening 5 p.m. the fleet returns to the Harbour, loaded with the day's yield, which is directly rushed to the Corporation cold storage; from here supplies are taken to the markets and Government fish stalls.

Catching Sharks

The Fisheries Department has special devices for catching sharks off the Madras Coast. One of the power vessels is concentrating on shark fishing with special tackle and expert fishermen. A number of baited shark fishing hooks in different sets are released in the various grounds and kept overnight. The next morning the lines are hauled in, with a number of sharks hooked to them. The sharks are stowed on board, the lines baited again and released again in different grounds.

As soon as the sharks are landed on the vessel, they are washed and cut, the flesh, liver and fins being separated. The flesh is cured under the most hygienic conditions and supplied to towns in the interior. The livers are sent for shark liver oil extraction; the fins are dried and exported to Eastern countries.

The fisherman engaged in deep-sea fishing operations are quite happy and consider themselves far above the other fishing folk. Besides substantial monthly wages, the fishermen also get a lucrative share in the daily catches. The Fisheries Department looks after their needs in supplying suitable craft, yarn for making lines and nets, and special hooks for fishing. The daily catches are marketed by the Fisheries Department.

Training Young Veterinarians

In the heart of the City, on Vepery High Road, within audible distance of the Ripon Building clock chimes, and appropriately situated opposite to the office of the S.P.C.A. (Society for the Prevention of Cruelty to Animals) is India's oldest Veterinary College. It is young as institutions go, being but a year or so under fifty, but the College can start preening itself in advance on a prospective Golden Jubilee. Years alone count little in the development of an educational institution, but the Madras Veterinary College can look back with pride on a noble tradition of learning in Veterinary Science, with an all-India reputation of being a premier institution for training in Animal Husbandry.

The colloquial name of 'Dog Hospital' still finds currency around Vepery, but the old-style red brick infirmary (with modern yellow laboratories scattered round the extensive grounds) is still a landmark not merely for the fashionable aristocratic lady worried about her poodle's loss of appetite, but also for milkmen, jutka-drivers and the ilk—people to whom the sickness of a cow or the lameness of a pony means much more than the sentimental attachment to a pet; to them it is instant loss of income. Lecturers and students make valuable use of the steady stream of the dumb patients, quadrupeds and beasts of burden, and the studies cover all aspects of Veterinary Science—theory, practice and research.

The Madras Veterinary College was founded in the year 1903, and housed in a rented building known, oddly enough, as 'Dobbin Hall', on Vepery High Road. In 1905, permanent buildings were constructed in the vicinity for the use of the institution; additional buildings were put up from time to time, to meet the incessant requirements for more space. 'Dobbin Hall' was used as a hostel for the students right up till July 1931, when the new hostel buildings were completed and occupied.

Curricula of Studies

In the beginning, candidates who came for training in the institution were examined orally, and the successful students were given the diploma G.M.V.C. But, in course of time, written, oral and practical examinations were introduced.

The syllabus and curricula of studies were revised in the year 1930, and in 1936 the College was affiliated to the University of Madras. It thus became the first Veterinary College in India to get affiliated to a University, for conducting a graduate course leading to the degree of B.V.Sc. The duration of the course was then three years and one term. Consequent on the extension of the period of the Diploma course to four years, the duration of the B.V.Sc. course was extended to five years from 1938-39. With a view to having uniform curricula and studies, the duration of the degree course was reduced to four years and one term from 1946-47 onwards; the Diploma course which was till then conducted concurrently was abolished.

Candidates between the ages of 16 years and eight months and 22 years are generally admitted to the College. The basic educational qualifications required for admission to the course is a pass in the Intermediate Examination



Kumari N. Kalyani

in Arts and Science of the Madras University or an Examination of any other University or body recognised as equivalent thereto, the students having offered either Chemistry or Natural Science as one of their optional subjects. The College offers post-graduate research facilities for qualifying for the M.Sc. and Ph.D. degrees of the Madras University, and these facilities are fully utilised both by the students and the staff.

Admission of Women Students

A memorable page in the annals of the Madras Veterinary College is the admission of women students to the B.V.Sc. degree course from 1948-49. This remarkable feature in the history of the College is a significant achievement in the cause of women's education throughout the country. And it is quite likely that in Kumari N. Kalyani the College has produced India's first lady veterinarian. Kumari Kalyani was one of the first lady candidates to be admitted to the B.V.Sc. degree course of the Madras Veterinary College in 1948-49. After a brilliant collegiate career, she qualified for the B.V.Sc. degree in June 1952, passing her final examinations with first rank and winning the coveted Panikkar Memorial Medal.

Free Grazing of Cattle

The Government have sanctioned the concessions of free cutting and removal of grass by cartloads or handloads and free grazing of cattle (except goats) in the reserve forests in all the villages of Nandyal and Sircel Taluks in Kurnool West Division up to December 31, 1952.

South Arcot Lignite

By DR. C. V. S. RATNAM, PH.D., Member, Experts Committee, Lignite Investigation

Part V—Lignite Briquets and their Utilisation

The large deposits of lignite discovered recently in South Arcot District in the Madras State are the only significant coal deposits in South India to date. These lignite deposits extend over an area of 100 square miles and are estimated to contain about 2,000 million tons of lignite. Lignite, a member of the coal family, is characterised by relatively large amounts of moisture, inability to give coke when treated in the conventional coke ovens and a tendency to disintegrate into small pieces on exposure to the atmosphere. The South Arcot lignite contains 35 to 45 per cent moisture and compares well with lignite obtained elsewhere in the world.

Lignite, as obtained from the mine, can be used straight away in a boiler furnace at the mine site or at a limited economical distance away from the mine. But for markets at a considerable distance from the mine, for domestic purposes and for plants now utilising higher grade coals, natural lignite may not be suitable. The high percentage of moisture and the tendency to disintegrate easily during handling makes natural lignite unsuitable for these purposes. Lignite briquets can be used for locomotives, existing industrial furnaces, thermal stations and domestic purposes.

Briquetting is essentially compacting of finely divided materials into more useful and saleable product. Briquetting lignite makes the material more useful than the natural lignite for certain purposes. Briquetting improves the handling properties of lignite, increases the economic distance over which it can be used and serves the domestic market.

Process of Briquetting

The process of briquetting is briefly described below. Natural lignite is crushed and dried in a suitable way. The dried lignite is then mixed with a suitable binder and fluxed with steam. A briquetting machine processes the mixture of lignite and binder into suitable briquets which are cooled and despatched to the markets.

These are different ways of accomplishing every one of the above operations involved in briquetting lignite and the circumstances of each case decide them.

For example, the usual method of drying coal in a briquetting plant is by a rotary drier, a very large piece of machine and not very economic. Recently flash drying and fluidized drying techniques have been developed to do this same thing easily and economically.

Most coals and lignites need a binder to aid briquetting. The usual binders are petroleum asphalt and coal tar pitch. Waste sulphite liquor molasses and starch have also been used as binders. But the German brown coal was found to briquet without binder and binderless briquetting is extensively practised in Germany, amounting to about 30 million tons in 1949. Australia does the same. About three million tons of binderless lignite briquets are produced there annually.

Investigation on South Arcot lignite indicates that it can be briquetted without binder. This factor is of great importance because asphalt and pitch binders are very expensive in India. To meet the existing and potential demands for lignite briquets in South India, it may be necessary to produce two kinds of briquets. For use in locomotives and industrial furnaces, dried South Arcot lignite may be briquetted with or without a binder. This briquet need not be processed further so as to make it smokeless, because smoke does not seriously affect their use for these purposes. The briquets will have the required handling qualities and crushing strength, and have the necessary calorific value. Although the calorific value of South Arcot raw lignite is about 7,000 B.T.U. per pound, these briquets will have a calorific value of about 10,000 to 11,000 B.T.U. per pound.

For Domestic Use

For household purposes and for hotels and other similar purposes, the above briquets are not suitable, as they give a lot of smoke. The briquets for this purpose must resemble as much as possible charcoal now used in large quantities. For this purpose, the briquets must be carbonized around 600°C yielding carbonized briquets which can be used as smokeless fuel of good heating value and tar, which can be processed to yield liquid fuels, phenols, acids and the like. These briquets will have a calorific value of about 12,000 B.T.U. per pound and will be an ideal fuel for the purposes mentioned and wherever good solid fuel is necessary. A good, smokeless briquet at a reasonable price comparable to the present charcoal price of about Rs. 150 to Rs. 180 per ton will be in great demand in our State. Such briquets are sold as premium fuel in the U.S.A. This will reduce the cutting down of trees and forests for firewood and charcoal for domestic purposes and for bus and lorry transportation. The tar will prove a good source of material, very much required at present.

The Expert Committee on Lignite Investigation appointed by the Madras Government considered this problem of briquetting South Arcot lignite and they feel that this should be developed simultaneously with the proposed pilot plant mining operation. Experiments are under way at the mine site and other places to arrive at the best conditions for briquetting South Arcot lignite. When this industry is established in Madras State, as it is now established in Germany and Australia, there will not be any fuel shortage for industries, buses, domestic purposes and locomotives.

Recognition of M.I.T. Diplomas

The Government of India, in consultation with the Union Public Service Commission, has decided to recognise diplomas awarded by the Madras Institute of Technology, Madras, in aeronautical engineering, automobile engineering, electronics and instrumental technology as equivalent to engineering degrees of recognised universities for the purposes of recruitment to posts under the Central Government.

Chemistry for the People's Good

"The purpose of this Laboratory is to advance Knowledge and to apply Chemical Science for the Good of the People."

This is the legend that attracts every visitor to the National Chemical Laboratory of India, in Poona. It is prominently displayed from the ceiling of the cream and light grey entrance hall. A motto, however, is one thing; what is infinitely more important is whether and, if so, how, it is being observed.

With a peculiar charm of line, design and colour and in a setting of lawns, fountains and low hills, the Laboratory covers an area of 475 acres. It may not at first sight give the impression that anything so remote from the artistic as the conversion of bones and hides into gelatine, or tobacco waste into an insecticide, or the microbiological production of sulphur goes on within; but one has only to visit the first and second storeys to meet men—some eminent in their respective departments of learning—and not a few women too, working purposefully in a maze of test tubes, retorts, decanters and glass bottles—not to mention furnaces and infra-red rays!

Test Tube to Pilot Plant

Seated in his glass panelled office room, Prof. James W. McBain, F.R.S., scholarly but humane, said: "We carry on work from the test tube stage of the university to the pilot plant stage. We cannot afford to make convenient guessess, because our problems are fundamental to industry." Clearly with a zeal to make his Institute of real service to Indian industry and, if the final analysis, to the country at large, he added: "The touchstone of our success is what happens outside the Laboratory—in industries which have sought and obtained our advice on their problems." The N.C.L., he continued, had always in mind the need for turning chemical and industrial indigenous materials to good account. Some of these now thrown away in large quantities as mere waste, are

basic to many a project upon which work is in hand, and to that extent there is promise of saving on imports.

A visit to the Laboratory, a matter of four to five hours if one wants to gain some insight into the work, technical aspects apart—readily shows the emphasis that is being placed on its function of bridging the gulf between science and its application to the practical problems of human welfare. At the same time, fundamental research, considered necessary for maintaining "the vitality of the institution", goes on; and there is much scope for the specialised staff to delve into the mysteries of various chemical processes.

Broadly, the N.C.L.'s scientific work—carried out in no less than about 300 rooms, each a laboratory in itself, falls into seven major divisions—Biochemistry, Organic Chemistry, Inorganic Chemistry, High Polymers, Chemical Engineering, Physical Chemistry, Survey and Information.

Engineering Hall

Comparisons are always odious, but a layman seeks the expert's indulgence for being more than ordinarily intrigued by the Chemical Engineering Division, to which each project is finally sent for development on a pilot plant scale and for the working out of the economies involved.

Equipped with machinery for various chemical processes, the Engineering Hall of this division is replete with crushers, grinders, distillation apparatuses and vacuum and steam-jacketed pans. Here one finds experiments on the production of certain phosphatic fertilizers not yet manufactured in India. Phosphate from Tiruchirappalli, in the South, is basic to this process. A plant is being assembled both for the production of phosphorus from this phosphate and subsequently for the processing of the phosphorus into a fertilizer known as Triple Super-Phosphate. The experiments aim at determining conditions for commercial manufacture.

CHEMISTRY FOR THE PEOPLE'S GOOD: At the National Chemical Laboratory of India, Poona. A view of one of the laboratories of the Organic Chemistry Division.



Insecticide from Waste

Another important project for which a fairly elaborate apparatus has been erected pertains to the extraction of nicotine sulphate from nothing more valuable and rare than tobacco waste. The grading, manufacture and preparation for export of 684 million lb. of the Indian tobacco crop produce over 100 million lb. of midribs, stocks, dust and scrap. It is believed that in the Guntur District alone the scrap amounts to five million lb. Some of the scrap is used in the manufacture of snuff, but considerable quantities—regarded as just so much waste—await economic utilization. The N.C.L.'s process for the extraction of nicotine aims at the production of an effective insecticide from this cheap waste material. This insecticide has already been sprayed from the air in certain parts of the country in the fight against the locust.

The Division is also setting up a pilot plant for the preparation of cellulose pulp from indigenous raw materials such as bamboo, reeds, grasses and certain varieties of wood. The object is to use this pulp in the manufacture of rayon, plastics, certain types of paper and photographic film. At the moment, our cellulose pulp is imported from Sweden, the U.S.A. and Canada, especially in the form of newsprint.

Alcohol is being employed as the starting point of a basic organic chemical industry. First, it is sought to produce ethylene; and, later on, clycol, styrene and other chemicals, hardly any of which are produced in India in spite of the fact that we have large quantities of cheap alcohol, 20 million gallons of which are produced annually as a by-product of the sugar industry.

A process that bids fair to become the basis of a cottage industry is the aqueous extraction of castor seeds. The seeds are roasted and ground to a meal, which is then boiled in water with the addition of small quantities of salt, lime and potassium nitrate. Castor, one of the best

known lubricants apart from its medicinal value, is released and removed, and the oil obtained is about 90 per cent of that originally in the seeds. One advantage of this process is that it does not call for the use of any elaborate machinery.

Sulphur from "Digested" Sewage

A recent achievement of the Biochemistry Division is the production of citric acid—used largely in pharmaceutical preparations, food industries, ink manufacture and dyeing and calico printing—and calcium gluconate by the fermenting action of fungi on sugarcane and glucose. Developed in the laboratory with a view to commercial exploitation, the process has been made over to a Bombay firm which is being advised in the setting up of a bench pilot plant. Citric acid is now being imported from the U.S.A.

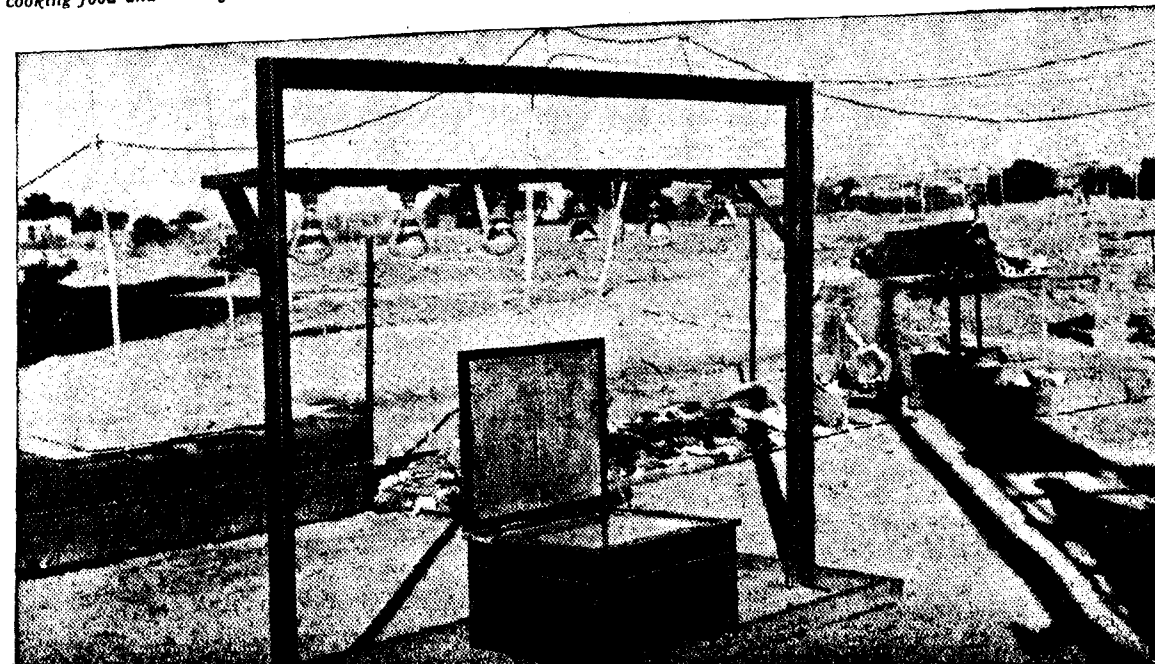
Another promising line relates to the production of sulphur—in short supply in most countries—by micro-organisms. "Digested" sewage, as produced in the sewage purification works at Dadar, near Bombay, is an essential of this process.

The Biochemistry Division has since last year become the custodian of the national collection of type cultures. This collection, which was begun at the Indian Institute of Science, Bangalore, in 1940 under the C.S.I.R. was transferred to the N.C.L. in April, 1951. The primary object is to collect, preserve and disseminate free of cost pure culture of bacteria, fungi, yeasts and other micro-organisms important to industry and research. The collection has at present 700 cultures in its repository.

Sugar and Boot Polish

Sugar is not generally associated with boot polish, but the Organic Chemistry Division, in which no less than 30 projects are in hand, sees a very definite connexion between the two. A by-product of the sugar industry is a black

SOLAR ENERGY: Artificial Sun (heat produced by use of infra-red bulbs). Here a cooker is being tested. Sunshine is a commodity which is in plentiful supply in India. The harnessing of this rich source of energy for practical purposes is receiving attention at the National Physical Laboratory, New Delhi. Solar energy can be used for generating power by the use of a heat engine or through a thermo-electric generator. It can also be used as heat for air-conditioning, refrigeration and similar purposes. In the National Physical Laboratory an air engine is working on sunshine and air alone. Appliances to use solar energy for cooking food and heating water are also being devised.



U.K. Standard Tests for Farm Machinery

By HILARY PHILLIPS

In Britain there is one tractor for every 57 acres of arable land, and in a country where more than one-third of all the farms are less than 50 acres in size, this shows a pretty high degree of mechanisation. The agricultural engineering industry employs about 45,000 people, and the value of its goods adds up to more than £100,000,000 a year. The United Kingdom is second only to the United States in the number of tractors exported, and the influence of British agricultural machinery on overseas farming is considerable.

All this has developed fairly recently. To give an example: in 1937 there were 50 combine-harvesters in Britain, and in the harvest just completed around 20,000 were used. It is hardly surprising, therefore, that the National Institute of Agricultural Engineering should have grown rapidly.

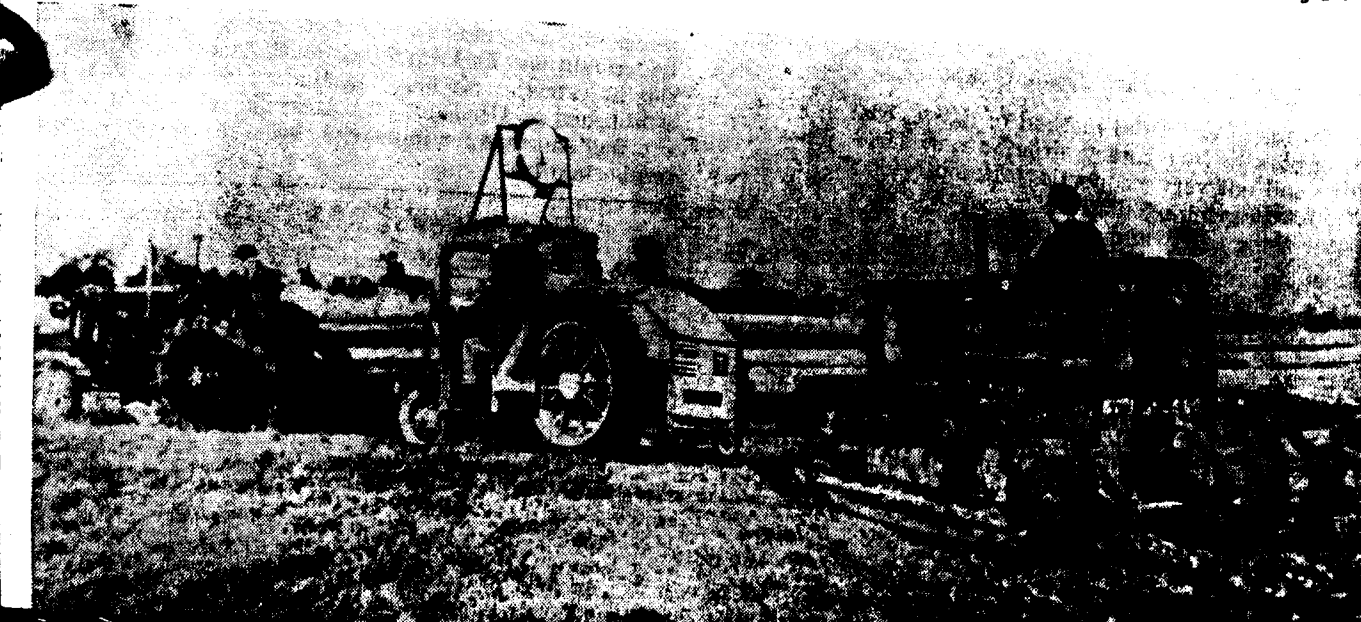
The Institute started in a modest way in 1924, as a research department of the University of Oxford. Since then it has progressed until after a spell under the Ministry of Agriculture it came, in 1949, under the control of the Agricultural Research Council.

Staff of 300

Now it is firmly established at Silsoe, with a staff of more than 300 in eight departments. Wrest Park is a beautiful 19th century house in the country, about half-way between Luton and Bedford. The estate used to belong to the de Gray family, which owned it continuously from the 15th century until 30 years ago. The present house, the third, was built in 1837, but the formal gardens surrounding it were laid out much earlier.

The testing of agricultural machinery and of tractors has always been one of the main jobs of the Institute. Even such unorthodox things as a hand-hoe from Argentina, a potato-clamper, and a mechanically operated spade have been tested. A satisfactory National Institute of Agricultural Engineering "ticket" is accepted by the British farmer as the hallmark of an efficient machine.

FIELD TRIAL: A field test being carried out at the National Institute of Agricultural Engineering at Wrest Park, Silsoe, Bedfordshire, to determine by means of an electrical loading car the power developed by a tractor on various types of soil. The car is coupled to the tractor by a draw bar dynamometer which shows on a dial the pull exerted by the tractor.



The big increase in the number of combine-harvesters in use in Britain has kept workers at Silsoe busy devising ways of drying and storing grain and other crops. The comparatively high moisture content of grain harvested by combine in Britain can make the immediate post-harvest storage and drying position very acute in a wet season.

Farmers are being urged to equip themselves with their own drying plants, and one of the most successful for the small man was designed at Silsoe four years ago. It is called a platform drier. Grain is laid out in bags on a concrete or brick platform, and warmed air is blown up through holes immediately under each bag. For bulk storage a ventilated silo has been designed.

Interesting Projects

One of the most interesting projects under way at Silsoe is a complete groundnut harvester. If this machine is successful, it will go into a standing crop of nuts, lift the plants, remove the soil from them, strip off the nuts and put them into bags. The first prototype machine will be tested this year in East Africa.

Another scheme which promises well is the tractor with hydraulic transmission. This tractor will be able to move at exactly the speed the operator desires—an immensely important feature in many agricultural operations. It will have no gearbox, nor ordinary transmission; in fact, there will be next to nothing between the front and rear axles except a seat for the driver. The prime mover will be between the front wheels, and the drive for the rear wheels will be encased within them. The operator will have perfect view of the ground to his front and immediately beneath him, and there will be plenty of room for the attachment of implements midway, if necessary.

There is a big Horticultural Engineering Department at Silsoe, as well as departments for instrumentation and field investigation, and a large information unit. (B.I.S.).



U.N. EXPERT MEETS LAW MINISTER: Dr. Edward Galway, U.N. Expert, recently met Sri K. P. Kuttikrishnan Nair, Minister for Law, at Fort St. George. Dr. Galway is a member of the section of Social Defence of the U.N. dealing with the subject of control, treatment and prevention of juvenile delinquency. A specialised counsellor in the field of improvement of prisons, borstals and certified schools, Dr. Galway is touring India to offer his help and advice in regard to orientation programmes, correct coral administration and pre-discharge work in Indian jails.

Crime and Jails

Dr. Galway's Discussions with Law Minister

Dr. Galway, Member of the Section of Social Defence, United Nations, held discussions with Sri K. P. Kuttikrishnan Nair, Minister for Law, on problems relating to jails and jail administration, on Wednesday, November 5, 1952. The need for speeding up of trials, legal aid by the Prisoners' Aid Society to under-trials, classification of prisoners, sufficient information to the sub-jail authorities, so as to make possible segregation on the basis of age and previous jail experience, the working of the Borstal Act, over-crowding in jails, long trials, jail reforms, including setting-up of different types of jails for different types of prisoners, the introduction of wage earning by labour of prisoners, preliminary screening of cases to decide which set of offenders could be released on undertaking and which set detained as under-trials, and specialisation in youth cases, were among the subjects discussed.

Mr. Justice P. Rajagopalan, Chairman of the Committee on Separation of the Executive from the Judiciary, Sri W. R. S. Sathianathan, Member, Board of Revenue, and Member of the Committee on Separation, the Joint Secretary, Home Department, the Inspector-General of Prisons, the Chief Presidency Magistrate, the Chief Inspector of Certified Schools and other departmental officials concerned were also present and participated in the discussions.

Government Officials Punished for Corrupt Practices

During the month of July 1952, one Assistant Engineer of the Highways Department, one upper division clerk of the Public Works Department, one Inspector, one Sub-Inspector and one head constable of the Police Department, one Monegar, Amindivi Islands, and one peon of the Registration Department were compulsorily retired; one lower division clerk of the Revenue Department, one peon of the Registration Department and one Prohibition Guard were discharged from service; one Tahsildar, one Deputy Tahsildar, one Minor Irrigation Overseer, one Fieldman of the Agriculture Department, and one Police head constable and six constables were dismissed; and one attender of the Transport Department was removed from service. The punishments awarded to four others were less severe.

Illicit Emigration to Ceylon

There have been raids conducted by the Police Department to prevent illicit emigration to Ceylon by country craft at Ramanathapuram Railway Station and the area between Pamban and Dhanushkodi. Eight emigrants and one tout have been apprehended in both these places.

INDUSTRIES

20

MADRAS INFORMATION

solid sticky "wax", not of much use in its original state, we are assured by the experts, because it does not possess properties of "solvent-retention" and "take-up". The process evolved at the N.C.L. is for bleaching the wax and chemically modifying it. This modified wax approaches in chemical properties carnauba wax, which is imported and for which no substitute has so far been found in India. Results obtained with the N.C.L. wax in the preparation of boot polish, carbon paper, floor polish and lubricants are distinctly promising.

Wrinkle Finishes

By a process of which the Laboratory is justly proud and which it has had patented in India, the U.K. and the U.S.A., oil from Kamla seeds (found in U.P., Punjab, Bihar, Assam, Bengal and to some extent in Bombay between heights of 3,000 and 4,000 feet) is used in the preparation of varnishes and paints which, on drying in air at ordinary temperature, yield artistic "wrinkle" finishes, hitherto obtainable only by "baking" films of alkaloid varnishes. This method results in beautiful decorative finishes—but not without utilitarian value too—in doors, walls, furniture, typewriters, fabrics, paper and other materials that cannot ordinarily be subjected to baking.

It takes only two or three minutes after the Kamla oil has been spread on the glass, wood, metal or other surface for the film—subjected to air-drying—to set into wrinkles of various patterns and the required colour. Wrinkle finishes give better "grip" than plain finishes, besides rendering the material scratch-proof.

Ion Exchange

In chemical operations, few jobs call for so much effort and precision as that of separating the substances one wants from those one does not. Whether the substance is, on the one hand of the rarity of streptomycin or a radioactive isotope, or on the other ordinary sugar or water, the purification is not always easy. In the last few years, there has been discovered an excellent way of doing this—a process called Ion Exchange. Ions are simply atoms, singly or in groups, that carry on electric charge, and ion exchange is the process of taking one species of ion out of a solution and putting a different one back in its place. At least—that is how it seems to the layman.

In the Plastics and Polymers Division, methods of making resins by the exchange of ions are in progress, use being made of such indigenous raw materials as coal, cashewnut shell liquid, sulphuric acid, agricultural waste and naphthalene. The resultant resins can be used in the treatment of brackish waters, to make sea-water potable and to remove fluorides from water found in certain parts of the south, making it drinkable. Medicinal uses include the treatment of dropsy and a certain type of ulcer. Ion exchange also results in the recovery of sugar from fruit wastes and in the preparation of soft-curd milk for children.

In another experiment in this section use is made of Indian asbestos in the manufacture of battery containers, which have to be acid and electrical proof. An essential of the process, which aims at the curtailment of imports of battery containers, is the mixing of bitumen with the asbestos and other fillers. These experiments followed a reference by the Tariff Board to the N.C.L. in view of the restrictions placed on imports of Canadian and South African asbestos.

The Rats Lived

The common cashewnut, of which India is a big producer, yields from its shell a dark liquid which when applied to a tin or iron surface and baked at about 120° produces a shining film, resistant to water and ordinary organic solvents. An important investigation, it has as its objective the use of this composition for the lining of food and oil containers. Rats have been given to eat food packed in containers lined with this composition—with no ill-effects.

At present, cashewnut liquid is being exported to the U.S.A. where it is used in the preparation of coating compositions and various plastics.

Another set of experiments in the Organic Chemistry Section in which use is sought to be made of the natural resources of the country, relates to the purification and removal of objectionable odour from neem oil, rendering it suitable for use in high-grade soaps, and even for edible purposes. The purified oil yields, on hydrogenation, good quality stearin. It can also be used in the preparation of vanaspati. Thus neem may replace groundnut oil to a substantial extent in the manufacture of soaps and other industrial products, making groundnut more readily available for edible purposes.

Advice to Displaced Persons

One of the most interesting features of the institution is the Industrial Laboratory; and an invaluable service rendered by this section is the information, advice and aid it gives to would-be small investors to study—and in many cases set up—industrial projects with limited capital (Rs. 5,000 to a lakh is generally the range). Care is taken to eliminate as far as possible the use of heavy and costly machinery. Demonstrations are arranged for the benefit of those who want to be advised on practical methods in the manufacture of various chemicals, on starting new industries or on the use of substitutes for materials needful but difficult to import.

Ranging from fountain-pen ink to soya bean plastics and soya bean milk, nearly two score projects—all small scale—have been or are being studied, each arranged neatly on a table with its relevant charts and graphs, chemical equipment and raw materials. The school-boy will find there a cheap process for the manufacture of slates and lead pencils, and for the housewife there are experiments on dyes and camphor making and the preparation of solid disinfectants. Mirrors should be of general interest, while the industrialist will revel in experiments for the use of gypsum powder in white paints and preparation of silicon tetrachloride, not to mention the utilisation of nitre cake and the treatment of effluent water.

Built and equipped at a cost of Rs. 75 lakhs, the N.C.L. boasts of a collection of scientific instruments, in many respects unique in Asia. These include special X-ray plant, infra-red spectrometer, ultra centrifuge and electron microscope.

Cut off from Poona proper by a distance of about five miles, the Laboratory has built up a community life. There is a flourishing sports club, a well-equipped auditorium, a cafeteria run on non-profit basis, co-operative stores and colony centre, a dramatic club, a kindergarten, besides a dairy, vegetable and fruit gardens.



THE PRESIDENT: Dr. Rajendra Prasad, President of the Republic of India.



THE VICE-PRESIDENT: Dr. Sarvapalli Radhakrishnan, Vice-President of the Republic of India.

Six persons, attempting to go to Ceylon in country craft, were apprehended at Somanathapuram seashore by the Inspector of Customs Preventive Party, Manamelkudi, on August 24, 1952, and handed over to the police.

A tout by name Devasaghayam Nadar of Madathivilai, Arumughaneri, who was apprehended during the campaign in March 1952, has been convicted and sentenced to rigorous imprisonment for one month. Six other emigrants, who were apprehended along with him, have been sentenced to pay a fine of Rs. 20 each.

A man (suspected to be organising illicit emigration to Ceylon by using his boat), who applied for a visa and

Embarkation Certificate to go to Ceylon, was detained by the Protector of Emigrants, Mandapam Camp, and handed over to the police for necessary action.

There has been a series of raids, conducted by the Emigration Department, Government of India, in Tirunelveli and Ramanathapuram areas, to prevent illicit emigration to Ceylon by country craft. The places covered by the raids include Tharuvaikulam, Nazareth, Tiruchendur, Tirupalakudi and Rameswaram. A total number of 13 emigrants and 12 touts were apprehended; two boats were also seized.

Working of the Police Department

Administration Report for the year 1951 on the working of the Police Department is reviewed below :

The year 1951 registered a slight increase in the volume of crime due to persistent adverse economic conditions, partial unemployment of rural population and diversion of police man-power to a considerable extent to combat the violent activities of anti-social elements during the first half of the year to the detriment of normal police work. The total number of cognizable offences excluding offences under the Special and Local Laws and the 'nuisance' sections of the Indian Penal Code, increased from 82,348 in 1950 to 89,466 in 1951, an increase of 7,118 or 8.6 per cent. Grave crimes increased from 61,871 in 1950 to 66,740 in 1951, an increase of 4,869 or 7.9 per cent, there being an increase under all heads except dacoity and robbery. Murder increased in number from 1,261 to 1,428; house-breaking from 14,666 to 15,747, cattle theft from 6,570 to 7,537 and ordinary thefts from 38,276 to 40,979. Dacoity decreased from 389 to 368 and robbery from 709 to 681. There was also an increase in the total number of cases under Special and Local Laws from 262,172 in 1950 to 270,885 in 1951. The increase under certain heads was due to the enforcement of various control orders and the Prohibition Act throughout the State. The number of nuisance offences decreased from 282,817 in 1950 to 247,020 in 1951. The number of serious offences against person and property showed an increase by 2,634 or 9.3 per cent.

The percentage of detection of total cognizable crimes was 42 per cent as against 43.7 per cent in 1950 and 44 per cent in 1949. The fall in detection by 1.7 per cent as compared with the previous year was mainly due to the manning of a large number of police stations by Sub-Inspectors promoted from the ranks, generally lacking in intensive experience and of comparatively poor calibre, the deputation of a large body of experienced officers to the Hyderabad State and the Government of India, and the diversion of the police to work connected with the countering of the activities of the terrorists from their ordinary functions relating to prevention and detection of crime.

The Crime Branch of the Criminal Investigation Department worked efficiently and investigated a number of important cases of murder, cheating, fraud, misappropriation, counterfeit currency notes, conspiracies of anti-social elements, use of bombs and explosives, bogus telegrams,

kidnapping of children, issue of forged Secondary School-Leaving Certificates, etc. The Criminal Investigation Department worked in close liaison with District Intelligence Bureaux as usual, co-ordinating their work and functioning as the Central agency for dealing with organised crime. Better results were achieved during the year in the use of scientific aids to investigation. There was an increase in the number of calls made on the services of experts, especially in coin and currency. The X Branch achieved a fair measure of success in the investigation of corruption cases during the year. The Anti-Blackmarketing staff in the districts continued to function with vigour and a certain number of blackmarketeers were detained and a large number deterrently punished.

Labour unrest resulting in strikes and lockouts, and agrarian trouble in the districts of East and West Godavari, Nellore, Malabar, Ramanathapuram and Madurai threw considerable strain on the police. Nevertheless they rendered the necessary assistance.

Communal tension between Hindus and Muslims was noticed in Guntur, Bellary, Cuddapah, North Arcot, South Arcot, Madurai Rural, Tiruchirappalli and Salem Districts. Fourteen incidents were reported and in all two persons were killed while 119 were injured. Armed Police detachments were stationed wherever required and the incidents were brought under control. The number of cases of rioting or unlawful assembly including activities due to anti-social law and order on the whole were well maintained. It is significant that the police had to open fire on only 38 occasions to maintain law and order as against 97 occasions in 1950.

The number of traffic accidents recorded in Madras City during 1951 was 2,953 as against 2,718 in 1950. Sixty-seven cases were fatal in 1951 as against 42 in 1950. The slight increase over that of the previous year was due to increase in the number of vehicles as also the total population.

The Armed Reserves were kept up to strength and in cases of labour unrest, agrarian troubles, anti-social activities by subversive elements both in the State and on Hyderabad border, and during pre-election bandobust, they discharged their duties efficiently. Tear smoke squads were functioning in Madras City and in the Armed Reserves of all the districts. The Malabar Special Police and Special

Armed Police were stretched to the full and with good results in countering the activities of the subversive elements in several districts.

The Madras Prohibition Act was enforced by the police in the districts of Guntur, Nellore, Chittoor, North Arcot, Tanjore, Madurai Urban, Madurai Rural, Tiruchirappalli, Salem and Coimbatore as part of their normal duties, and latterly they are taking increasing interest in enforcement.

In the Police Radio Network, 30 static stations and 29 Transportable stations were functioning. Separate Radio Networks were functioning in the Malabar Special Police, Special Armed Police, in the Madras City and in Madurai, Coimbatore and Tiruchirappalli towns. The Radio Network rendered signal service in combating the violent activities of the anti-social elements, particularly in Kurnool District. For the maintenance of law and order in connection with the First General Elections, the entire Radio Network was mobilised to work on a "round the clock basis" and it functioned as well as was desired.

Extensive police bundobust arrangements were made during the closing months of the year in connection with the First General Elections under the new Constitution, which came off in January 1952. Few major events were reported and the conduct of the police came for all round praise.

A "Courtesy Week" was observed during the year in order to establish that the police are in every sense friends of the public and to improve further the good relations between them. The police co-operated well with the Revenue authorities in procurement work and in the prevention of smuggling.

Like the previous year, the year 1951 was a very difficult one for the police throughout the State on account of anti-social activities by subversive elements, labour and agrarian unrest and severe adverse economic conditions. The efficiency and morale of the police force however remained unimpaired. The force rendered meritorious service during 1951 in combating the subversive activities of lawless and anti-social elements, creating a general feeling of security throughout the State.

The adjustment of the activities of the force to a radically democratic set-up is in places no doubt attended with some difficulty, but is successfully being done without sacrificing in any way the efficiency for which the force in this State acquired a reputation under the old conditions more favourable for mere efficiency.

Educational Concessions for Children of Rural Medical Practitioners

The Government have directed that the educational concessions granted to the children of the Non-Gazetted employees of the State Government in the Order dated May 31, 1952, be extended to the children of the Rural Medical Practitioners and Maternity Assistants, employed in recognised Rural Dispensaries (subsidised or non-subsidised) serving under local bodies or Government.

Applications for India-Pakistan Passports

In the Press Note No. 124, dated 7th September 1952, regarding application forms for India-Pakistan passports, it was stated that after completing the form and getting the Subsidiary Declaration in the form signed by the persons authorised, applicants may send the forms with three copies of photos, etc., direct to the Deputy Secretary to Government, Home Department, by post or present the applications at the counter in the Secretariat to be opened for the purpose. In modification of the instructions in the above Press Note, dated 7th September 1952, it is ordered that applications for India-Pakistan passports should be presented to and sent through the Collectors of the districts in which the applicants reside or the Commissioner of Police, Madras, in the case of applicants residing in the City.

Persons applying for passports for travel between India and Pakistan should therefore address their applications to the Collectors of districts or the Commissioner of Police, Madras, as the case may be, to be forwarded to the Deputy Secretary to Government, Home Department, Madras-9. Applications and photographs should be duly attested by any one of the following persons :—

(i) Any member of Parliament or State Legislatures; (ii) Any Gazetted Officer; (iii) Any officer of the Land Revenue Department not below the rank of Patwari; (iv) Members of Corporations, Municipalities, District or Union Boards or any other similar local bodies recognised by the State Government for the purpose; (v) Any person of the teaching staff of any University, college or any school recognised by the Educational Department of the State; (vi) Practising lawyers, mukhtars or doctors; (vii) Any Justice of the Peace or Honorary Magistrate.

Any further particulars regarding procedure may be obtained from the Commissioner of Police in the City or the Collector or the nearest Deputy Tahsildar in the districts.

Zamindari Abolition : Interim payments

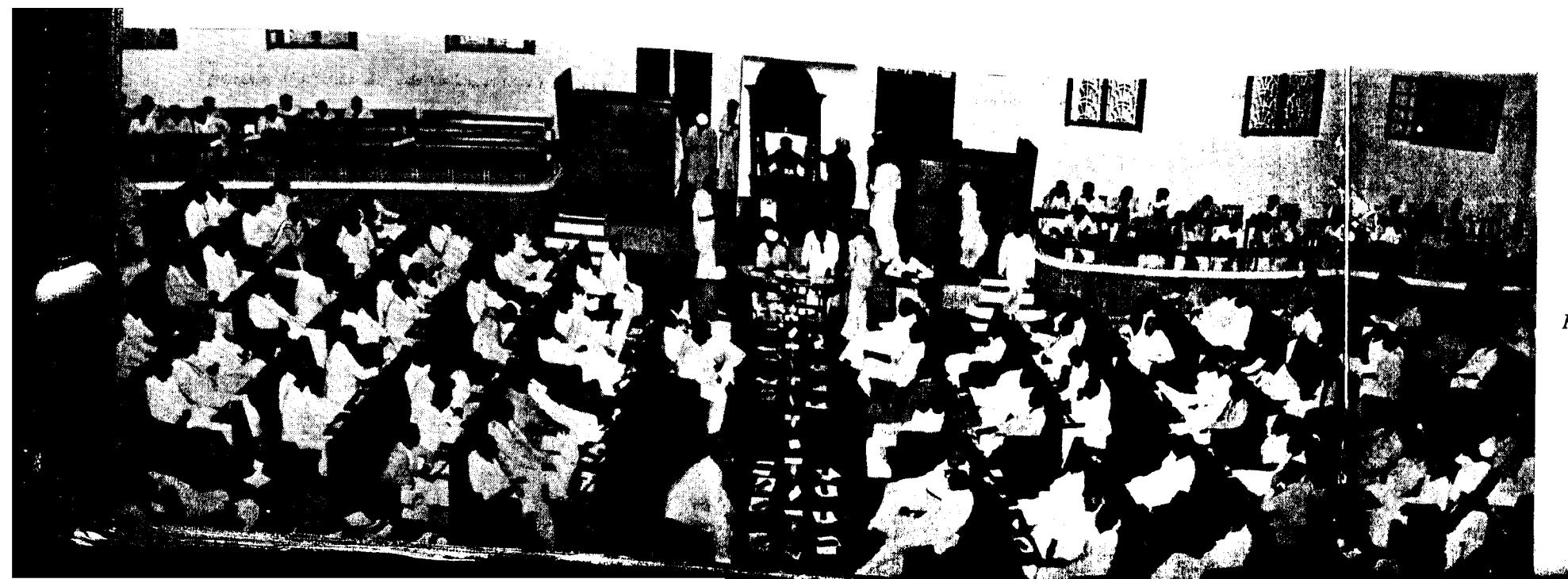
On behalf of the Government, the Director of Settlements, Madras, has deposited interim payments for fasli 1360 with the three Tribunals in respect of the zamin and under-tenure estates taken over in the third and subsequent batches. The names of the estates, the amounts due for each estate, the amount recovered towards the rents collected by the landholders from the ryots up to the notified date and the amount deposited with the Tribunals are published at pages 617-632 in Part II of the Fort St. George Gazette, dated May 14, 1952.



Above : H.E. the Governor cuts the ribbon to mark the opening.

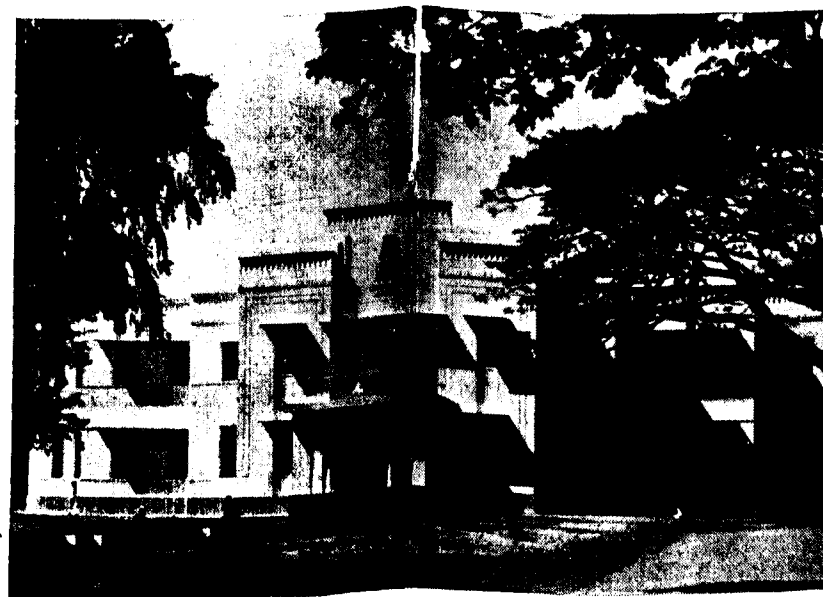
Right : The new buildings.

Below : A view of the Assembly hall, showing a session in progress.



THE NEW ASSEMBLY BUILDINGS

H.E. Sri Sri Prakasa, Governor of Madras recently opened the new buildings of the Madras State Assembly. Constructed and furnished at a cost of about Rs. 10.5 lakhs, the new buildings can accommodate all the 375 Members elected under the new Constitution.



H.E. the Governor speaking at the opening ceremony.



Above : His Excellency with Hon. Sri J. Sivashanmukham Pillai (Speaker) on his right and Hon. Dr. P. V. Cherian (Chairman of the Council) on his left.

Right : Sri P. T. Rajan as temporary Speaker, conducted the proceedings of swearing-in of Members and election of Speaker.



Training for Co-operation

By Sri J. M. LOBO PRABHU, I.C.S., Secretary, Development Department

Among the most high powered factories in the world are schools, because they develop the human mind which has not been equalled for its force and range. The temper, the achievements of any civilisation, of any age is dependent on and is reflected by its schools. The teachers and students of schools therefore have a significance, which they and others should understand. They supply impulse to vast aggregates of population, to great changes in life. The Central Co-operative Training School has importance not only because it is a school, but also because it stands for a new approach in human relations.

Strictly, the approach is not new. Co-operation is the beginning of civilisation but it has been forgotten in the complications imposed by the growth of population, based on science and money. Among the last strongholds of co-operation were our own village communities, with inter-related obligations and duties. Their self-sufficiency has been destroyed not merely by trains and trucks but economics and politics which have made them intimate and integrated parts of a great country.

Basic Unity of the Village

We need not regret the absorption of the village in the fabric of a great country, but we must regret the disintegration of the unity and mutuality of relationships which existed in our villages. It is the task of co-operation to warm the members of these relationships so that even though the village is a part of the country, within itself it retains unity of incentives and interests.

Such being the task of Co-operation, what precisely should a Central Training Institute teach? The Institute has been in existence since 1937. It has trained senior and junior Inspectors. It has supplied a good proportion of the rural welfare workers. It has a reputation in India of being a model institution for Co-operative training. The question is whether anything can be done to increase its effectiveness and reputation. The curriculum provides for Co-operative Law, Banking, Agricultural Economics, Audit and Book-keeping. All the teaching necessary to make Co-operation a commercial success appears to be present. Is this enough? Should not Co-operation do something more, something for the human relationship which was once the basis of our community life? Perhaps what is missing is a study of human factors, of the psychology of the masses to be served by Co-operation.

Servant of Community

It will be a mistake to underrate the importance of this psychology. Perhaps in no other country in the world has the human mind been subject to the same stresses and strains. Centuries of foreign rule and local despotisms have driven the people to live inwardly in distrust and fear of all outside influences. The official, particularly, has typified to the villages, the arbitrariness, violence and injustice of life.

From the Presidential Address of Sri J. M. Lobo Prabhu, I.C.S., Secretary to Government, Development Department, at the Inauguration of the Trainees' Association of the Central Co-operative Institute.

It is in this prevailing psychology the Co-operative official has a special role, of proving to be a servant of the community's interests. He should not represent any power except that of service. The question is, is this is taught in this Institute and is practised by those trained in their work. If the Co-operative official becomes identified with other officials as a collector of money and enforcer of rules, he is failing not only the Co-operative movement, but the general administration which is expecting him to make all officials acceptable to the masses, by his example. It seems necessary therefore to inculcate in this school an understanding of the people and willingness to serve them. Both the training and the spirit of the missionary are necessary if the masses are to be led by Co-operation to discover and develop themselves.

The Kumbla Grama Sangham

The Kumbla Grama Sangham in the Kumbla Select Firka in the Kasargod Taluk of South Kanara District was organised under the Prohibition Amelioration Scheme in the year 1948. The objects of the Sangham are to promote the economic, moral and social welfare of the people of the area and to organise all such works as would help the Government to fulfil the task in direct rural reconstruction.

In order to implement the objects, the Sangham felt the need of having a building of its own to serve as a community hall. Accordingly, the office-bearers collected local donations to the tune of Rs. 1,505 to begin with and applied to Government for subsidy of Rs. 1,500. The Government sanctioned the subsidy. A plot of Government land in the heart of the town was alienated by the Collector in favour of the Sangham. The Sangham was got registered under the Societies Registration Act, 1860, and the subsidy sanctioned by the Government was drawn and disbursed to it.

Local donations and the Government subsidy were found to be inadequate to complete the building, the construction of which was in progress, in accordance with the plan approved by the Government for community halls. The work of the building was expected to be completed by 31st March 1951. The building was half done and the work came to a standstill as the entire amount available on hand was spent. The Collector then came to the rescue, as a result of which local collections to the tune of Rs. 1,800 including proceeds of a benefit cinema show and cost of roofing and ceiling tiles, were effected.

The building was almost completed at a cost of Rs. 6,607 and was declared open by Sri A. R. Rajarathnam, I.A.S., Collector of South Kanara, on 31st July 1952. But a further amount of Rs. 1,500 will be absolutely necessary for the completion of the Community Hall. The Government have therefore been approached for a further grant of Rs. 1,500 for the completion of the building.

Multipurpose Societies

Sandur

The Vijaya Agricultural Bank of Sandur State (Bellary District) was converted into a full-fledged multipurpose co-operative society during the year. It is a special type of society, the only one of its kind in the district. It was registered on 3rd April 1907 under the Sandur State Co-operative Regulation as a Bank. Consequent on the merger of the State, the society was registered as a full-fledged multipurpose society with a limited liability under the Madras Co-operative Societies Act VI of 1932 on 18th February 1952. This is the forty-fifth year of its working. It has now 684 members on rolls of whom 13 are institutions and the rest are individuals with a paid-up share capital of Rs. 13,700. The society is placed under 'A' class.

The society has not borrowed any funds from the financing bank till now. It has utilised the uninvested Reserve Fund of Rs. 27,334-13-0 in its business, besides a sum of Rs. 11,266 Fixed Deposits tapped locally. It has a working capital of Rs. 52,313. It has not issued the surety loans to members but has issued loans on the pledge of jewels and on mortgage of immovable properties. A sum of Rs. 38,612-9-0 is outstanding against its members out of which Rs. 500 represent jewel loans, while the rest are mortgage loans. On the non-credit side it deals in foodgrains, chemical fertilisers and agricultural implements. Its purchase and sales in this regard were Rs. 1,31,509-1-0 and Rs. 1,41,588-8-0 respectively during the year. The working of the society resulted in a gross profit of Rs. 5,127-3-0 and a net profit of Rs. 1,591 during this year.

The society is catering to the needs of a large portion of the entire population of this small State and has in its by-laws provision to meet all the members' needs. It

KUMBLA COMMUNITY HALL: The Kumbla Grama Sangham in the Kumbla Select Firka in Kasargod Taluk of South Kanara District, built this fine Community Hall, with local donations and Government subsidy, at a cost of Rs. 6,607. The Sangham is the centre of many cultural and sporting activities.



proposes to construct a godown out of its funds and Government subsidy if permitted to do so. The working of the society is good, and it has a bright future.

Eletipalem

The Eletipalem Multipurpose Co-operative Rural Credit Society was registered on 4th February 1925 and started on its work on 17th March 1925 with 15 members and with a paid-up share capital of Rs. 25. The area of operations of the society is confined to Eletipalem, Velamvaripalem, etc. Loans are also granted on the security of immovable properties situated in Nagaram.

At present there are 165 members on rolls with a paid-up share capital of Rs. 2,546-8-0. The maximum borrowing power and individual maximum borrowing power of the society are Rs. 60,000 and Rs. 1,000 respectively. There are loans outstanding against members to the extent of Rs. 12,993. It has taken up multipurpose activities for the benefit of its members and non-members during the year 1951-52. The society has taken up distribution of foodgrains, iron and paddy seeds. The society encouraged its members to dig manure pits, and nearly ten tons of compost was prepared during the year. Provision is also made in the subsidiary by-laws to lend to its members for the purchase of pumpsets.

The President with the assistance of four other Panchayatdars is taking keen interest in the affairs of the society. The non-credit transactions done in this year are noted below:—

	RS.	A.	P.
Purchase of manures	6,302	1	0
Sale of manures	6,722	9	0

The society is working on profit.



RAYALASEEMA: (Left top) H.E. the Governor distributes saris to women at Kalikiri (Chittoor District); (Centre) Jobs are provided for unemployed ryots. Here work of silt clearing of an open well in Pamur (Nellore District) is being done; (Bottom) A well in Kanigiri (Nellore District) is being deepened.

Right top: Construction work on the supply channel to the Hajipuram Tank in Nellore District, proceeds apace.

SALEM: (Right centre and bottom)—Two views of the Poyyapatti gruel centre in Salem District.



RELIEF MEASURES IN SCARCITY AREAS

ANIMAL HUSBANDRY

21

MADRAS INFORMATION

Animal Welfare in Britain

By UNA LASCOT

The people of Britain are deeply interested in the welfare of animals, not only because they like them as pets, but because the country is famous for breeding horses, cattle and dogs. For this reason both the Government and private societies have always paid much attention to the task of raising the standard of animal health and to find out more about every kind of domestic animal.

In 1942 a new organisation was formed, called the Animal Health Trust, paid for by the gifts and membership subscriptions of people in all parts of Britain who love animals. The chief aims of the Trust are to help young men and women who wish to become veterinary surgeons, to study the prevention and cure of animal diseases, to give advice and eventually, when funds become available, to provide an animal hospital service.

The Trust has already done fine work for the dumb and patient creatures which not only work for man and provide him with food, but give him faithful companionship. In spite of limited funds and lack of accommodation and equipment, four different Research Stations have already been set up in Britain where staffs of experts study animal diseases and make important records about the breeding and care of animals. Lectures and demonstrations are given and promising veterinary students are awarded scholarships.

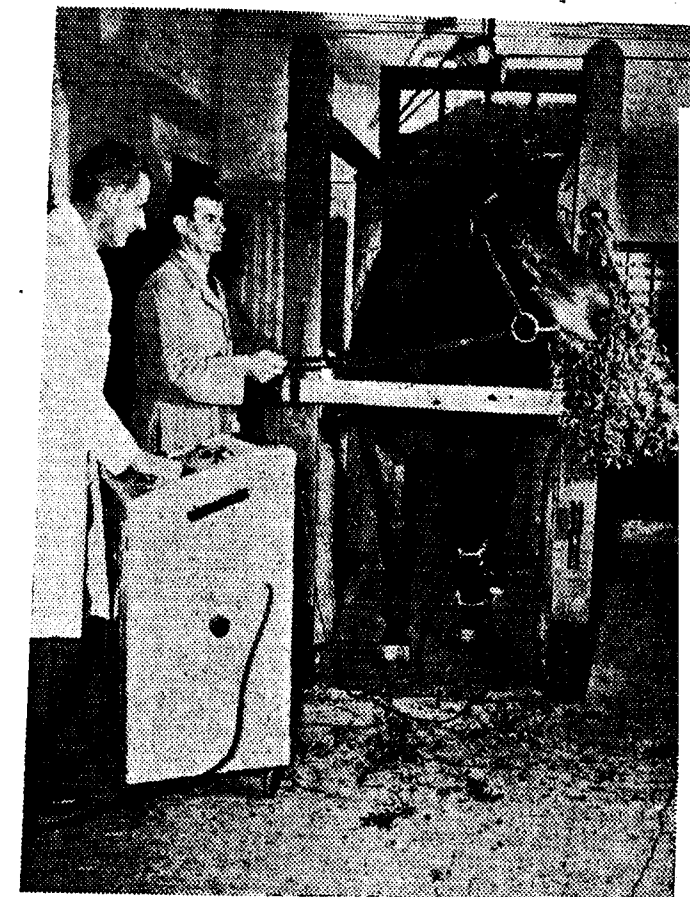
Study of Horses

At Balaton Lodge, Newmarket (Suffolk), is the Equine Research Station. The work done there has supplied valuable knowledge about the correct methods for breeding and rearing healthy horses and the best food for them, and how to prevent and treat certain horse diseases. At the field station there are spacious paddocks for ponies, a house containing flats for some of the staff and their families, and a library and lecture rooms.

Scientific workers, horse owners and breeders, students—all are welcome to visit Balaton Lodge and to see the work that is going on there. Many visitors assist the Station by telling the research workers about their own stables and problems.

In 1949 the Canine Research Station was opened at Kennett, near Newmarket, for the study of dogs. There the laboratory, X-ray room, record office, hospital ward and a low-temperature store for dog food are housed in temporary sheds and huts until the Trust is able to build larger and more permanent premises. Three tons of whale meat can be stored in the cold room for at least 12 months—a great benefit during the summer months—and two other huts have been converted into kennels with outside runs. In this modest collection of buildings the staff of the Research Station has made steady progress in the study of dog illnesses.

Further good work is being done at Houghton Grange, in Huntingdonshire, where are the Research Stations for poultry and farm animals. The number of dairy cattle, pigs, farm horses and poultry kept on the Trust farms increases each year, and many acres of land have been sown with wheat, barley, oats and vegetables—not only to enable the research workers to study different types of soil and crops, but to provide foodstuffs and bedding straw



ELECTRO-THERAPY IN ACTION: This brown mare in the stocks is receiving deep-heat treatment for a sprained tendon on her near fore leg. The surgeon (left) is operating the controls of the Inductotherm, while the patient loses no time in acquiring an extra ration of her favourite delicacy, lucerne, which has been placed in the net (right) for that very purpose.

for the livestock of all four Research Stations, so helping to reduce costs. Other departments deal with milk and egg production, and the rearing of healthy breeds of chickens and cows. One cowshed has been converted into an isolation hospital for studying infectious animal diseases.

Youth Members

As membership increases, the Animal Health Trust is able to gradually widen the scope of its work and carry out its splendid aims more fully. Many boys and girls in Britain give their help by becoming Youth Members (under 18 years of age) or Minor Members (under 14), and this entitles them to receive advice from the Trust about the management of their pets—and even the pets themselves can do their bit by being enrolled as members of the "Army of Trusty Animals".

Naturally, all the valuable work being done by this organization costs a great deal of money, but it is money well used in helping to reduce the loss of millions of pounds per year to Britain through animal diseases.

(R.I.C.)

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CONTROL ORDS

ControOrders in Force on 15th November 1952

FOOD AND AGRICULTURE DEPARTMENT MOVEMENT OF PADDY AND RICE WITHIN THE STATE

G.O. Ms. No. 1068, Food and Agriculture, dated 1st July 1952.

In view of the revised Food polineew Control Order has been issued regarding the ement of paddy and rice within the State. Aing to Order I of Notification I, the State is dividew six zones and the movement of paddy or rice orir products from one zone to another zone by maical means is prohibited except under a permit issuy the Collector of the districts concerned. Free moimt of paddy or rice or their products within the zonellowed. According to Order II of Notification I belt restrictions already existing in the districts of South A, Tanjore, Ramana-thapuram and Anantapur on thevement of paddy or rice or their products are continue.

According to Notification II olandholders will be allowed to transport paddy or rriom the produce of their lands from one zone to and zone for their personal consumption. This new Zorontrol Order cancels the notifications issued in G.O. MNo. 550, Food, dated 18th June 1948 and G.O. Ms. No.3, Food, dated 27th May 1948.

The Zonal Control Order issues G.O. Ms. No. 1068, Food and Agriculture, dated 1st July 1952 has been amended due to the inclusion oosdrug Sub-taluk of South Kanara District in therth zone comprising Malabar and the Nilgiris (G.O. No. 1216, Food and Agriculture, dated 26th July 1952).

By G.O. Ms. No. 1346, Food d Agriculture, dated 20th August 1952, the Zonal (trol Order has been amended to prohibit the movent of paddy, rice and their product, even by non-memical means of conveyances from one zone to anotheone within the State except headload by peasantry up tne maund for personal or family use.

Orders I and II in Notification of the Zonal Control Order for paddy and rice issued G.O. Ms. No. 1068, Food and Agriculture, dated 1 July 1952 have been amended allowing the bona fide avellers to take with them two Madras measures of rice four Madras measures of paddy as part of their persal luggage (G.O. Ms. No. 1712, Food and Agricultur dated 5th November 1952).

Order II in Notification I of thZonal Control Order for paddy and rice issued in G.O. is. No. 1068, Food and Agriculture, dated 1st July 1952 has been amended empowering the Police Officers ot below the rank of Head Constable and Revenue Ofir not below the rank of Revenue Inspector to seize tharticles in respect of which they have reason to belve that a contravention of the Order has been committednd also making a provision that the searching Office, while exercising the

power of entry should pay due regard to the social and religious customs of the occupants of the premises (G.O. Ms. No. 1737, Food and Agriculture, dated 8th November 1952).

PLYING OF MOTOR VEHICLES AT NIGHT

G.O. Ms. No. 1306, Food and Agriculture, dated 9th August 1952: In supersession of the Order issued in G.O. Ms. No. 393, Food, dated 3rd April 1947, the Government have issued an Order prohibiting the plying of motor vehicles carrying paddy, rice, millets and their products, excluding products of foodgrains which are used as cattle foods, namely, rice bran, wheat bran, bran of husks and millets and maize between the hours of 7 p.m. and 6 a.m. on any road or land situated in a district, which is notified by the Collector in the District Gazette.

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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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

This Order extends to the whole of the State of Madras. At present the Order has been made effective only in the districts of Guntur, Krishna, East Godavari and West Godavari and according to this no person can cultivate the rainfed crop of chillies in these districts 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, 1949, 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 manufactures.

The Problem of Rinderpest

A farmer who has owned cattle knows what Rinderpest is and means. A sharp fever, small ulcer on the lips, gums, muscle and tongue looking like bran-like deposits, later foul smelling projectile diarrhoea and prostration. He knows the cattle are in the grip of death and the pest is on its march. It means utter ruination for him. The best animals of his herd are to pass away. Once the animal is taken ill, the disease must run its course. No medicine is of any avail.

Mortality from Rinderpest in the Madras State is usually over 50 per cent of the animals attacked. But sometimes as much as 80 per cent may be lost. Certain strains of cattle are more susceptible than others. For instance, European cattle, hill cattle, crossbred cattle and Indian buffaloes are usually many times more susceptible than the Indian plains cattle. But even among plains cattle, the disease assumes high virulence when it has not been noticed among them for several years.

Nature of the Virus

To have an intelligent appreciation of the problem of Rinderpest in the State, it is necessary to understand the nature of the infective agent. The Rinderpest virus is a minute living entity. It is very fragile and does not live outside the animal body for more than two days. It cannot multiply in the soil and requires an actual living animal for it to survive. If the animal dies, the virus perishes with it within a couple of days. If the animal recovers, the virus is again totally eliminated within a few days of such recovery and the recovered animal is then immune. The only way by which the virus could exist is by finding close contact with successive susceptible animals without interruption. In a population containing proportionately large numbers of immune animals, this chain of transmission is interrupted and the virus is lost.

With this background of the nature of the virus, let us examine the history of the disease in this State for the last 50 years. There was a heavy mortality from Rinderpest in the years 1907-1909. During the 12 months April 1908 to March 1909 alone, there was a mortality of about 1½ lakhs of cattle. There was about as much mortality again near about 1918, and in 1928, there was a mortality of about one and a quarter lakh per year. It is customary in the study of epizootology to trace the course of the disease as represented by their incidence and mortality, by means of a graph. When the figures for the past 50 years are thus plotted, it is found that the crest of highest incidence of mortality occurred periodically at intervals of about ten years. During these crests the disease assumed high proportion occurring here, there, everywhere. During the intervening period between the crests, the mortality goes down and outbreaks occur at odd places and at longer intervals.

Immunisation

Let us look into this periodic increase and decrease in mortality rate. In any outbreak, for every animal that dies, there are many others that suffer little or apparently remain unaffected. This is because the susceptibility of individuals in a population is not always uniform. There are some which are highly susceptible—others which are

partially resistant and again others which are almost totally resistant. The very susceptible animal usually dies, but the other animals either get a mild attack from which they recover or an attack which is almost imperceptible. That is, some animals may just be off-form for a day or two but nothing more. But the animals which recover from the attack of Rinderpest whether severe, mild or imperceptible are rendered solidly immune for their life.

It follows that the survivors of a severe epizootic of Rinderpest are mostly composed of immune cattle. These immune animals interrupt the chain of spread. This explains why after a bad epizootic of Rinderpest, there is a lull period of some years when the disease cannot show itself in its severer form. But the calves which are born to these immune cattle will, however, be susceptible to Rinderpest.

When three successive generations of susceptible calves are born, which usually takes about nine years, the new arrivals usually form over 60 per cent of the total population and the field is now set to attract another wave of Rinderpest. So periodicity is kept on.

If we can reproduce artificially what obtains after a natural outbreak, we should be able to effectively control the disease. Scientists have been working for over 60 years to modify the Rinderpest virus so that it would produce a mild disease and render the animal immune. But it was not until 1928 when a relatively safe vaccine was made available. Just as vaccine reaped from the calf is safe for immunisation against Smallpox in man, Rinderpest virus adapted for the goat was found to be relatively more safe for use as a vaccine among cattle, although some cattle require a small flat dose of protective serum to control the severity of the disease. Soon after this discovery,



X-RAY PHOTO: An X-ray photograph is taken of a horse's foot suspected of being affected with navicular disease. The X-ray set is the latest type for animal work and the only one of its kind in the U.K. It can be adjusted to take an X-ray of any part of a horse or pony and can be moved for use in the operating room, stocks or stableyard. Some photographs can be obtained with an exposure as rapid as 1-100th of a second.

Towards Better Cattle

With a view to develop cattle breeding on an intensive scale in rural areas, the Indian Council of Agricultural Research is financing a scheme, the non-recurring and 75 per cent of the recurring expenditure on which will be met by them. Twenty-five per cent of the recurring expenditure has to be borne by the private institutions.

Six institutions found in the approved list of the Indian Council of Agricultural Research have come forward to take advantage of this scheme. Pure breed bulls will be located in these centres and this will be supplemented with artificial insemination of cattle. The non-recurring expenditure on these six centres comes to Rs. 55,800 and recurring expenditure every year will be nearly Rs. 75,000.

the Madras Government opened a Serum Institute for the production of large quantities of vaccines and sera for intensive field vaccination.

Intensive Vaccination

We know from the experimental study of epizootology under laboratory conditions and of field observations of a population subject to vaccination that if 40 per cent of animals are rendered immune, the disease no longer occurs in the form of widespread epidemics but occurs only as odd outbreaks at long intervals. If over 60 per cent are immunised, the disease tends to disappear altogether. That is why after a bad outbreak of Rinderpest when the survivors of immune animals make up more than 60 per cent of the population, the disease disappears from the locality.

Intensive vaccination was, therefore, resorted to and the result of this campaign is reflected in the lower incidence of the disease during the subsequent peak years. Compared to a mortality of 1½ lakhs in 1908 and 1918 and 1½ lakh in 1928, the mortality during the peak year 1943-44 was only about 40,000. What is more, on account of further intensive vaccinations at the scenes of outbreaks and of penta inoculations of cattle migrating to forest grazing areas, we have now succeeded in completely eradicating the disease from 15 contiguous southern districts of the State. The magnitude of this achievement will be realised when it is recalled that Rinderpest was not allowed to raise its ugly head for a continuous period of four or five years over a whole territory of over a lakh of square miles, whereas in no year previous to this period had any district been free from the visitation of this disease for even a year. The credit for this achievement goes primarily to the farmer, for prompt reporting to enable immediate application of control methods is vital for the arrest and eradication of Rinderpest.

Rinderpest is dreaded because of the heavy mortality that it inflicts, but it can be readily controlled if one has the determination to do it. It is not very contagious unlike Smallpox and Foot and Mouth disease in animals. A mere

partition is sufficient to prevent spread from infected to healthy animals. One of two things could be done to keep off the disease: (1) Immunise a large proportion of cattle by mass immunisation, i.e., over 60 per cent so that the herd immunity could be raised to a level when infection even if introduced cannot establish itself. This is a colossal job which requires enormous resources of men, money, organisation and laboratory equipment. (2) Alternatively, the disease could be nipped in the bud if the simple precaution is taken to confine all the animals—visibly infected or apparently healthy—to their sheds in a village when the disease has its first appearance, until all the animals in and around the village are vaccinated. In conjunction with this, all fairs and shows which facilitate congregation of animals should be banned in the neighbourhood. The enforcement of these standstill orders and "pocket" immunisation if relentlessly practised will suffice to abort the epizootic.

Danger of Contagion

Though we have no Rinderpest in the southern peninsula of the State, we cannot remain complacent over this achievement. The northern districts of our State bordering upon other States such as Bombay, Hyderabad, and Orissa still remain infected. There is a heavy pressure of contagion on the southern districts from these northern districts. We are endeavouring to keep off the disease by interposing an immune belt by regular vaccination of large numbers of cattle along the other inter-jacent taluks. But sometimes, there is a danger of Rinderpest being carried across the immune belt when animals are transported by train or boat. Rinderpest was thus introduced last year into the City of Madras from cattle imported from Guntur District and it spread to the adjoining districts of Nellore and Chingleput and it put a severe test on the efficiency of our organisation to stamp out the disease from these areas through intensive pocket immunisation.

The eradication of Rinderpest in the northern districts bordering upon other States is beset with difficulties because of certain complicating features. These districts are grossly deficient in cattle. There is a large annual import of cattle from the neighbouring States for work purposes. There is also an annual exodus of cattle from these districts to forests on the bordering territory for grazing purposes. There is thus a large intermingling of cattle between these districts and the neighbouring States. There is thus a constant heavy pressure of contagion. The only effective way of checking Rinderpest in these districts is to have vaccination camps at all trade routes and fairs. There are some limitations for such vaccinations. After vaccination with the present goat virus, animals require a short period of rest, otherwise they may react severely. If rest camps are to be provided for cattle along the trade routes and fairs, the cost will increase enormously. Fortunately, however, a milder rabbit adapted vaccine is now at hand. After vaccination with this milder product, animals can be allowed to move on as if nothing had been done to them. This vaccine is now under field test and will soon be available.

Control Measures

If the conditions for the survival of the virus are so precarious, then one may ask why at all should this virus be allowed to exist and be the dread that it is. The answer

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An amendment issued on December 29, 1950, gives the enhanced rates per annum of licence fees for the different classes of licences. The question of revising these rates is under the consideration of the Government.

Another amendment, dated December 29, 1950, explains that: (1) in cases where a mixing or miller's licence has been obtained, no other licence under the Order is necessary; (2) mixing or miller's 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 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."

According to an amendment issued on January, 5, 1952, the approved form of licence issued under this Order will provide in future suitable columns for incorporating the following details at the time of the renewal of licences:—

- 1 Year for which licence is renewed;
- 2 Date of renewal;
- 3 Fee;
- 4 Chalan number and name of treasury;
- 5 Penalty, if any;
- 6 Chalan number, date and name of treasury;
- 7 Signature of licensing authority; and
- 8 Remarks.

The three classes of licences issued under this Order will in future, be issued in three distinct colours as shown:

Class of licence.

- | | |
|---|--------|
| 1. Oil Mills | Green. |
| 2. Dealers in manure | Red. |
| 3. Firms engaged in manure mixing trade | White. |

G.O. Ms. 1013, Food and Agriculture, dated, June 23rd 1952: Certain amendments issued specify the principles and conditions on which the licensing authority can either refuse to grant a licence under the above Order or cancel one which has already been issued.

By an amendment issued in G.O. Ms. No. 1361, dated 22nd August 1952, for explanation on (1) under clause 4, the following is substituted: "In cases where a mixing or millers' licence has been obtained no dealers' licence is necessary for the particular place of business."

THE MADRAS MANURE MIXTURE QUALITY AND PRICE CONTROL ORDER, 1950.

According to this Order only firms of standing dealing in manure and approved by the Government of Madras on the recommendations of the Fertiliser Advisory Committee through the Director of Agriculture shall manufacture and market manure mixtures. The firms dealing in manure shall legibly mark on the manure bags the following particulars:—

- (a) The registered brand and name of the manure mixture;

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(b) The organic inorganic, total P.O., W.S. P.O., K.O contents of manure mixture denoted by the letters N, P (T), and K, respectively.

(c) The register of the firm.

(d) The crop or for which the manure mixture is suitable; and in case of a general mixture for all crops the expression "Crops".

(e) The gross cost by weight in pounds.

The manure mixture shall have to be sold at the prices approved by the J Director of Agriculture. The fertiliser mixture shall be put up in the market in sealed bags, to obviate the risk of being tampered with without breaking the seal. Firms dealing in manure shall not alter the ingredients, the guaranteed analysis, or the price of the manure mixture, except with the previous approval of the Joint Director of Agriculture.

MADRAS FOODGRS CONTROL ORDER, 1947.

This Order exercises control on the purchase, sale and storage beyond certain (i.e., 10 maunds in the case of purchase, sale and use for sale and 15 maunds in the case of storage for purposes other than those of sale) of the following foodgrains and products thereof by a system of licensing:—

Wheat, paddy (ric the husk) including fried paddy and parched paddy, (husked) including beaten rice, puffed rice and pare rice, cholam (Jowar), cumbu (Bajra), ragi, korra, m (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 42, the date on which this Order first came into force.

A licence fee of Rs. 2 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 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 each case.

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

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

MADRAS FOODGRAINS (MOVEMENT CONTROL) ORDER, 1947

(G.O. Ms. No. 720, Food, dated 14th June 1947.)

This Order controls the movement of foodgrains from places within the State of Madras to places outside it by a system of permits issued in certain cases and under certain conditions specified in the Order. Permits under

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the Order are issued by the Commissioner of Civil Supplies, Madras. A week's ration at the prescribed scale forming part of the luggage of bona fide travellers and grains intended for bona fide sowing purposes granted under a certificate issued by an Officer of the Madras Agricultural Department not below the rank of District Agricultural Officer and foodgrains transported under Military Credit Notes are exempted from the operation of the Order.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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.

The Order has been amended exempting Defence Services personnel who go on leave to carry ration under the certificates issued by the Military authorities up to the quantities specified therein.

The Madras Foodgrains (Movement Control) Order, 1947, has been amended in G.O. Ms. No. 192, Food and Agriculture, dated August 6, 1952 due to the removal of the ban on the inter-state movement of Pearl barley powder and indigenous barley without hush. The Movement Control Order has also been amended in G.O. Ms. No. 1323, Food and Agriculture, dated August 13, 1952, as the ban on the inter-state movement of semolina and self-raising flour imported from foreign countries has been lifted and the price restrictions removed.

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

This Order has been reissued as the Madras Foodgrains (Restricted Pledging with Banks) Order, 1952 (G.O. Ms. No. 1485, Food and Agriculture, dated 15th September 1952).

This Order imposes certain restrictions on the pledging of the procured stocks of paddy and rice with banks by the procuring agents in the State.

THE MADRAS SUGAR DEALERS' LICENSING ORDER, 1951

This Order directs that wholesale dealers for sugar should be licensed and that licences either from the Commissioner of Civil Supplies or his nominee are necessary.

By amendments issued on 6th September 1952, sub-clause (c) of clause 6, clause 7 and condition 14 of the licence in Form II in the Schedule have been amended.

SUGAR PRICE CONTROL ORDERS

The Collectors have been empowered to fix the wholesale and retail prices of sugar.

THE MADRAS FLOUR (USE IN MAKING PASTE OR STARCH) PROHIBITION ORDER, 1947

This Order prohibits the use of flour for making paste or starch except under a permit issued by the City Rationing Officer, Madras, District Supply Officer, etc., or an authorisation given by the Government.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

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ORDER RELATING TO THE RESTRICTIONS ON THE OUTPUT OF BRAN WHEN MILLING WHEAT

(G.O. Ms. No. 940, Food, dated 22nd August 1947.)

According to this Order, all flour mills situated within the State of Madras shall, when milling wheat, restrict the output of bran to five per cent of the whole wheat.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

MOVEMENTS OF MILLETS

According to this order, four zones have been formed in the State for the purpose of movement of locally grown millets, viz., Cholam, Cumbu, Ragi, Korra, Samai, Varigalu and Maize. These millets and their products cannot be transported from any place within a zone to any place outside it except under a permit issued by the Collector of the District concerned. (G.O. Ms. No. 1570, Food and Agriculture, dated 4th October 1952.)

PRICE CEILINGS OF BENGALGRAM

By a notification issued on 22nd July, 1952, by the Central Government, the maximum prices at which bengalgram, bengalgram dhall and besan may be bought or sold in the State of Rajasthan and the Rohtak and Hissar Districts in the State of Punjab, have been fixed. (G.O. Ms. No. 1290, Food and Agriculture, dated 6th August 1952.)

LEVY PROCUREMENT ORDER, 1952

As envisaged at the time of introducing the decontrol policy in June 1952, the Madras Government have now proposed to build up a buffer stock of about 2½ lakh tons of rice for the coming year by an easy levy system. The Levy Procurement Order is accordingly being published in an extraordinary issue of the *Fort St. George Gazette*. The Order is applicable only to the surplus areas in the surplus districts of East Godavari, West Godavari, Krishna, Guntur and Tanjore. The main features of this scheme are—

(1) Persons owing five acres and less are exempted from levy.

(2) Those owning above five acres have been classified into various groups for purposes of levy and the scales of levy have been fixed. An initial slab of five acres in each of these groups is, however, exempted from levy.

(3) No person who is coming under the purview of the Order can sell any part of the foodgrains harvested from the lands to any person other than the District Collector or an agent appointed and notified by him in the District Gazette before surrendering in full the levy demand made from him.

THE FLOUR (USE IN SOAP MAKING) PROHIBITION ORDER, 1946

This Order was issued by the Government of India in their notification No. C. G. 602 (86) Department of Food, dated 1st February 1946, under the Defence of India Rules. This was republished by this Government in the *Fort St. George Gazette* in their G.O. No. 630,

is the ignorance of the common man of the real weaknesses of this poor virus, lack until recently of a safe and cheap vaccine for mass immunisation and thirdly, want of organization and personnel. With the safe vaccines which have been recently evolved and with the knowledge that we possess, there is no right for this disease to stalk the world if only we have the requisite organization. (Whereas Asia has been devastated by this disease, Europe has remained free for over 70 years, although the susceptibility of European cattle are many times greater than Asian cattle. Only once, soon after the Second World War, the disease was introduced into Belgium through some Indian cattle jettisoned at Antwerp en route to Brazil. But the disease was rapidly eradicated by the simple precaution of the destruction of the affected animals and enforcement of standstill orders.)

But in a country where the disease has established itself and made its home, it is necessary to starve it out of existence by the application of pocket belt or mass immunisation as the case demands. We have been able to eradicate the disease from the southern peninsula by intensive pocket immunisation. But while the disease exists in any part of this great country, there is a risk of the disease being introduced here also. The Government of India have wisely decided to tackle this eradication work on a country-wide scale under the ten-year programme of land transformation, by mass immunisation of all susceptible animals. But this is not likely to materialise for another two or three years.

In the meantime, you can facilitate the disease being kept under control by—

- (1) prompt reporting of outbreaks as soon as cases appear in the village;
- (2) isolation of the attacked animal in owners' own premises;
- (3) voluntarily keeping all animals in their yards in affected villages until the Veterinary Doctor advises otherwise;
- (4) insisting on prompt vaccination of all animals in and around the affected village;
- (5) getting animals vaccinated before taking them to cattle fairs and shows; and
- (6) vaccinating all animals newly purchased.

(By Courtesy, A.I.R., Madras)

More Fish to Meet Food Deficit—Continued from page 16.

outside the yards was inferior in quality and had also the tendency to decompose rapidly, resulting in loss of valuable food. Government have therefore introduced the supply of salt at subsidised rates at Rs. 1-4-0 a maund, just at about 50 per cent of the cost price. This resulted in a great increase of the quantity of fish cured in the yards. Nearly 80,000 maunds of fish are thus saved from spoilage and made available for consumption to the poor people in the interior.

Ice-cum-Quick Freezing Plants.

The Department is also setting up two ice-cum-quick freezing plants in the West Coast. These plants have a capacity to produce four tons of ice per day and to keep in cold storage 70 tons of fish. Lots of fish, which otherwise would be lost by spoilage or converted into

Equine Research

By HELEN DUNT

Unknown to the spectators who cheer on their favourite runners in some future Grand National, the winner may well be, if research just begun proves successful, a horse which has recovered from a broken leg and has a metal plate, with screws, immobilising the fractured bone.

Experimental work on this possibility has recently begun at the Equine Research Station of the Animal Health Trust, where the most urgent of the numerous and varied problems which confront breeders and trainers from the first moment of a foal's birth are under investigation.

In the house, stables and grounds of Balaton Lodge, which were placed at the disposal of the Trust by the late Lady Yule and Miss Gladys Yule, and in Lanwades Park near by, veterinary scientists and their assistants are at work. They aim to increase equine fertility, to throw more light on the various diseases of foals and adult horses, and to develop a practical system of control of those worms (notable "redworm") which can and do seriously affect the health of the horse, particularly young stock.

In the Surgical Department, operations are performed at the request of practising veterinary surgeons, and special attention is being paid to the application of electrotherapy to horses and to the use of metal plates and screws in the repair of fractures.

Voluntary Effort.

This Equine Research Station is one of four research establishments set up by the Animal Health Trust, which is an independent organization, founded in 1942 under the Scientific Directorship and Chairmanship of Dr. W. R. Wooldridge, M.Sc., M.R.C.V.S., F.R.I.C. Mr. J. Arthur Rank has recently become Chairman of the newly appointed Executive Committee. The aims of the Trust are to mobilise the enthusiasm and efforts of all who care for animal health in order to relieve animal suffering, reduce the cost of animal production and maintenance and to remedy the shortage of trained veterinary and assistant personnel by the awarding of fellowships, grants and scholarships to graduate and post-graduate students, for specialist study both in the United Kingdom and overseas. (B.I.S.)

manure, can be kept safely in cold storage and sent to cities gradually when there is demand.

All the schemes for development of the fisheries of the State also improve side by side the economic status of the fishermen. The development of the inland fisheries will greatly improve their income since the fishermen charge one-third of the total value of the fish caught towards their fees. The saving of fish from spoilage by supply of salt at subsidised rates will also improve their economic position. The spread of education and the introduction of the Co-operative movement will also serve the same purpose.

The proper development of the fisheries in the country will depend chiefly on the improvement of the fishing communities, especially on the socio-economic side.

(By Courtesy, A.I.R., Madras)

Dr. Maria Montessori

By SRIMATHI RUKMINI DEVI, Theosophical Society, Adyar

The passing away of Dr. Maria Montessori has created in the world a very serious gap which can hardly be filled. I met her first in Holland in the year 1936. She had left Spain where Civil War had broken out and had settled down in Holland and founded a small school in Laren. Dr. Arundale and I called on her and were received by her with great warmth. She was dressed in black and looked so motherly and simple that we were struck by her personality. In those days she could only speak Italian and we were translated. She told us when we asked her to come to India that she had for years longed to come out; though she many invited her no one had actually arranged it. She said she would gladly come if we arranged it. So this became one of our chief interests. It took some time to plan it all and get all the necessary support. Finally she came in 1939 when she conducted her first Montessori Course. Three hundred students came from all over India. The Besant Theosophical School was put at her disposal for experimental work and for making a model institution to demonstrate her ideas. From then on, India became Montessori conscious and teachers trained by her were in great demand.

Soon the war broke out and throughout she stayed with us both at Adyar and for some time at Kodaikanal. Being an Italian she was not allowed to move everywhere freely. Misfortune had dogged her in the past. She had to leave Italy because she would not co-operate with Mussolini in his ideas of educating the young for war. She went to Spain and built up her work there. Again, she had to leave Spain when that country became Fascist. She came to India in time to be saved from the World War. In 1947 she started a permanent Training Centre for teachers. She longed for this and was tired of short training courses.

Entered the Very Heart of Childhood

In the midst of so much unreality and unhappiness Dr. Montessori brought a ray of light which could illumine the darkness in which the whole world is enveloped. There are and have been many great people in the world, but one who has entered into the very heart of childhood is indeed a saviour. We all understand so little about ourselves and we do not know that what we are is due to what we have been. Had the childhood of every citizen been filled with happiness, a creative atmosphere and understanding, the world itself would have been much further moved from the idea of war. Dr. Montessori realised that the child is not the child, the child is the whole man; the complete past, present and future in a tender young body; and that within that young body is the seed of qualities of weakness, of capacities and of intelligence. It is she who has brought to us the knowledge of the understanding of the mischievous child. She discovered what is mischief. She discovered the nature of play and she understood the process of the child's growth. In the child she saw the grown-up man or woman and in him she saw the personification of civilization.

Her fearlessness and constructive energy made it possible for all educationists to realise that we have all been fundamentally wrong in thinking that the child is immature.



A GREAT TEACHER: Dr. Maria Montessori, who revolutionised the technique of teaching children.

Listen to what she herself says: "My idea of experimenting differs from this in two ways. First, because it refrains from inciting reactions depending on the will of the experimenter, and offers instead activity freely chosen by the subject; it follows that in this very choice there is manifested spontaneously the individual mental seeds. Second, because the stimuli, although they are means analogous to those of experimental psychology, have however as their object the stabilisation in the subject of reactions which are enduring, that is, which are capable of modifying his personality. Education cannot exist other than in a dynamic state, in a continuous transformation of the individual who is to be raised to a higher level; and this process must develop in accordance with the inner dictates of life. It is the creative forces which must develop and we must not make ourselves substitutes, in an arbitrary manner, for the divine work which is accomplished in every living being. Indeed, we cannot be more than co-operators in educational work with creation; we cannot, therefore, force the child to follow our promptings, but we must provide the means best adapted to help the child in his voluntary work."

New Way of Learning

She brought to the world of education the knowledge that even a child of two is mature within the circumstances

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Development, dated 9th February 1946. Though the Defence of India Rules are not now in force, it was considered that the Order continues to be in force under the Essential Supplies (Temporary Powers) Act, 1946.

According to the Order, no person shall use in the manufacture of soap the flour of any of the foodgrains specified below:—

1. Wheat and wheat products (including ata, maida, rava, suji and bran) Triticum inclusive of the different species.
2. Rice in the husk (paddy) (Oraysa Sataiva).
3. Rice husked (Orvza Sataiva)
4. Maize (Zea, mays)
5. Jowar (Sorghum vulgare).
6. Bajra (Pennisetum typhoides).
7. Gram, any variety (Cicer arietinum).
8. Barley (Hordenm).
9. Ragi or mandua (Eleusine coracana).
10. Rahar (Cajanus indicus).
11. Masur (Lens esculenta or Ervum Lens).
12. Kodra (Kondan) (Paspolum Scrobiculatum).
13. Korra (Tenai) (Setaria italica).

PLYING OF BOATS OR OTHER FLOATING VESSELS UP THE RIVER GODAVARI BEYOND POLAVARAM TOWN IN THE WEST GODAVARI DISTRICT

According to the Order, the plying of any boat or other floating vessel up the river Godavari beyond Polavaram Town in West Godavari District during night between 7 p.m. and 7 a.m. is prohibited. The plying of the boats or other floating vessels during daytime, i.e., between 7 a.m. and 7 p.m. is permissible only after they are checked by the special permit issuing officer. (G.O. Ms. No. 1071, Food and Agriculture, dated 29th September 1947.)

PLYING OF BOATS OR FLOATING VESSELS ON THE KRISHNA AND TUNGABHADRA RIVERS

According to the Order, the plying of any boat or other floating vessels on the Krishna and Tungabhadra rivers within the limits of Kurnool District between 7 p.m. and 7 a.m. is prohibited. The plying of boats or other floating vessels during the time, i.e., between 7 a.m. and 7 p.m. is permissible only after they are checked by the special permit issuing officer. (G.O. Ms. No. 1220, Food and Agriculture, dated 3rd November 1947.)

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. Consequent on the revised food policy, the Government have ordered that it is not necessary to continue the ban on the installation of new rice mills and on the expansion of the existing rice mills anywhere in the State. The position at present in regard to rice mills is as it stood prior to 10th December 1949.

All rice mills, anywhere in the State, whether engaged in hulling Government stocks or hulling private paddy for cooly, are controlled by this Order. Licences issued

under this Order have to be renewed year after year. A licence fee of Rs. 24 is levied for every licence and every renewal thereof. The licensee will have to deposit with the District Collector such sum as may be specified by the latter for due performance by the former of his duties as a licensee under this Order. The 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 authorised 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.

SALT PRICE CONTROL ORDER, 1947

This Order specifies the maximum ex-factory whole-sale 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 price varies between 12 annas to 15 annas per Imperial maund. The Collectors of the districts have been empowered by the Central Government to fix the wholesale and retail prices of salt for each con-suming area, within their respective jurisdictions, subject to any directions issued by the State Government. 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.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

DEVELOPMENT DEPARTMENT

THE COTTON CONTROL ORDER, 1950

This Order provides control over contracts relating to sale or purchase of cotton and over sale of cotton to speci-fied persons at specified prices.

THE MADRAS DRUGS (CONTROL) ACT, 1949

In order to ensure that essential drugs continue to be sold at reasonable prices even after devaluation, the Madras Drugs Control Act 1949, was passed by the Government. The Act provides for the control of the sale, supply and distribution of drugs in the Madras 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 pro-ducer or a dealer in mill-made yarn or cloth woven out o

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such mill-made yarn shall carry on the business of a producer or a dealer in hand-pound 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 15½ per cent thereof.

PUBLIC DEPARTMENT

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 including age bar will be considered.

PUBLIC WORKS 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.

Whereas Section 6-B (1) of the Madras Buildings (Lease and Rent Control) Act, 1949, as amended by Act VIII of 1951, provides for the deposit of rent when the address of the landlord or local agent is not known and when the owner is under dispute, there is no provision in the Act to deposit the rents of buildings in cases where the addresses of the landlords are known but they refuse wil-fully to receive the rent. Under Section 6-A (4) of the Act, the tenant is bound to continue to remit the rent to the landlord by money order after deducting the money order commission. But if the rent so remitted by money order is consistently refused by the landlord and the money is thus returned to the tenant, it will accumulate in the hands of the tenant with the possible risk of his not being able to pay the amount in lump sum when demanded by the landlord. The Government who are the statutory tenants of the building are liable for payment of rent to the landlord. It is therefore, in the interest of the Government to see that the refused rent which is returned to the tenant is caused to be deposited by him so as to be available for payment to the landlord whenever he demands it. Therefore the amounts returned to the tenant on the refusal of the money orders should be caused to be deposited by the tenant to the credit of the Government in the Reserve Bank or the treasury under "Revenue Deposits."

By G. O. No. 1600, dated 16th June 1952, the following amendments have been issued to the Act:—I. In sub-rule (3) of Rule 6 of the words "at 8 annas" the words "at Re. 1 and annas 7" are substituted.

2. In sub-rule (2) of rule 22 for the words "a fee of annas eight" the words "a fee of Rupee one and annas seven" are substituted.

By an amendment issued in G.O. No. 146, Public (General) Department, dated January 24, 1952, the follow-ing note is added:

Note.—The Reserve Bank or the treasury will not receive the deposit unless the Controller or the appellate authority, as the case may be, or any person authorised by such Controller or appellate authority in this behalf, certifies on the chalan accompanying the deposit that the deposit may be received.

CEMENT CONTROL ORDER, 1949

This Order controls the sale of cement.

By an amendment issued on 3rd April 1951, licensed cement factories are authorised 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.

Amendments issued to the Cement Control Order on 30th May 1951 provide that:

The price of all Portland cement produced in India, exclusive of the cost of containers, if any, shall not exceed Rs. 71 per ton; in full wagon loads f.o.r. destination.

The actual cost of gunny bags, subject to a maximum of Rs. 26 per ton of cement, if supplied wholly in new gunnies, may be charged, in addition to the price of the cement specified above.

The price leviable for the cost of packing for supplies in paper bags or old gunny bags, which may be settled between the purchaser and the supplier, shall not exceed Rs. 26 per ton of cement.

An amendment issued on 1st November 1951 provides further that an insurance fee of Re. 0-10-0 (annas ten) per ton may be collected by the supplier when the cement is despatched in open wagons with the concurrence of the purchaser.

Deposit of Advance Compensation

On behalf of the Government, the Director of Settle-ments, Madras, has deposited certain further amounts towards advance compensation with the Chairmen, Estate Abolition Tribunals, Chittoor and Vizianagaram, in respect of certain under-tenure estates, notified in the II batch and taken over on September 7, 1950. The names of the estates concerned, the amounts deposited, the date of transaction and the reasons for the same are published at pages 1230 and 1297 of Part II of the *Fort St. George Gazette*, dated 3rd September 1952 and 17th September 1952, respectively.

EDUCATION

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MADRAS INFORMATION

of his being, and intelligent. Only his is a different approach and he has different ways of learning. So she created a new way of learning which we call the Montessori System. The Montessori way has spread round the world to such an extent that the word "Montessori" means the child and there are many who even do not realise that there was such a person as Dr. Montessori. They only think that the word is the name of a method. Even today, unfortunately, people think that Montessori Education is just a method. But if one is to understand Dr. Montessori one knows that it is not a method but a special light shining through a form of learning and the learning itself is as Nature made it possible for the child. She says: "Now let us imagine a mind filled with a mystic ardour which follows all the revelations of the little child's mind, in order that, with mingled feelings of respect and love, of sacred curiosity and of aspiration after the highest places in heaven, he may learn the way to his own perfecting, that he may carry his perfection into the beautiful work-room of a classroom peopled with little children."

The whole world must bow to her in homage and in gratitude, for she brought joy and happiness to every school and every classroom. If the children in numerous schools today go eagerly to classes, to learn mathematics or geography or any other subject with the least fear that to do so is an unconquerable task, it is entirely due to Dr. Montessori. She identified herself so much with the children that though she was 81 when she died, she was like a young girl in the virility and creative imagination of the mind. Temperamentally Dr. Montessori was very emotional with a powerful intellect. She once told me that her desire when she was young was to be an actress. She went so far as to join a dramatic school but she heard a voice within her own higher nature which said that her mission was different. Then she desired to follow the way of medicine. In those days it was very difficult for a woman to join a medical college. She often said very humbly that she was admitted by chance. She applied to become a pupil and signed herself "M. Montessori". She said that the authorities of the medical college did not even dream that a woman would apply and so accepted her as a student thinking that M. Montessori was a man. One can

imagine the tremendous shock which her appearance at the College produced! She took her M.D. and was a most brilliant doctor; yet she said she was not sure whether her calling was not something else.

Revealing the Joy of Living

While practising as a doctor she was asked to take charge of some defective children. She tried to amuse these poor children by playing with them. She made things with her hands in order to find some way of teaching them, for they were not intelligent enough to learn in the old way with books. Then she discovered that this means of playing began to reveal something thrilling and found that in the new way these children learnt eagerly, enthusiastically and intelligently. She says: "Nothing in fact is so fascinating as to attend the mental awakening of these children who are enslaved by their own inferiority, and to witness this kind of liberation of the soul from extinction through spiritual poverty, to see them arise, reviving and opening up towards interests that give life to their intelligence, to witness the happiness that comes to them through every activity in which the hand becomes capable of achieving something. It is really man arising from death to the joy of living." Thus her work began.

Dr. Montessori was emotionally sensitive and sympathetic. She felt for the children of the world and her heart went out to them in the miseries that they were suffering under their teachers and parents. It was in this sympathy that the Montessori system was born. She has been to India and has inspired hundreds of students. Many have benefited by her diplomas but to benefit truly one must imbibe that spirit of her artistic imagination, sensitiveness, childlikeness and profound sympathy. To her, the child was God and so her school was the temple and the deity of the temple was the essence of childhood. Every educationist ought to understand this. We have lost a very great and a very wonderful person and the only thing we can do in remembrance of her is for every educationist to study her ideas and bring that blessing of happiness which she brought to every child in the home, in the school, in the country and the world.

(By Courtesy, A. I. R., Madras)

VISIT TO RAJ BHAVAN: A batch of about 30 students from the Andaman Islands, recently visited India on a month's tour. The students were invited to Raj Bhavan for breakfast with H.E. the Governor. Here they are seen with H.E. Sri Prakasa and Srimathi Kamini Devi.



EDUCATION

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MADRAS INFORMATION

Educational Round-up

Adult Education

On the representations received from several quarters Government have enhanced the rate of remuneration to Adult School teachers as indicated below:—

	Existing rates.		Revised rates.	
	Grant.	Con- tin- gent Allow- ance.	Grant.	Con- tin- gent Allow- ance.
Teachers trained in adult literacy methods.	8	plus 4	12	plus 4
Teachers not trained in adult literacy methods.	5	plus 3	8	plus 4

A training course in adult literacy methods was organised for the benefit of college lecturers in Tamil Nad and the West Coast at the Theosophical College, Adyar, from 24th March 1952 to 2nd April 1952. The Hon'ble the Chief Minister inaugurated the training course. The course came to a close on 2nd April 1952. Sri V. R. Ranganatha Mudaliar presided over the valedictory function of that day.

In G.O. Ms. No. 1602, Education, dated 19th February 1946, Government sanctioned the award of certain scholarships to women students taking the language groups in the Intermediate course leading to the B.O.L. degree and to women students in the B.O.L. classes. For want of an adequate number of applications from the women students, Government in their Order Ms. No. 592, Education, dated 21st March 1952, have extended the scheme to men students taking language groups under Part III whenever there are not enough women students.

The services of Dr. M. Abdul Haq, Principal and Senior Professor, Presidency College, Madras, have been placed at the disposal of the Aligarh Muslim University, Aligarh, for appointment as Pro-Vice-Chancellor. Dr. M. Abdul Haq handed over charge of the post of Principal to Sri V. K. Ayyappan Pillai, Professor of English, on the afternoon of 31st March 1952, and Sri Ayyappan Pillai is in additional charge of the duties of Principal of the College.

Sri S. J. Savarinathan, now officiating temporarily as District Educational Officer, South Arcot, has been appointed temporarily to officiate as Inspector of Anglo-Indian Schools, Madras.

Basic Education.—Retraining courses for graduate teachers in Basic Education were started in the following Government Basic Training Schools on the dates noted against each:—

1. Government Basic Training School, Pentapadu—4th February 1952.
2. Government Basic Training School, Kallupatti—3rd March 1952.

Government have also passed orders for the conduct of retraining courses for Secondary and Elementary Grade teachers in 20 centres during the summer of 1952. Forty candidates are to be admitted to each centre which will be a Basic Training School. The courses are expected to begin early in April 1952.

In Government Memorandum No. 624-C/52-1, Education, dated 18th March 1952, Government have passed orders treating Higher Elementary Grade teachers with S.S.L.C. or equivalent qualifications who have undergone the three months' retraining course in Basic Education on the same footing as Basic Trained teachers of the Secondary Grade, so long as they are employed in a Basic School.



VISITORS FROM THE ANDAMANS: When in Madras the students from the Andaman Islands visited the Fort St. George and the Secretariat and met the Hon. Sri C. Rajagopalachari, Chief Minister.

Goodwill Mission from Nigeria

The first Nigerian Goodwill Mission to India arrived in Madras on the morning of November 11, 1952, from Colombo, on the first lap of a two-week tour of India. The Mission, consisting of the Hon'ble Dr. Obafemi Awolowo and the Hon'ble Mr. Augustus Meredith Akinloye, Ministers of the Nigerian Government, has planned to spend a fortnight in India, during the course of which it will visit Mysore, Delhi, Agra, Calcutta, Nagpur and Bombay. The Mission will study the electoral system in India, visit important scientific, educational and medical institutions, factories and agricultural centres.

The two Nigerian Ministers were received at the Meenambakkam Aerodrome by a large gathering of officials and non-officials. Dr. Awolowo, picturesquely robed in the costume of his country, received newsmen with a genial smile and told them: "We are delighted to come to India. We are particularly impressed by the spontaneous reception that has been given us on landing in Madras. The Indian Government has taken a very keen interest in our visit. We have been looking forward to our fourteen-day stay in India and we have no doubt that during our stay here we will have a very good time."

Visits to Institutions

Later the members of the Mission visited the Victoria Technical Institute, a State-sponsored cottage industries and handicrafts shop. They expressed high appreciation of the artistic skill exhibited in the workmanship. They then visited the Veterinary College.

The Mission visited the Madras University the same afternoon. The visitors were received by Dr. Lakshmanaswami Mudaliar, Vice-Chancellor, who took them round the various departments of the University. At the University Library, the Nigerian Ministers were delighted to find several books dealing with Nigerian history, politics and administration.

The visitors later came to the Madras Secretariat, where they were met by Sri C. Subramaniam, Minister for Finance, and other officials. In the evening the distinguished visitors addressed the Madras branch of the Indian Council of World Affairs at the Servants of India Society building. From there the Nigerian Ministers proceeded to Adyar, where they went round the Theosophical Society, and saw young trainees being put through their steps at the famed art centre Kalakshetra.

On November 12, 1952, Dr. Awolowo met the Inspector of Municipal Councils and the Additional Secretary to Government, Public Department. Mr. Akinloye met the Director of Agriculture and other officials. The Ministers then visited the Simpson Farm and the Standard Motor Assembly Factory at Vandalur. After attending a luncheon party given by the Deputy High Commissioner for the United Kingdom, the visitors motored to Mahabalipuram, to see the famous rock sculptures and stone chariots of the Pallava Age.

Nigeria

Nigeria is one of the four West African British territories. The population is about three crores. It has

advanced politically very rapidly and at present may be compared to the position India occupied in 1935. The Constitution is federal, and there are three units, the Western, the Northern and the Eastern. There is a legislature for the State as well as for the Federation. There is a Governor for the entire country, with three Lieutenant-Governors for the three units. Each region has its own Legislature and Executive Council. At the Centre is the House of Representatives whose members are elected by the regional legislatures. The Central Executive Council decides the overall policy for Nigeria. This Council consists of the Governor as President, six ex-officio Members and 12 Central Ministers (four from each region).

West Africans have a great regard for India, and the Nigerians greatly admire Mahatma Gandhi and Jawaharlal Nehru. They would like to know how India achieved her freedom through non-violence, and they are anxious to see how elections are conducted in India, especially with a large illiterate population in the electorate. Nigerians are also interested in our Community Projects.

Nigeria is an exporter of very important raw products like groundnuts and cocoa, and the country is considered to possess rich untapped sources of mineral wealth.

The Two Ministers

Obafemi Awolowo.—Dr. Awolowo was born on March 6, 1909, in a small town in Nigeria. After finishing his school education he worked in various capacities as a teacher, a shorthand typist in a firm, as a reporter for a daily paper and as a businessman. After taking his B.Com. degree in 1944, he left for the United Kingdom to study law, and was called to the Bar in November 1946.

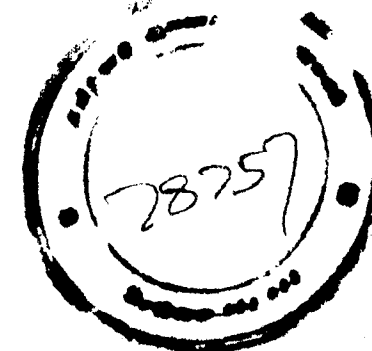
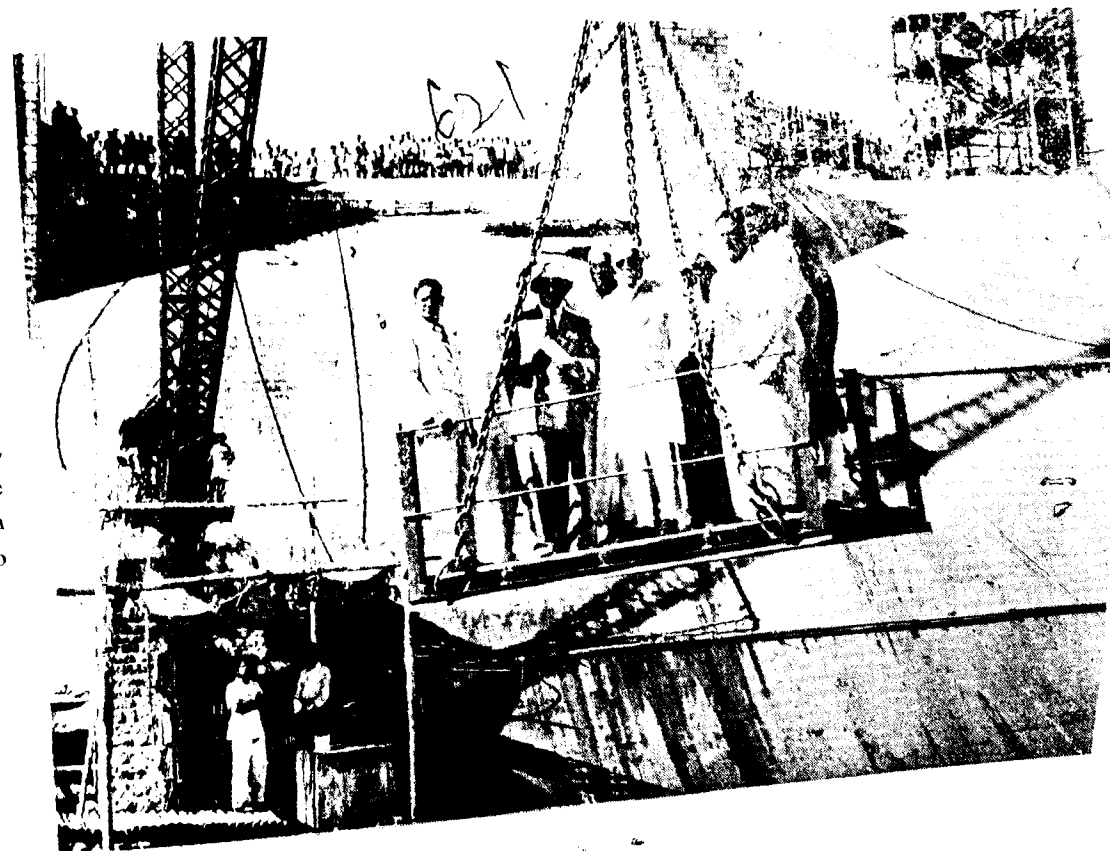
Dr. Awolowo is the founder and first President of the Action Group, the party now in power in the Western Region of Nigeria. The Action Group was founded in March 1950, and publicly inaugurated in April 1951. Dr. Awolowo is also actively connected with the Trade Union movement and was one of the founders of the Trade Union Congress of Nigeria and the first Secretary-Editor of the *Nigerian Worker*. In January 1952 he became Minister for Local Government. He is the author of *Path to Nigerian Freedom*, published in 1947. He has also translated Pandit Nehru's *Autobiography* in the language of his country, and published it as a serial in his newspaper.

Augustus Meredith Akinloye.—Mr. Akinloye was born on August 19, 1918, at Ibadan, Nigeria. He was educated at the Ibadan Grammar School and worked in the Medical Department in Nigeria till 1945, when he proceeded to the United Kingdom to study law. After qualifying in law, he returned to Nigeria in 1950 and set up practice at Ibadan.

He formed the Ibadan People's Party in 1950 and was its first President. The Party is strongly affiliated to the Action Group. He is also one of the foundation members of the Action Group. He is a member of the Action Group Working Committee, and is the Minister of Agriculture and Natural Resources, Western Region.

THE TUNGABHADRA PROJECT

Sri Jawaharlal Nehru, Prime Minister, recently visited the Tungabhadra Project to inspect progress of work done. Here the Prime Minister is seen in the cradle going aloft to the top of the dam.



View of dam and lake from "Vaikunt", on the Madras side.

Co-operation and Rural Uplift

By SRI A. PALANIAPPA MUDALIAR, Joint Registrar of Co-operative Societies

India is primarily a rural country and her prosperity depends on the prosperity of the rural areas. There is at present a widespread desire throughout the world to improve the lot of the rural folk. In fact, rural development is one of the main objectives of the F.A.O. of the United Nations. Of all problems confronting present day India, the most urgent one is that of rural uplift and the food situation has only served to emphasise the importance of rural areas in the country's economy. The problem of rural reconstruction has manifold aspects, namely, economic, social, religious, educational, health, sanitation, etc. The Central and State Governments have realised the urgency of the problem; but it is beyond the resources of any Government to provide the entire machinery and personnel needed to attend to the reconstruction of seven lakhs and odd villages. Non-official organizations consisting of honorary workers have therefore a vital part to play in the sphere of rural uplift. It has been widely recognised that the Co-operative organization provides the ideal non-official agency whereby rural uplift can be successfully promoted.

The Royal Commission on Agriculture observed: "If Co-operation fails, then will fail the best hope of rural India." Co-operative organizations are peoples' organizations managed by the people for the benefit of the people. A co-operative society is an association of persons coming together on equal terms on a voluntary basis for the promotion of their common economic interests. It is an extension of the great maxim "unity is strength" to business. The Co-operative movement in the Madras State came into existence nearly 50 years ago with a view to relieve the indebtedness of the rural-folk, namely, agriculturists, artisans and traders. For a long time it remained a credit movement. In recent years, it has undertaken a variety of functions in addition to the supply of credit and today it occupies the proud position of being able to cater to the various needs of the people in the villages and in the towns. With the advent of popular Governments in the country, co-operative organizations have received increased support from the Government.

Function of Village Credit Societies

The primary unit in the Co-operative structure is the village credit society. There are nearly 14,000 village societies in the State covering nearly 67 per cent of the villages. The population served by them is nearly 19 per cent. The village societies give loans for agricultural operations for the discharge of small prior debts and for other useful purposes. The rate of interest charged is generally 6½ per cent. In recent years, the societies have undertaken extra functions such as distribution of foodgrains, cloth, chemical manure and fertilisers, iron and steel, etc. They have done business in this way to the extent of Rs. 614 lakhs. They have given loans to the extent of Rs. 767 lakhs during the year 1950-51. They help agriculture by the distribution of agricultural requisites such as chemical manure and iron and steel and by hiring out to the members agricultural machinery. They also distribute the domestic requirements of the members. Some of the village

societies have undertaken social activities such as construction of godowns-cum-village halls, maintenance of reading rooms and libraries, conduct of night schools, etc., by raising funds for the purpose in the villages.

Still, there is considerable ground to be covered by these societies and a good deal of the rural population is yet to be served by them. If the societies should develop into a strong and independent financial unity, each village should be able to raise the bulk of the money required by the societies from the people in the village; membership should be increased and they should take an intelligent interest in the working of the society.

There is no place for faction in a co-operative society and the members should be loyal. The village society offers an excellent platform for all the people to unite and undertake such common activities as could be managed by the villagers themselves. For example, the society can undertake the excavation of channel or a canal or its maintenance, the excavation of tank, its maintenance, etc. They can arrange to bring, as some societies are doing, additional lands under cultivation. Under proper local leadership the village societies afford the best form of organization for catering to the needs of the agriculturists.

Promoting Rural Progress

Besides the village credit societies, there are other types of co-operative organizations functioning in the villages for promoting general rural progress. The more important side of rural uplift is to increase the income of the cultivator. As the Planning Commission has observed: "The central problem is to change the character of the Indian agriculture from subsistence farming and to bring about such changes in its organization as will introduce a substantial measure of efficiency in farming operations and enable the lower income farmer to increase his return. In the interest of the society, as a whole, the effort should be directed to bring about its transformation in such a way as will help to reconcile conflicting interests within the agrarian economy, remove the disparities which now exist and provide a social and economic framework for the balanced growth of the village community."

The co-operatives are playing a notable part in this direction. There are societies which promote improved methods of agriculture, attend to sale of agricultural produce at favourable prices and provide agricultural requirements such as manure, iron and steel and agricultural machinery like tractors, pumpsets, etc., to the villagers at cheap rates. Efforts are also made through land colonisation co-operative societies in the Madras State, which are in number, to bring additional land under cultivation and to provide facilities for co-operative farming to be undertaken in as large a degree as possible.

Thrift Encouraged

An equally important side of rural uplift is to encourage savings among the agriculturists. Promotion of thrift is one of the prime objects of the village societies. Villagers are encouraged to save for their future and this is

done in people to make various kinds of deposits. To inculcate the thrift habit, the rural societies supply hundi boxes to the members who put in whatever small savings they are able to make. The societies collect the amounts thus accumulated and credit them to the homesafe deposit account. These amounts are utilised by the villagers for occasions like Pongal, Deepavali, village festivals, etc. After the introduction of Prohibition the thrift campaign of the co-operatives was intensified.

The people are encouraged to save the money formerly spent on drink, although a part of it has to be spent to meet the increase in the cost of foodstuffs, cloth, etc. A sum of Rs. 21 lakhs was collected in this way during the last year. The amount may be small but the village societies are serving a very useful purpose by promoting the savings habit. Incidentally, these savings provide the village societies with the funds required for their business. Recently to mop up rural savings and to make them available to the village societies, a drive was instituted to collect rural savings in the countryside and a sum of Rs. 1.06 crores was collected up to 31st December 1951. The village societies thus function not only as an instrument of credit but also as an instrument for savings in the countryside.

Aid to Village Industries

Co-operation also helps the small artisans in the village. Next to the agriculturists, the chief artisan is the weaver. The State is now covered with a network of weavers co-operative societies, which distribute yarn to the members and take back the finished goods for sale. They are assisted in this work by the Madras State Handloom Weavers Co-operative Society. Nearly two lakhs of looms are working in the societies and their production amounted to Rs. 715 lakhs during the year 1950-51. Co-operative societies have been formed for the benefit of other artisans also who suffer from want of capital and a steady market for their goods. Societies have been organised for metal workers, leather goods manufacturers, coir workers, etc. These societies have been afforded assistance by Government by way of subsidy to meet the cost of equipment and to meet working expenses.

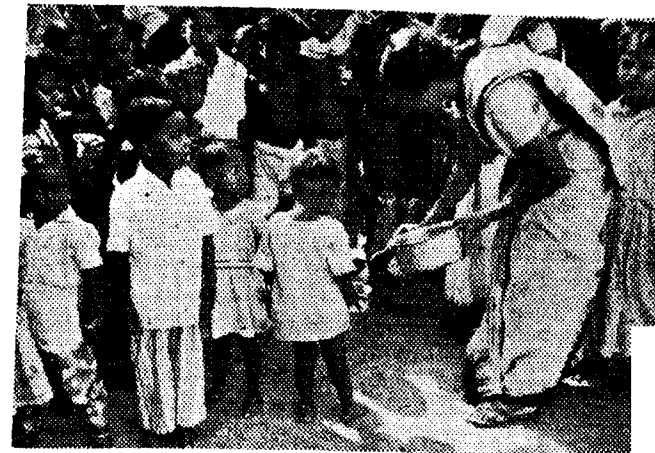
Another important village industry which is receiving attention is the palm gur industry. More than 2,000 societies for palm gur manufacture are in existence and they produced jaggery to the value of Rs. 137 lakhs during 1950-51. Training is given in the improved methods of jaggery production and free sets of equipment have been supplied to some of the tappers in the districts. Arrangements are also made to market the jaggery so that the producers may get a better return. They are also given loans by the village credit societies for the pursuit of their industry.

In the select firkas in the districts steps are being taken to distribute raw materials such as iron and steel, timber, etc., to the village artisans at cost price. Government have provided necessary funds for the purpose and also subsidy and staff to the co-operative agencies undertaking the work.

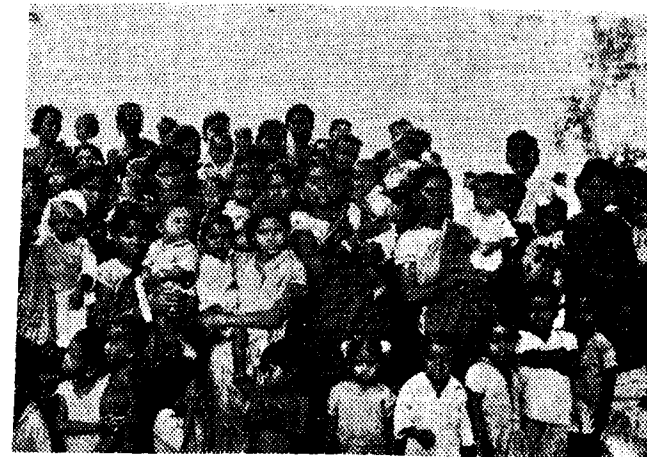
Health Co-operatives

An interesting experiment is being made in the formation of health co-operatives to improve the health of the villagers. A health co-operative society was started

(Continued on page 36)



OIL-BATH DAY: Oil and soap-nut powder were distributed to all Harijans, especially children, during the Harijan Day Celebrations at Alampatti in Madurai District.



CANDIDATES: As part of the Rural Welfare activities, a baby competition was held to select the healthiest baby in the area. Picture shows the mothers with the "candidates".



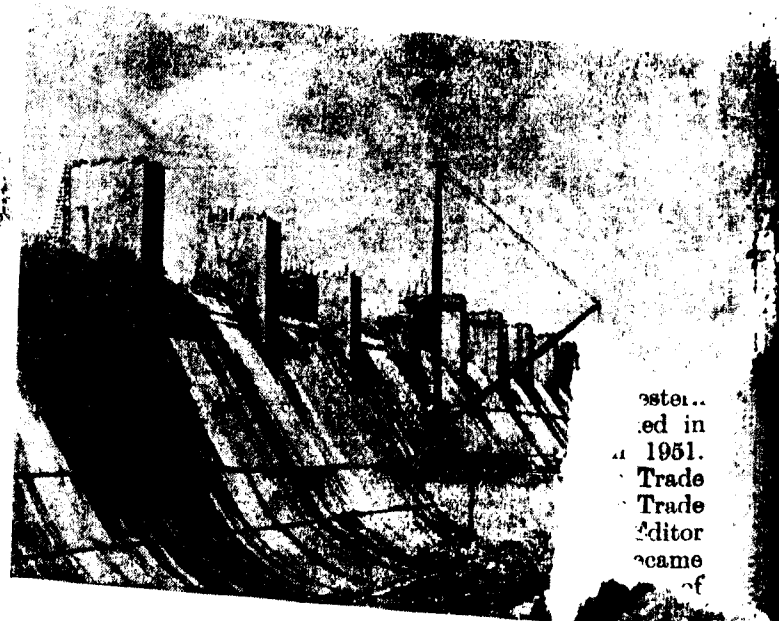
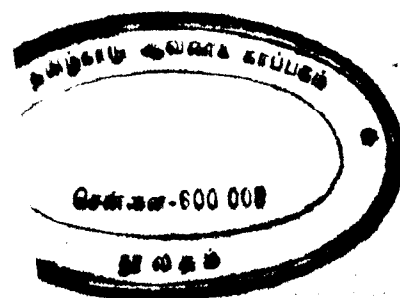
PRIZE WINNERS: Adjudged the healthiest babies in the competition, these three fine looking infants were awarded the coveted prizes for health.

Registered No. M-476

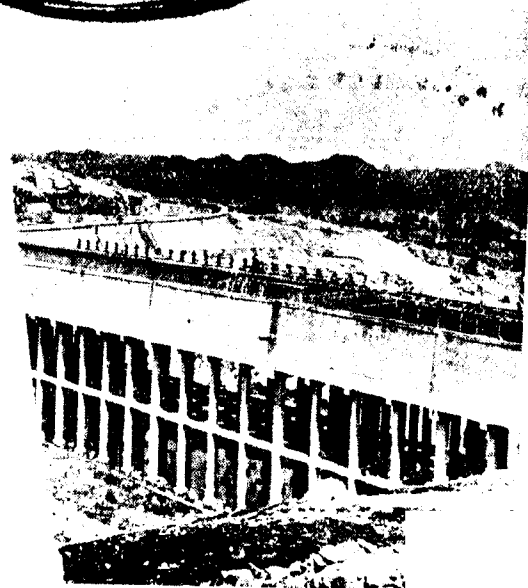
View from rear of
pouring through
gap in dam.

WORK IN PROGRESS AT TUNGABHADRA

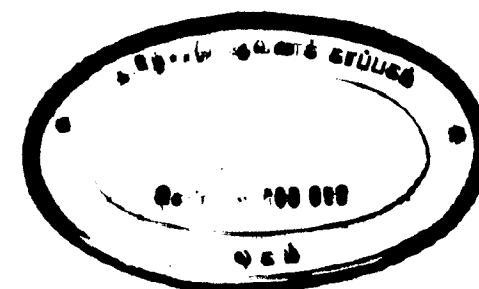
The Derrick crane that hauls the construction
materials to top of dam in the
spillway section.



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An aqueduct across a deep gorge with hill side walling, at
the fifth mile of the irrigation canal
on the Madras side.



Multipurpose Co-operatives

Kudiraichandal

The Kudiraichandal Multipurpose Rural Credit Society E. 404 in Chinnasalem Development Centre in South Arcot District was registered on 12th September 1910 and started on its work on 5th October 1910. It serves four villages, viz., Kudiraichandal, Karanur, Nallathur and Envaipatnam with headquarters at Kudiraichandal. The present membership of the Society is 102 and the share capital of members is Rs. 498.

The maximum borrowing power of the Society is Rs. 6,000 and the individual maximum borrowing power of a member is Rs. 500. On 1st April 1952 loans due from members amounted to Rs. 3,276 as against Rs. 2,855 due on 1st April 1951. During the Co-operative year ending 30th June 1951 the Society borrowed Rs. 4,228 from the South Arcot Co-operative Central Bank and repaid Rs. 2,359. The Society has built up a decent reserve Fund and has invested a sum of Rs. 2,151 under Reserve Fund in the South Arcot Co-operative Central Bank. It has taken shares to the extent of amount of Rs. 567 in the South Arcot Co-operative Central Bank, Rs. 75 in the Kallakurichi Agricultural and Industrial Co-operative Society, and Rs. 25 in the South Arcot Co-operative Central Stores. The Society amended its bylaws for undertaking multipurpose, social and recreational activities.

The Society is dealing in chemical fertilisers, handloom cloth, iron and steel and domestic requirements like tamarind, varagu, salt, etc. The Society is supplying credit for purchase of articles of agricultural needs, supplying iron implements and manure for the farmers, handloom cloth for the daily wear and tamarind for the people of the village. Thrift scheme through hundi boxes has been introduced by the Society and the members are regularly saving in the hundi boxes.

During the year 1st April 1951 to 31st March 1952 the transactions in multipurpose activities are given below :—

Purchases.				Sales.			
RS. A. P.				RS. A. P.			
Textiles (Handloom).	180	0	0	Ammonia	185	0	0
Tamarind	21	0	0	Tamarind	36	10	0
Salt	20	0	0	Varagu	13	4	0
				Iron	28	3	0
				Textile	143	8	9
				Salt	7	2	0
Total	221	0	0		413	11	9

The society is subscribing for *Melichelvam*. Rural games are held at regular intervals under its auspices.

Hathibelagal

The village of Hathibelagal is at a distance of two miles from Alur, the Taluk headquarters in Bellary District. It is in Alur Selected Firka and is also within the panchayat board area of Alur with a population of 4,000 as per the last census. A multipurpose co-operative society was registered on 18th November 1950 and started on its work on 29th November 1950 for this village. As on date of starting, the Society has 20 members with paid-up share

capital of Rs. 140. Now the Society has 34 members on its rolls with a paid-up share capital of Rs. 401. Fifty per cent of the population is represented and efforts are made to increase the number of members and share capital.

The Hospet Co-operative Central Bank sanctioned post-sanction of loans to the Society to the tune of Rs. 2,500 and a short-term loan of Rs. 500. Fifteen members were given loans for a total amount of Rs. 2,900. There are no overdues.

Fifteen members of the Society through 15 hundi boxes have saved Rs. 70 so far. It has done non-credit business by selling pencils, empty soap cases, knives, matches, etc., to an extent of Rs. 43-14-0.

The maximum credit limit of the Society is Rs. 15,000 and individual maximum credit limit is Rs. 500. The net assets by the 34 members comes to Rs. 2,11,848 as per property statement. Sri Prenashachar, the President, hopes to develop its business to greater extent in the co-operative year.

The address of the Society is Y. No.541, The Hathibelagal Multipurpose Co-operative Society, Alur Post, Alur Taluk, Bellary District.

Koderu

The Koderu Multipurpose Co-operative Credit Society in Nilgiris District was registered on 27th June 1934 and started on work on 23rd November 1934. It has 37 members with a paid-up share capital of Rs. 1,720. The maximum credit limit of the Society is Rs. 5,000.

On 30th June 1951, the Society owed a sum of Rs. 4,318 to the Central Bank. It has since repaid this amount and taken a fresh short-term loan of Rs. 4,850.

The individual credit limit of members is Rs. 400. On 30th June 1951 a sum of Rs. 5,959 was outstanding against the members. Out of this the Society has since collected Rs. 5,232, leaving a balance of Rs. 727 in six loans. This amount is overdue from 5th January 1952.

The Society earned a net profit of Rs. 100-13-0 during the year 1950-51. It has undertaken the collection of thrift deposits from members as a first step towards the introduction of multipurpose activities. The members have been supplied with hundi boxes and a sum of Rs. 265-8-9 has so far been collected in these boxes.

Ambulance Vans for Cuddapah

Sanction has been accorded for the diversion for the two ambulance vans from the mofussil hospitals to the famine affected areas of Rayachoti, Badvel and Rajampet Taluks of Cuddapah District, in order to render medical aid in these places.

Amenities to Hospitals

The Government have accepted with thanks the donations made by the Secretary, Rotary Club, Tirunelveli, and Srimathi Thangaswami, Member, Advisory Committee of the Government Women and Children Hospital, Vannarpet, Tirunelveli District, for providing amenities to the patients in the Government Women and Children Hospital, Vannarpet.

Benefits of Prohibition

The following instances reported from the districts give a graphic picture of the benefits of the Prohibition campaign.

Chingleput District

The enquiries conducted in the villages in Chingleput District reveal that Prohibition has done good to the villagers, especially to ex-addicts. The villagers are leading a happy life and there is definite decrease in the crimes generally committed by the villagers under the influence of liquor.

Guntur District

After the introduction of Prohibition it is seen that the economic conditions of ex-addicts have improved considerably and the money wasted on drink is being saved and is utilised for securing sufficient food, clothing and other necessities of healthy living, besides helping to clear off the debts incurred in pre-prohibition days. Some instances are given below :—

An ex-addict by name Kosuru Raghavulu of Hemelli village in Guntur Taluk used to spend all his earnings for his drinking habit in pre-Prohibition days. Now he has given up his drink and saved Rs. 500 and used that amount in improving his agriculture.

Another ex-addict by name Kerthi Lakshmiah, native of Tellapadu in Narasaraopet Taluk, used to spend all his earnings on drink. Now he has given up his drinking habit and thus was able to save Rs. 600. He opened a 'Killi shop' and now earns Rs. 70 per month.

Madurai District

1. K. Karuppannan—Pudupatty village, Nilakottai Taluk. A veritable drunkard, he saved a sum of Rs. 100 after the introduction of Prohibition, and has utilised his savings for the redemption of his old debts.

2. A. Anthony—Pudupatty village, Nilakottai Taluk. He was able to save a sum of Rs. 150 and thereby discharged his old debts.

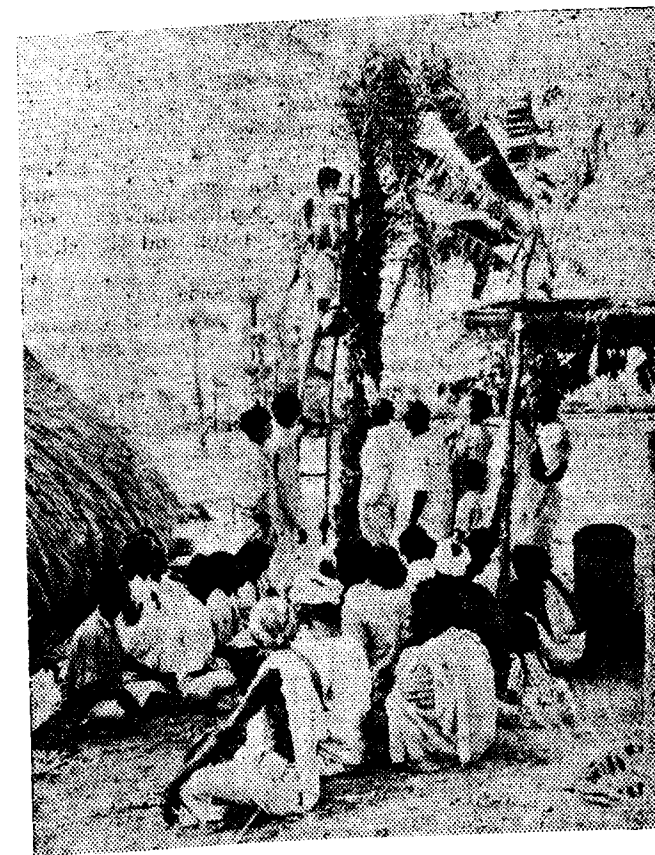
3. R. Mookan—Pudupatty village, Nilakottai Taluk. He was able to save a sum of Rs. 75. He purchased a bull from his savings for cultivation purposes.

Visakhapatnam District

In Visakhapatnam District Prohibition is working out good results to the ex-addicts. After the introduction of Prohibition, the ex-addicts equipped themselves with better clothing and renewed their household furniture with the aid of the savings which were previously spent on drink. Before the introduction of Prohibition, the ex-addicts were responsible for many a strife in their villages. Now they are peaceful villagers and members of the local Gramasangams and co-operative societies, especially in milk supply societies, contributing their mite to the uplift of the villages.

Tiruchirappalli District

Sample surveys of the economic conditions of typical ex-addict families before and after Prohibition were conducted in two villages of Alangudi Taluk in Tiruchirappalli were studied. The ex-addicts have saved Rs. 10 from their income every month regularly after Prohibition was introduced.



PALM GUR TRAINING : A course of instruction was imparted by the Palm Gur Instructor to the members of the Thimmanalpalem Jaggery Manufacturing Co-operative Society in Chandrahari Taluk, Chittoor District.

The Nilgiris District

The ameliorative staff during their tours in the villages of Ooty found from their enquiries that there was a definite improvement in the social and economic conditions of the persons who were addicted to drink before the introduction of Prohibition. The fact that in many village societies thrift days are celebrated regularly when substantial amounts saved by the members are collected and brought to account, goes to show beyond any doubt that the economic conditions of the villagers have definitely improved. Some of the societies which celebrated thrift days regularly are those at Kilatti Denad, Kilkotagiri, Kervan, Melbellicombai, Kadakkadu and Melcowhatti.

South Kanara District

One fishermen's co-operative society at Kaup, South Kanara District, was organised during the quarter ended 31st March 1952 and was registered on 2nd April 1952. The formation of fishermen societies will benefit about 30 to 50 fishermen families. They will be able to get yarn at subsidised rates from the Fisheries Department for manufacture and repairs of their nets. They will be advanced loans also which will enable them to be free from the clutches of the rich and middlemen merchants.

Tirunelveli District

During the quarter the ameliorative staff have enquired into the socio-economic conditions of 23 ex-addicts' families in Tirunelveli and the following improvement in their standard of living was revealed in the enquiry.

The major part of their income spent in drinking in the pre-Prohibition days is now utilised by them for better food and clothing. Due to high cost of living though they are not able to save much, they are now able to spend more on their family needs without incurring debts. In some of the families they were able to discharge their old debts prudently with some amount of economy in their day to day expenditure. The children are now sent to school neatly dressed. Many of them are living in decent houses. The following illustration of the two families will show the benefits derived by the ex-tappers after the introduction of Prohibition.

I.	II.
1. Village—Kasiapuram, Tenkasi Taluk.	Thisayanvillai, Nanguneri Taluk.
2. Head of the family: V. Muthiah Nadar.	Sudalaimuthu.
3. Number of members of the family. 3 males, 2 females.	4 boys, 1 girl, 3 adults.
4. Average income before Prohibition. Rs. 60 per mensem.	Rs. 50 per mensem.
5. Average expenditure before Prohibition including drinking: Rs. 75 per mensem.	Rs. 60 per mensem.
6. Total debts incurred. Rs. 150.	Rs. 10 per month.
7. Average earning after Prohibition. Rs. 90 per month.	Rs. 85 per month.
8. Average expenditure after Prohibition spent on food and cloth. Rs. 80 per month.	Rs. 65 per month.
9. New assets purchased. Purchased one acre of dry land.	Purchased 50 cents of dry land.

South Arcot District

One Sri K. Kuttan of Eraiyur village in Tirukoilur Taluk was a terrible drunkard. He was leading a very bad life in the pre-Prohibition days. He ran into debts and lost his wealth by his drinking habit. When Prohibition was introduced his life was changed and he became sober. Now he has become a businessman. He is selling grinding stones, etc. He has purchased two bulls and some silver jewels for his wife. He is slowly recouping his lost wealth from his savings. He is leading a happy life with his wife and children.

Coimbatore District

The enquiries were made by the Special Senior Inspectors, jaggery manufacturing co-operative societies, into the economic and social conditions of the typical families in villages. The results of their enquiry are given below:

1. Athijoor village (Pollachi Taluk). The family of Ramaswamy Gounder.

Before Prohibition: Income Rs. 150 per month. Expenses:

(a) Domestic Rs. 100. (b) Liquor Rs. 30. (c) Other expenses Rs. 20. Savings—Nil.

After Prohibition: Income Rs. 150. Domestic expenses Rs. 120. Other expenses Rs. 20.



MAKING QUALITY JAGGERY: Practical demonstration on the manufacture of jaggery from Neera by the improved method. The Palm Gur Instructor explains to the trainees the colour, quality, durability and value of jaggery prepared under the improved method.

Total savings so far made Rs. 400.
2. Thottipalayam village. The family of Arunachala Gounder.

Before Prohibition: (a) income Rs. 140 per month. (b) Expenses:

1. Domestic Rs. 90.
 2. Liquor Rs. 20.
 3. Other expenses Rs. 40.
- Total debts incurred Rs. 200.

After Prohibition: (a) Income Rs. 150. (b) Expenses:

1. Domestic Rs. 100.
 2. Other expenses Rs. 40.
- Debts—Nil.

Malabar District

Kandappadi Panham, son of Raman of Paral Amsom in Walluvanad Taluk, Malabar District, is an ex-addict, and now a tapper member of Karalmanna Jaggery Production Co-operative Society. He is a family man having a wife, one son and a daughter. Before the advent of Prohibition he was owning a small plot of barren hilly land with a thatched hut in it. He owned half an acre of land on lease. He was a toddy tapper and he used to spend

all his earnings on liquor, neglecting his wife. The family lived on their own earnings and were in a miserable condition.

After the introduction of Prohibition he became a member of the Karalmanna Jaggery Society and tapped sweet toddy for the manufacture of jaggery, and is now earning Rs. 3 to Rs. 4 per day. He was able to take on lease two acres of paddy fields and he, with his family, works in the fields to supplement his income. By dint of hard work along with his family, he purchased another plot of garden land measuring $\frac{3}{4}$ acre worth Rs. 750 and two pairs of buffaloes to plough the fields and garden land. He cultivates tapioca, ginger and planted arecanut trees and coconut trees in the garden land. From the income of the produce and the paddy sold after his requirements he constructed a tiled house which is worth about Rs. 2,000. He is now living a contented life with his family.

North Arcot District

Kanikaniyan, Vellore Taluk. Name of the ex-addict: Kannimandri.

Properties owned after Prohibition. Dry two acres. Cattle wealth Rs. 400. Cloth purchased Rs. 150; celebrated his daughter's marriage.

Cuddapah District

1. One Yeri Venkatanna, son of Ramudu of Devagudi village, Jammalamadugu Taluk, purchased 20 goats and a house worth Rs. 1,000.

2. One Danam Munaiah, son of Rami Reddi, Goneganur village of Jammalamadugu Taluk, purchased four acres of land and two bulls worth Rs. 1,500.

3. One Thalari Venkatanna, son of Nadipodu Thimmapurampet, Pulivendla Taluk, purchased 50 sheep and a house worth Rs. 1,000.

Anantapur District

A few specific and concrete instances of economic development in the condition of the ex-addicts after the introduction of Prohibition are given below:—

Name.	Economic status prior to introduction of Prohibition.	After introduction of Prohibition.
1 Avalampalli village, Gooty Taluk, Bandam Narayana.	Nil.	Purchased five acres of land.
2 Vepamanipeta village, Kadiri Taluk, Ediga Narappa and Ediga Venkatesu.	Had a monthly income of about Rs. 20 per mensem.	They have since migrated to town and are doing petty business, earning Rs. 100 per month.

Kazi of Madras

The Government have appointed Janab Hajee Moulvi Mufti Muhammed Habibullah Sahib as the Kazi for the Sunnis in the City of Madras.



NEERA TECHNIQUE: The members learn preliminary operation on date trees, proper application of lime and the difference between Neera and toddy tapping.

Maintenance Allowance

The Government of India have issued the following Press Note:

The last date for submission of applications for the grant of Maintenance Allowance was the 30th November 1950. It is notified for the information of all concerned that applications received after that date will not be entertained. The Government of India will, however, continue to consider specially hard cases (e.g., death of the breadwinner after the prescribed date, contracting of a disease or disability after that date, which renders the applicant incapable of earning) provided the applications are made through the Deputy Commissioners or Collectors of the districts in which the applicants are residing.

Enhancement of Allowance.—Cases of all grantees are being reviewed by the Government of India, with a view to deciding whether any increase in the maintenance allowance already sanctioned, is admissible or not. As the number of grantees runs into thousands, the review is bound to take time. The review, however, will be automatic and it will not be necessary for grantees to make applications for the enhancement of their allowance.

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 during February, 1952.

North Arcot District.—During the month under review, the following works were completed under the Collector's discretionary grants, the villagers having contributed half of the cost :—

1. Construction of a park at Kalasapakkam.
2. Provision of doors to bathroom at Ganvaram.
3. Construction of a shed at Veeralur Cheri.
4. Construction of eight Wardha Model latrines at Kadalady village.
5. Repairs to the existing well at Melapalur.
6. Repairs to the existing well at Kilpalur cheri.

The villagers of Karumapathy and Nallapillaipethal constructed and offered buildings worth Rs. 2,000 and Rs. 700 respectively for the location of schools free of rent. One adult school was opened at Salayanar village in Thuriinjapuram firka.

Tiruchirappalli District.—Twenty-seven compost pits were dug; ten trees were planted. Tools were distributed to 20 artisans in Musiri Firka.

A cattle show was conducted at Perambalur. Ten charkas were distributed; 697 hanks of yarn were collected from the spinners during the month.

In the Vellakoil Centre, 31 cheris and 52 villages were visited. Thirty soak pits were cleaned and 20 constructed. Twelve latrines were cleaned and 14 put up. Fifteen mass sanitation drives were conducted.

Chittoor District.—In Nagari firka 24 sanitation drives were conducted; four magic lantern shows were shown and six compost pits were dug.

South Arcot District.—Two short spinning courses for women were conducted at Sendanadu and Padur villages. Twenty women in each course were given training in ginning, carding, slivering and spinning for 15 days. Lectures were given to them on the economy of self-sufficiency in food and cloth, general health, sanitation and Gandhian way of Rural Reconstruction. On the last day of each training course, a spinning competition was conducted and prizes were awarded from the contributions collected from the villagers. Each trainee was paid a subsidy of Rs. 3 and 39 kisan charkas were also distributed to them.

Another short spinning course for 20 women was held on 15th February 1952 at Badrakottai. Fifty-eight charkas were issued in Kadambuliur and Tirunavalur firkas and 1,067 hanks of yarn were produced during the month.

On 29th February 1952, a cattle show was conducted at Tiruvamur by the Veterinary Department. Bulls, cows, buffaloes, goats, rams, sheep, cocks, etc., were brought from several villages and exhibited at the show. Prizes costing Rs. 100 were awarded to the ryots who exhibited the best cattle and fowls at the show.

Two adult education centres were opened, one at Badrakottai for women and the other at Perumbattu for men. Equipments, such as lights, slates, books, etc., were supplied to these centres.

Ninety-four compost pits were dug up and 23 trench latrines were constructed in the month.

South Kanara District.—The first set of houses for the Koragas was completed and declared open by the Director of Harijan Welfare on 16th February 1952. The Collector of South Kanara presented cloths and saris worth more than Rs. 100 donated by the leading persons of Kumbala. They were distributed to the Koragas. A benefit drama was staged in aid of the Koraga colony work. Half an acre of waste lands was terraced. One beehive was introduced. One hundred and two hanks of yarn were collected in Kumbala. Twenty houses and their surroundings were got cleaned in Nileshtar, and propaganda on cleanliness was conducted in the Harijan colonies.

The Nilgiris District.—During the month under review, propaganda on compost making, soil erosion, etc., was carried on. Fifty-one compost pits were opened and ten manure pits were dug during the month. A sum of Rs. 778 was distributed to 114 ryots as compost subsidy. Four hundred and seventy-eight and half lb. of insecticides were supplied from the Ooty Agricultural Depot and an area of 22 acres were saved from pests and diseases. An amount of Rs. 2,700 was paid to eight ryots of the firkas, being agricultural loan for purchasing seeds and manure. Rural Welfare Day was celebrated at Palada. The Deputy Director (South) presided over the functions and the Collector of the Nilgiris opened the exhibition.

Sanitation drive was conducted by the Grama Sevaks in their respective groups. One Grama Sangam was formed in Kil-Kundah hamlet.

A public meeting was conducted at Bengalmattam and free distribution of improved tools (worth about Rs. 2,000) was made to encourage cottage industries to the nine selected artisans.

Tanjore District.—Eighteen charkas were introduced; 1,222 hanks of yarn were produced; 77 manure pits were dug; 42 compost pits were laid; 51 cheris were cleaned; 70 bhajanas, prayers and congregational spinnings were conducted and two cub packs were formed during the month. A sum of Rs. 1,605 being the contribution from the villagers towards works was credited to Government.

Tirunelveli District.—Eighty-seven compost pits were dug; ten charkas were sold; 950 hanks of yarn were produced. Tools to the value of Rs. 3,326-8-0 were distributed to the artisans free of cost so far.

Anantapur District.—Cattle shows and two group tournaments were conducted and prizes were awarded. Thirty-five new compost pits were dug; 25 charkas were distributed and a subsidy of Rs. 25 was paid to the self-spinners. One stud buffalo was purchased and a poultry farm was started during the month.

Chingleput District.—Thirty-three compost pits were dug; 24 manure pits were opened and four manure heaps were covered with mud. Street cleaning was done in several villages during the month. First aid was rendered to 87 persons. Bhajanas and music classes were conducted at Pakkam.

West Godavari District.—During the month under review, a cattle show was organised at Gutala village. Fifty cattle were brought for the show. Prizes were distributed to the persons who maintained the cattle well. A mass sanitary drive and a spinning demonstration were held at Pandugudem. Khadi cloth worth Rs. 100 was sold to the public. Harijan Day was celebrated on 28th February 1952 at Dondapudi.

Cuddapah District.—Six new charkas were introduced; 40 compost pits were dug; two trench latrines were constructed; 203 tons of manure were produced; 62 sanitation drives were conducted; 59 cess pools were constructed; eight magic lantern shows were conducted and 142 manure heaps were properly preserved during the month.

Guntur District.—Thirty compost pits were dug; five magic lantern shows, 11 spinning demonstrations, 21 mass and 20 individual sanitation drives were conducted; 46 first-aid cases were treated in 17 centres and a drainage of 2½ furlongs in length was constructed in Guruvareddipalem centre.

In Ongole and Ammanbrole firkas, 72 hanks of yarn were produced by the self-spinners and 22 yards of cloth was produced. An amount of Rs. 20 was paid as subsidy to the self-spinners. Twenty adult night classes were conducted by the Rural Welfare staff.

Malabar District.—In Tellicherry, Kuthuparamba and Mattanur firkas, six culverts on roads were constructed. Fifty-two compost pits were dug in the firkas during the month. One hundred lb. of bone ash, 72 lb. of Kolinji seeds and 56 paras of seed paddy were distributed to ryots. Twenty acres of land in Tellicherry firka were brought under vegetable cultivation. Twelve charkas were introduced under the Extensive Khadi Scheme in Tellicherry and Kuthuparamba firkas.

In Payyanur area, one compost pit and one trench latrine were constructed. Forty lb. of Kolinji seeds and zinc phosphate were distributed among the ryots of Kunhimangalam and Vellur villages.

Kurnool District.—The Rural Welfare officers and the Grama Sevaks conducted mass and individual sanitation drives in several villages of the firka. In Kurnool firka, 13 compost pits were dug and 14 compost pits were filled up. Three insanitary pits were levelled up and three manure pits were removed from the villages. Four latrines were constructed in the firka.

In Yerragondapalem firka, 30 streets were cleaned. Thirty-one manure pits in Yerragondapalem firka and 17 in Tripurantakam firka were set right. Eighteen compost pits were dug in Yerragondapalem firka and eight in Tripurantakam firka.

In Kurnool firka, 17 spinning demonstrations and 20 adult classes were conducted. One reading room was opened in Kurnool firka and one magic lantern show was also performed.

In Yerragondapalem firka, 26 spinning demonstrations while in Tripurantakam 33 demonstrations were conducted.

Visakhapatnam District.—During the month, 83 sanitation drives were conducted in Araku Valley firka and 25 hanks of yarn were spun; 37 adult classes were conducted; seven magic lantern shows were exhibited; 38 spinning demonstrations were conducted; 66 compost pits were dug and two cub packs were organised in Pendurthi firka.



BETTER TYPE OF GHANI: The Rural Welfare Officer of Tirumangalam explains to visitors Miss Nancy Damman and Miss Ellen B. Horan of the U. S. Consulate-General (Madras) the advantages of the Wardha type single bullock ghani.



SELF-HELP: The villagers of Thottipatti (Madurai District) put in commendable concerted work to deepen the village tank.



QUALITY BREEDING: The Harijans of Chinnachettipatti jointly purchased this stud bull, with a little help from Government.

Ramanathapuram District.—During the month of February, 180 charkas were distributed among the villagers. The villagers were taught about the value of compost pits. The Kangayam bulls supplied to the firkas rendered good service. Five new wells were sunk and 100 old wells repaired so far. Roads up to the length of 11 miles and two furlongs have been formed so far.

Srikakulam District.—Thirty-six sanitary drives were conducted; 12 charkas were introduced; 79 yards of yarn were spun; 1,490 books were distributed in the month and 55 spinning demonstrations were conducted.

Nellore District.—A combined agricultural and industrial exhibition and cattle show was conducted at the Nidiguntapalem village of Surveypalli firka. Wide publicity was given to the Rural Welfare Scheme and the villagers were encouraged to make their villages self-sufficient.

During the month, 22 mass and 135 individual sanitary drives were conducted; 64 manure heaps were set right; six soak pits were constructed; 20 new compost pits were dug; 70 spinning demonstrations were given; 937 hanks of yarn were spun and 203 yards of khadi cloth were woven.

Krishna District.—A cattle show and an agricultural exhibition were held at Tiruvur on 21st February 1952. The best specimens of stud bulls (Ongole type and Murrah type), cows, buffaloes, bullocks, heifers, etc., were exhibited there representing from all the villages of Tiruvur and Vissannapeta firkas. The agricultural products from all the villages of Tiruvur, Vissannapeta and Nuzvid firkas were also exhibited at the exhibition. Prizes to a value of Rs. 600 were given away to the best specimens of cattle and agricultural products.

Six poultry units were started in the month by distributing six cockerels to the interesting ryots in Tiruvur and Vissannapeta firkas free of cost from Rural Welfare funds.

Three radio sets were installed in Vissannapeta and Nuzvid firkas. New branch Post offices were opened in the villages of Tiruvur Taluk.

Coimbatore District.—In Vellakoil centre, the Rural Welfare staff visited 61 hamlets and 25 cheris; 23 latrines were constructed and 28 latrines cleaned. The Special Agricultural staff visited 37 farms and opened 42 compost pits. To prevent soil erosion, formation of bunds around fields was advocated and bunds were formed in six holdings. A sum of Rs. 250 was disbursed by the Agricultural Department to the ryots of this area as subsidy for the manufacture of compost.

In Tirupur centre, seven well works were completed. A sum of Rs. 3,566 for road works and a sum of Rs. 1,581 for well works was spent during the month. Roads to a total length of one mile and two furlongs were formed during the period under review.

Bellary District.—During the month, 19 sanitation drives were conducted; 620 books were distributed; 50 compost pits were formed; 15 charka demonstrations were conducted and eight charkas were distributed.

Sivagalai

The name of the revenue village SEVALAI in Sri-vaikuntam Taluk, Tirunelveli District, has been changed to SIVAGALAI.

Co-operation and Rural Uplift

(Continued from page 29)

in the Chittoor District with the help of the funds provided by the local panchayat board, provincial welfare fund, etc. The area of the society extends to ten villages and the funds are derived from subscriptions from the members. It is running a dispensary and maintains a hospital. During 1950-51, 4,470 out-patients and in-patients were treated in the hospital. Eight maternity cases were also attended. The working of the society is encouraging. The success of the experiment is largely due to the co-operation received from the villagers. Such health co-operatives will go a long way to supplement the efforts of the State to maintain and improve the health of the people in the villages.

Co-operative societies are business organizations. Their success depends, therefore, upon the way in which they are managed by the people. If the co-operatives in the rural areas should function as live centres of rural development, there should be proper leadership in the villages. The Co-operative movement in the countryside provides an unlimited opportunity for honorary workers to do selfless service for village development. Every one owes a duty to his country to play his little part in bringing about general social uplift. Man is a social being and as the Tamil sage, Thiruvalluvar, said: "He alone lives who functions as social co-operator. He who does not recognise his duty is counted as dead." With the widening of the franchise and the spread of literacy, I have every hope that people in the villages will take an intelligent interest in the affairs of the co-operatives and work wholeheartedly for their success. For, on the success of the rural co-operatives depends largely rural prosperity and happiness.

(By courtesy, A.I.R., Madras.)

Forwarding Gifts of Fodder and Grain

The public are no doubt aware that many voluntary organisations and relief committees are endeavouring to procure gifts of fodder and grain from surplus areas of the State for the benefit of the deficit areas to relieve the distress caused by scarcity conditions on account of the failure of the monsoon. It has been represented to the Government that the collecting agencies are experiencing considerable difficulty in the matter of forwarding these gifts, because the local revenue officials had no instructions from Government as to the steps they should take. Instructions have since been issued.

Gifts of fodder and grain collected by the voluntary organisations should be received by the Tahsildars, who will despatch the gifts under instructions from the Collector of the district in which they are collected to the deficit areas, free of cost and with the utmost expedition. Donors and promoters of charity should take into account the distance and expenditure incurred on transport as against the value of articles donated.

Gift of Tuberculosis Ward

The Government have accepted with thanks the offer of the North Arcot District Tuberculosis Association to construct a Tuberculosis ward of 24 beds at a cost of Rs. 39,000, in the Government Pentland Hospital, Vellore, and hand it over to Government for maintenance.

NEWS AND NOTES

List of Donations to the Madras State Famine Relief Fund

Following is the list of donations to the Madras State Famine Relief Fund:—

	RS.	A.	P.		RS.	A.	P.
1 The Hon'ble Pandit Jawaharlal Nehru from the Prime Minister's Fund for Food Relief.	2,00,000	0	0	42 Sri N. Madhusudan Rao, Tenali	..	..	..
2 Shri Rajendra Prasad, President of the Indian Republic.	1,000	0	0	43 Sri A. K. Krishnamurthi, Tenali	..	1	0 0
3 Dr. John Matthai on behalf of Sir Dorab Tata Trust.	25,000	0	0	44 Sri P. V. Suryanarayana, Banaras	..	(each).	..
4 H.E. Shri Sri Prakasa	1,000	0	0	45 Sri Gian Prakash, New Delhi	..	..	..
5 Sri S. Anantharamakrishnan	1,001	0	0	46 Sri A. S. Mani, Madras	..	0	8 0
6 Sri Manjeshwar Gopala Krishna Prabhu.	1,000	0	0	47 Sri C. Kuppuswami, Salem	..	1,246	13 1
7 The President, Bandar Nagayalanka Bus Operators' Union, Masulipatnam.	500	0	0	48 Mr. J. J. Batlivala, Treasurer, Southern Railways, Head Office, and from Deputy Chief Accounts Officer, Southern Railways, Madras.	..	1,116	0 0
8 Sri V. K. Thiruvengkatachari	(each).	..	..	49 Secretary, The Anakapalle Merchants' Association, Anakapalle, Visakhapatnam District.	..	501	0 0
9 Sri Jyotibushan Gupta	250	0	0	50 Mrs. Raksha Saran, Madras	..	(each).	..
10 Srimathi Kamini Devi	(each).	..	..	51 Sri M. Parameswara Iyer, Madras	..	500	0 0
11 Sri T. Sadasivam	116	0	0	52 Sri Jyotibushan Gupta, Banaras	..	(each).	..
12 Sri G. L. Mehta	(each).	..	..	53 Messrs. N. T. Patel & Co., Madras	..	201	0 0
13 Sri Radhakrishna Groundnut Oil Mills, Guntur.	101	0	0	54 Sri V. Parashuram Mudaliar, Sagaon (Berar).	..	200	0 0
14 The Secretary, Guntur Medical Club, Guntur.	101	0	0	55 The Secretary, Teachers' Association, All Saints High School, Hyderabad.	..	150	0 0
15 Messrs. Bansiram Virbandas, G.T., Madras.	..	..	..	56 Sri M. Bapineedu, Madras	..	116	0 0
16 The Secretary, Tinnevely Co-operative Central Stores, Limited, Tuticorin.	100	0	0	57 Air Voice Club, A.I.R., Vijayavada	..	(each).	..
17 Mrs. M. N. Clubwala	(each).	..	..	58 The Executive Officer, Panchayat Board, Nidadavole.	..	..	..
18 Mr. Phiroj Nogi Clubwala	90	0	0	59 Treasurer, Rotary Club of Bezvada, Vijayavada.	..	101	0 0
19 The Trustees to the late Mrs. S. P. Clubwala Settlement.	53	0	0	60 Messrs. Lakshmi Glassware Mart, Madras.	..	(each).	..
20 The Hon'ble Justice E. E. Mack, I.C.S.	50	0	0	61 Superintendent, Government Secondary and Training School for Women, Kohikode.	..	100	0 0
21 Sri V. Nagiah, Kovur, Guntur District.	29	0	0	62 Sri K. Venkatarama Iyer, Madras	..	(each).	..
22 Agent, Central Bank of India, Ltd., Vijayavada.	25	0	0	63 Sri V. Shanmuga Mudaliar, Madras	..	51	0 0
23 Sri S. V. Rama Iyer	(each).	..	..	64 Messrs. C. J. Sheth, Madras	..	(each).	..
24 Sri K. Bhaskaran Tampan, Ottapalam.	20	0	0	65 Messrs. S.U.S. Davey Sons, Madras	..	26	0 0
25 Sri K. Ragnathan, Mylapore	11	0	0	66 Dera Nawab Wale, Branch, Ambala City.	..	25	0 0
26 Everett F. Drumwright, New Delhi	10	0	0	67 Sri P. Govinda Raj, Bangalore	..	18	8 0
27 Sri P. Aswathanarayanaiah, Razole	5	4	0	68 Sri P. Aswathanarayanaiah, Razole, East Godavari District.	..	15	0 0
28 Proprietor, Messrs. Jitendra Foundry, Rajahmundry.	..	..	..	69 Proprietor, Messrs. Jitendra Foundry, Rajahmundry.	..	11	0 0
29 T. K. Ramanuja Kavirayar, Tirunelveli.	..	..	..	70 Sri V. Singara Mudaliar, Nellore	..	(each).	..
30 Sri Mohan Chandra, Bhadohi, U.P.	..	..	..	71 Sri T. K. Ramanuja Kavirayar, Tirunelveli.	..	19	6 0
31 Sri T. C. Kalloor, Madras	..	..	..	72 Sri M. V. Ramakrishna Rao, Madras.	..	18	8 0
32 Sri T. V. Subramaniam, Coimbatore	..	..	..	73 The Staff of Taluk Office, Razole, East Godavari District.	..	15	0 0
33 Sri Sankaran Nair, Kottakkal	..	..	..	74 Sri V. Sankaran Nair, Kottakkal, South Malabar.	..	11	0 0
34 Sri C. A. Krishna Kumar, Cuddapah.	..	..	..	75 Sri Ved Prakash Murwaha, New Delhi.	..	(each).	..
35 Sri P. S. P. Madhava Rao, Repalle	..	..	..	76 Sri S. Srinivasa Rao, Visakhapatnam.	..	10	0 0
36 Sri Pratti Sitaramayya, Duggirala	..	..	..	77 Sri T. V. Subramaniam, Coimbatore	..	(each).	..
37 Sri Kumari Rani, Tenali	..	..	..	78 Sri S. N. Gupta, Agra (U.P.)	..	..	..
38 Sri Jonnalagadda Sreeramamurthi, Chebrole, Guntur District	..	..	..	79 Sri Kidar Nath Batra, Jhansi	..	80	0 0
39 Sri A. P. Veeraraghavan, Madras	..	..	..	80 Sri M. Subramaniam, Palayamkottai.	..	81	0 0
40 Sri V. K. Sarma, Madras-17	..	..	..	81 Sri Valji Govindji Desai, Poona-4	..	7	1 0
41 Sri V. S. R. Prasad, Pedapalam	..	..	..	82 Sri A. Srinivasa Raghavan, Pudukkottai.	..	..	..

NEWS AND NOTES

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MADRAS INFORMATION

	RS.	A.	P.		RS.	A.	P.
83 The Agricultural Demonstrator, Nuzvid.	8	8	0	118 Janab Mohamed Usman, Teynampet Garden, Madras.	200	0	0
84 Sri N. Venkateswaran, Mangalore				119 Sankari Panwala Association, Sankari-drug R.S., Salem District.	160	0	0
85 T. K. Rajagopalan, Bhavanisagar				120 Sri H. V. Sivanatham, Secretary, Famine Relief Committee, Indian Institute of Technology, Kharagpur.	150	0	0
86 Sri E. Singaram Pillai, Tiruchirappalli.	5	0	0	121 Sri T. Rajamannar, Honorary Secretary, Thattikonda, Nachamma Charities, Chetput, Madras.	120	0	0
87 Sri M. Ramasubbiah, Cuddapah	(each).			122 Honorary Secretary, Madras Piece-goods Merchants' Association, 100, Godown Street, G.T., Madras.	116	0	0
88 Sri B. Nagappan, Kurnool				123 Secretary, Timber Dealers' Association, P.P. Ballarpur, Chanda District (M.P.).	116	0	0
89 Sri Raghuram Bhat, Kurnool				124 Ryots of Madamamur village, Nellore.	116	0	0
90 Sri Mandapati Subbi Reddy, Arthamaru, East Godavari District.	4	0	0	125 Sri M. Balarama Reddy, Landlord, Buchiredipalem, Nellore.	116	0	0
91 Janab M. Khader Hussain Sahib, Karathadipalayam, Coimbatore District.	(each).			126 Messrs. S. Krishnaswamy and P. Suryanarayana, 11-12 Second Line Beach, Madras.	116	0	0
92 Sri V. V. Srivatsa, Madras	2	1	0	127 Sri. S. S. Baripurnam, representing the staff of Messrs. Gannon Dunkerley & Co. (Madras), Limited.	108	13	0
93 Sri Shantilal Harilal Desai, Jibhaipole, Mehadabad, District Kaira, Gujarat.	2	0	0	128 Janaki Ammal, c/o S. Venkataraman, Advocate, 5/41, Grey Town, Coimbatore.	100	0	0
94 Headmaster, Board Hindu Boys' Elementary School, Krishna District.	(each).			129 Messrs. Shandas Chandumal, 179, Samuel Street, Bombay.	100	0	0
95 Sri R. Irulappan Serrvai, Madurai	1	0	0	130 Dr. B. S. Joshi, Civil Surgeon, Tavoy, Burma.	100	0	0
96 Sri A. S. Mani, Madras	2,120	12	0	131 The Superintendent, Lady Ampthil Government Secondary and Training School for Women, Masulipatnam.	100	0	0
97 Amount collected and remitted by the President, Sri Gujarathi Mandal, 170, Netaji Road, Madras.	2,000	0	0	132 Sri K. P. Jagannathan Chettiar, Pannakadu, Kodaikanal Taluk.	100	0	0
98 His Highness the Maharaja of Bhavnagar, Royal Cottage Palace, Bangalore.	2,000	0	0	133 Miscellaneous collections (below Rs. 100).	1,594	10	0
99 Vasantha Mills, Limited, Singanallur, Coimbatore District.	1,000	0	0				
100 Sri T. Vijayaraghavacharya, Riverside, Adyar, Madras.	1,000	0	0				
101 Ashok Motors, Limited, 13, Haddows Road, Madras-6.	1,000	0	0				
102 Messrs. Seshasayee Brothers, Limited, 120, Armenian Street, Madras-1.	923	0	0				
103 Public Affairs Officer, U.S.I.S., 158 Mount Road, Madras-2.	505	11	7				
104 President, Common Welfare Uplift Youths Association, Ootacamund.	500	0	0				
105 The Managing Partner Sri Mandava Lakshmaiah & Co., Jagannadhapuram, Masulipatnam.	500	0	0				
106 His Highness the Maharaja of Cochin.	500	0	0				
107 Theosophical Society, Adyar	500	0	0				
108 Mr. Arthur W. Ghater, P-21, Mission Row Extensions, Calcutta-13.	500	0	0				
109 Shri M. S. Aney, Governor, Bihar	500	0	0				
110 Kumari Ila Sen, Honorary Secretary, Guild of Service, Visakhapatnam.	500	0	0				
111 Wing Commander R. N. Chawla, 3, Equipment Depot, I.A.F. Station, Avadi.	477	3	6				
112 Vijayavada Co-operative Central Bank, Limited, Vijayavada.	425	10	0				
113 Staff of Salt Cotaurs, Southern Railways, Madras.	375	8	9				
114 Sri N. S. Arunachalam, I.C.S., Collector of Madurai.	300	0	0				
115 Sri A. Vaidyanatha Ayyar, Advocate, Madurai.	250	0	0				
116 M. Shiva Rao, President, South Kanara Central Co-operative Wholesale Stores.	250	0	0				
117 Sri K. Santhanam, Lient.-Governor, Reva, Vindhya Pradesh.	200	0	0				

The donations to the Madras State Famine Relief Fund reached the total of Rs. 3,75,313-5-11 on May 6, 1952. The following is the list of donations of Rs. 100 and above. Amount received up to 26th April 1952 :—

	RS.	A.	P.
(Already published in newspapers).			
134 The Hon'ble Prime Minister of India.	2,57,299	11	11
135 Donation from the Madras Provincial Welfare Fund, Madras.	1,00,000	0	0
136 Sri Pannatal Bansilal, Hyderabad	1,000	0	0
137 His Highness the Maharaja of Cooh-Bihar.	(each).		
138 The Secretary to His Excellency the Governor of Bombay.	500	0	0
139 Donation from the Kanaiyalal Motilal Charitable Fund, Madras.	(each).		
140 Sri Indra Devi Sachar, Tara Cottage Estate, Nainital.	417	0	0
141 From the staff of the I.B.I., Madras Branch.	350	0	0
142 Sri J. Balaji Rao, Diwan, Ramanathapuram Samasthanam. Donation representing cost of silver casket presented to the Raja of Ramana-thapuram.			

NEWS AND NOTES

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MADRAS INFORMATION

Transport Advisory Committee Reconstituted

The Government have reconstituted the Transport Advisory Committee for the Government Bus Service, Madras City, for a period of one year with the following persons as members :

Secretary to Government, Home Department—*Chairman*; Assistant Transport Commissioner, Madras—*Secretary*; (1) The Transport Commissioner, Madras; (2) The Deputy Commissioner of Police (T. and L.); (3) The Mayor of Madras or his nominee; (4) Sri C. Rajam Ramaswamy, M.L.A.; (5) Sri A. M. Sambandam, M.L.A.; (6) Sri S. Rangarajan of *The Hindu*; (7) Sri K. S. Janakiraman, Joint Secretary to the Commercial Employees' Union, Madras; (8) Sri B. D. V. Ramasamy; (9) Sreemathi Raksha Raghunandan Saran; (10) Sreemathi Padmini Raghavan, B.A., B.L.; (11) Sri K. Kannankutty Menon, President, N.G.O.'s Association; (12) Sri N. S. Rajamannar, Secretary, National Union of Students of India, Madras State Organizing Committee; and (13) Sri Rajah J. Swamidoss, Superintendent, Education Department.

The function of the Committee will be purely advisory and will be confined for the present to advising on questions relating to routes, bus fares, amenities to passengers, advertisements and any other allied subjects, pertaining to the bus service, Madras City. Matters relating to workers' welfare or wages shall not come within the purview of the Committee.

	RS.	A.	P.
143 Messrs. Batlibai & Co.	250	0	0
144 Imperial Bank of India (Clerical and Cash Department).	228	8	0
145 Srimathi Diraviam Ponnammal, Madurai.	201	0	0
146 The Madurai Vermicelli Manufacturers and Merchants Association, Madurai.	200	0	0
147 Dr. A. Lakshmanaswami Mudaliar, Madras.	150	0	0
148 From the Directors and Members of the Mettupalaiyam Co-operative Urban Bank Limited, Mettupalaiyam.	115	0	9
149 Staff of the National Bank of India Limited, Madras.	(each).		
150 Sri V. Periaswamy, Colombo	101	0	0
151 Messrs. V. N. Kumaraswamy & Sons, Madras.	(each).		
152 Proprietor, Messrs. Sri Ram & Son, Delhi.			
153 Sri Shanmugasundara Mudaliar, Madras.			
154 Madurai District Famine Relief Committee.			
155 Sri A. Ponnuswami Pillai, Tiruchirappalli.	100	0	0
156 Seth Mangoomal Atmasingh, Bombay.	(each).		
157 Miss M. O. Woodhouse, Meerut			
158 Sri K. C. Eashwar, Indore City			
Miscellaneous contributions (below Rs. 100 received subsequent to 26th April 1952).	1,084	2	0
Total so far	3,75,313	5	11

New Routes and More Buses

The Government have issued instructions that the Regional Transport Authorities should be more liberal in granting additional bus permits in the existing routes or opening up of new bus routes or giving additional timings to vehicles doing less than the maximum mileage. But at the same time care has to be taken to see that the interest of the existing operators are not adversely affected, and that unnecessary competition with the Railway is avoided.

In this connection, the Government have observed that there is still terrific competition for State carriage permits with attendant malpractices and that cases of overloading are still rampant especially on several mofussil routes. The railways are also still unable to cope with the increasing traffic, and hence the need for this revised policy.

Textile Dyeing and Printing Works Exempted from Sales Tax

The Government have directed that textile dyeing and printing works be exempted from liability to Sales Tax for the year 1950-51, i.e., from 1st April 1950 to 31st March 1951.

Gift of Maternity Home

The Government have accepted, with thanks, the offer made by the Government Hospital Maternity Home Buildings Committee to construct a maternity ward of four beds at an estimated cost of Rs. 15,000, in the Government Hospital, Wandiwash, and hand it over to Government for maintenance.

Recognition of Aligarh Degree

The Government have directed that the B.Sc. (Electrical) Degree of the Muslim University, Aligarh, be deemed as equivalent to the B.E. (Electrical) Degree of the Madras University.

The Government have also directed that holders of the B.Sc. (Electrical) Degree of the Muslim University, Aligarh, be appointed to posts in the Madras Electrical Service and the Madras Electrical Subordinate Service, when suitable candidates possessing the B.E. (Electrical) Degree of the Madras University are not available.

Sales by Agents of Government

The Government have directed that all sales by agents of the Government of Madras, should, in the absence of orders to the contrary, be held liable to Sales Tax, unless they hold a licence under Section 8 of the Madras General Sales Act, 1939.

Study of the Constitution

INTRODUCTION TO INDIAN ADMINISTRATION

By M. R. PALANDE, M.A.

Oxford University Press.

Pages 497.

Price Rupees six

The framing of the new Constitution has entirely changed the structure of Indian administration, and Professor Palande has therefore utilised the opportunity for reissuing a completely revised edition of his book, published originally in 1937.

The author restricts his historical and analytical treatment of the British administration in India, from the days of the East India Company to the advent of independence in 1947, to a third of the book. The rest of the book is devoted to a detailed study of the new Constitution.

Part I—the historical portion of the book—starts off with a brief but lucid survey of political development from the period of the British conquest to the 1935 Act, touching lightly on the various Parliamentary Acts, the Minto-Morley Reforms, the Montford Reforms, the 1919 Act, the Simon Commission, the Round Table Conferences, the 1945 Act, the Cripps Mission, the Cabinet Mission, down to the Interim Government and the Acceptance of Partition.

In subsequent chapters, the key role of the Secretary of State for India is outlined; as for the Indian High Commissioner, "... there was reason to believe that pressure was brought on him to observe some kind of preferential discrimination in favour of British and British Empire products." The British exercised determined control over Indian affairs and so "reciprocity was only a euphemism for British dictation". The Governor-General enjoyed "supreme eminence in the State," and the Executive Council was only a bureaucratic body; "Elevation to the Executive Council was among the principal attractions of the Indian Civil Service." The communal electorate system for the Central Legislature bolstered up minorities, while the franchise of the Central Council created a body of vested interests "inevitably drawn into an alliance with the bureaucracy as against the declared wishes of the popular chamber."

The Federal structure envisaged in the 1935 Act never came into being because the war intervened, and Lord Linlithgow, the Viceroy, shelved the scheme. The Federation proposal posed the delicate question of the scope of paramountcy; "... the task of securing the accession of the Princes was full of difficulty."

The author underlines the point that the experiment of dyarchy in India "proved to be incapable of yielding really satisfactory results" since a vital condition—"the complete self-effacement of an irresponsible bureaucracy"—was not satisfied. Provincial autonomy was, on the whole, a fair success; the Services co-operated with the Ministers, the Governors, "played the game". But World War II interrupted the progress on these lines, and the Bengal Famine high-lighted the need for "strong centralized and common action" in times of a grave emergency.

As the author points out, some time must elapse before the working of the new Constitution crystallizes into definite shape. Part II of the book therefore gives a non-critical description of the Constitution under the following Sections:

I. *General*.—Main features, the Indian Union, fundamental rights, directive principles, the Union and the States, Federation, distribution of subjects, the three branches of Government.

II. *The Union Government*.—The President, the Cabinet, the Legislatures, the Supreme Court, the Attorney-General and the Auditor-General.

III. *The State Government*.—Part A, B and C States, the Governor, the Council of Ministers, the State Legislatures, the State Judiciary, subdivisions, local-self government.

IV. *Miscellaneous*.—Public services, elections, backward classes, official languages, emergency provisions, amendments to the Constitution, schedules.

This portion of the book is a masterly exposition of the provisions of the Constitution, and the explanations, related in the simplest terms, of the complexities of the Articles, are a noteworthy feature. While modestly purporting to give an introduction to Indian administration, the author has actually presented a valuable guide, comprehensive and exhaustive, which students of politics as well as our new legislators will assuredly appreciate.

—P.V.S.

A GANDHI ANTHOLOGY

(Book I)

Compiled by VALJI GOVIDJI DESAI.

Navajivan Press, Ahmedabad.

Pages 60

Price annas eight.

Bapu had a thrilling gift for expressing patent and latent truths in ringing phrases. There is little of the woolly rigmarole of generalised half-truths—the stock-in-trade of the professional politician—in the vast mass of Gandhiana that have come down to us.

In this little pocket-sized book Sri Valji Desai has made a telling collection of quotations from the speeches and writings of the Mahatma, classified under a variety of heads—death, martyrdom, the drink evil, gambling, non-violence, swadeshi economy and so on.

—P.V.S.

Expansion of N.C.C. Junior Division

The Government have decided to expand the Junior Division of the National Cadet Corps in the Secondary Schools in the State in the coming academic year and sanctioned the formation of 30 fresh sub-units consisting of 30 cadets for each sub-unit. To provide for the officers for these units and to fill up substitutes for officers who have left the units 40 teachers from various schools have been selected for pre-commission training in the Regional Centre at Wellington for two months from the 1st May 1952. Provision has also been made for a Naval Wing and an Air Wing of the Junior Division.

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LEATHER INSTITUTE: H. E. the Governor of Madras recently visited the Central Research Leather Institute at Guindy (Madras City). Pictures show His Excellency examining the modern machinery and up-to-date laboratory.

Registered No. M-4767

DEEP-SEA FISHING

A day on the deep waters, where catamaran fishers seek new grounds hitherto unexploited. Towed to far-off spots by motor fishing vessels like the one at left, the catamaran spend the entire day collecting a rich harvest, which they joyfully display at the end of the day's fishing.



JULY 1952
Price As. 3

M A D R A S *Information*





UNION COMMERCE MINISTER VISITS MADRAS SECRETARIAT: The Hon'ble Sri T. T. Krishnamachari, Union Commerce Minister, recently visited the Madras Secretariat for discussions. The Union Commerce Minister is seen here with the Hon'ble Sri C. Subramaniam, Minister for Food and Finance, other Hon'ble Ministers and officials.



WITH MEMBERS OF THE CABINET: The Hon'ble Sri T. T. Krishnamachari, with some of the members of the Madras Cabinet: (Left to right)—Hon'ble Sri M. A. Muthukavulu Nicker, Hon'ble Dr. U. Krishna Rao, Hon'ble Sri N. Ranga Reddi, Hon'ble Sri K. Kuttikrishnan Nair, Hon'ble Sri C. Subramaniam, Hon'ble Sri T. T. Krishnamachari, Hon'ble Sri S. B. P. Pattabhirama Rao, Hon'ble Sri D. Sanjeevayya and Hon'ble Sri N. Sankara Reddi.

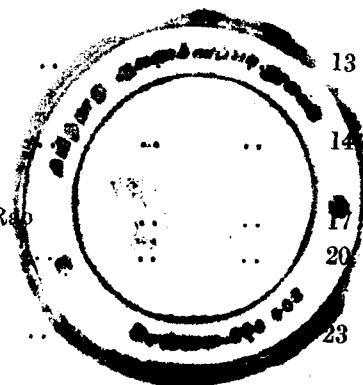
Madras Information

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COVER PAGE—

"Every twelfth person in our State is a weaver. Do not let him starve." This is the appeal made by the Chief Minister while exhorting the people of Madras to buy handloom cloth. Picture of a weaver at his loom illustrates our cover page.

Rice Decontrolled in Madras State

Free Market in Zonal Framework

By HON'BLE SRI C. RAJAGOPALACHARIAR, Chief Minister, Madras

State Divided into Six Zones

Now the zones are pretty large. They are :—

- (1) East Godavari, Visakhapatnam and Srikakulam.
- (2) West Godavari, Krishna, Nellore, Madras City, Chingleput, Chittoor and North Arcot.
- (3) Guntur, Anantapur, Cuddapah and Kurnool.
- (4) Tanjore, South Arcot, Tiruchirappalli, Ramanathapuram, Madurai, Coimbatore, Salem and Tirunelveli.
- (5) South Kanara.
- (6) Malabar and Nilgiris.

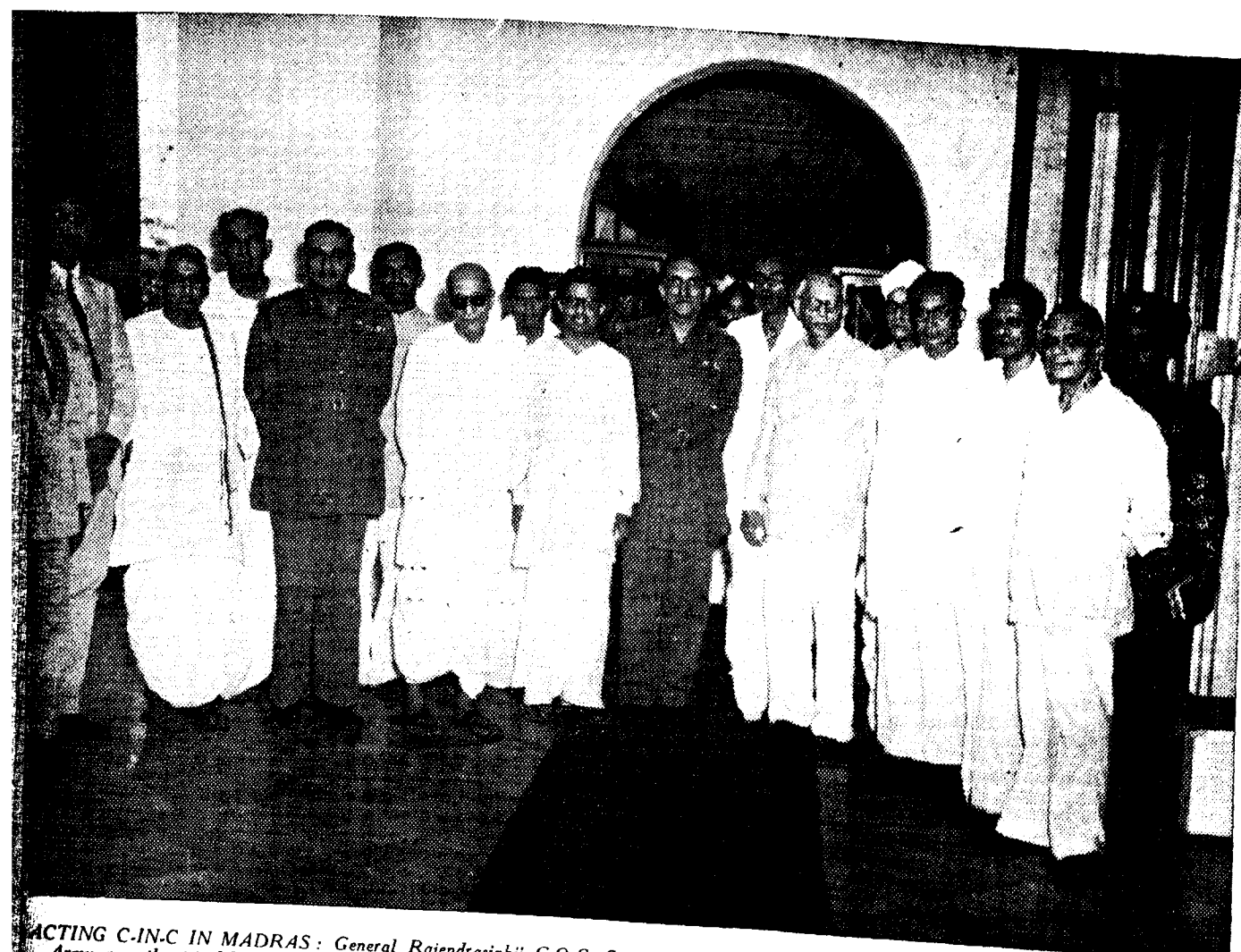
It will be seen that in group (1), East Godavari will supply Visakhapatnam and Srikakulam Districts through free trade and free movement. Similarly it will be seen that West Godavari, Krishna and Nellore will supply Madras City, Chingleput, Chittoor and North Arcot Districts. This zone will also include for supply purposes the Southern Railway grain-shops. In the third zone, Guntur will be the feeding district for Rayalaseema. In the fourth zone, the two surplus districts of Tanjore and South Arcot will feed the other districts in the zone through normal trade. The South Kanara District stands by itself being a self-sufficient area. The requirements of Malabar and Nilgiris will be met from imported rice, i.e., rice imported into Madras from outside. Malabar and Nilgiris are two highly deficit districts which have to be given special treatment. They have always depended on outside rice. The entire quota allotted to this State by the Centre will be allotted to meet the requirements of these two districts over and above their local production. The requirements of Hosdrug Sub-taluk will be met from imports along with Malabar and Nilgiris.

Ever since I took office I have been giving serious consideration to the system of procurement, control and distribution of food grains in our State. Every one is aware of the strong feeling among all sections of the people that the food administration is causing great harassment. Growers of food have no enthusiasm. There is plenty of evasion, which every one is aware of and no one is willing to prevent. After much deliberation we formulated a scheme of decontrol, which was discussed with the Central Food Minister. This scheme has now received the approval of the Government of India and will be brought into force forthwith.*

The Madras State will be divided into six zones, each zone with one or two surplus districts supplying through a free market the needs of the attached deficit districts. Within these zones, trade and movement will be free. There will be no control as regards price or as regards quantity of rice to be sold to any consumer or trader in the free market. There will be fair price shops where price and quantity to be sold will be regulated by Government. This is a safeguard against distress or sudden inconvenience. Movements from a place in one zone to any place in another zone by rail or motor vehicles will not be permitted except through permits. Within the zone however there will be no restriction. Between one zone and another transport by peasantry of small quantities by headloads or carts will not be interfered with.

* From the talk broadcast by the Hon'ble Chief Minister on June 6, 1952 at 9-30 p.m.

FOOD CONFERENCE : The Hon'ble Janab Rafi Ahmed Kidwai, Central Food Minister, with the Hon'ble Sri C. Rajagopalachari, Chief Minister, and officials of the Madras Government, at a Food Conference held recently in the Madras Secretariat



ACTING C-IN-C IN MADRAS : General Rajendrasinhji, G.O.C. Southern Command, and now Acting Commander-in-Chief, Indian Army, recently visited Madras City. He is seen here with the Hon'ble Chief Minister and other Ministers of the Madras Government.

ARE GIFTS : At a meeting organised by the Guild of Services, at the Government House Estate, Madras City, the Hon'ble Sri C. Subramaniam, Minister for Food and Finance, distributed food gifts, multipurpose tablets and implements donated by CARE, to various social service organizations.



Procurement of Rice Given up

Government procurement of rice in East Godavari, West Godavari, Krishna, Guntur, Nellore, Tanjore, Malabar and Nilgiris will be given up forthwith. So also the levy system of procurement prevailing in South Arcot, South Kanara, Madurai, Tiruchirappalli and Srikakulam will be given up. Statutory rationing will be abolished throughout the State.

Although the present system of procurement in Malabar and Nilgiris is to be given up and the rice so procured hereafter will move through the normal trade channels, informal rationing will be continued in these highly deficit districts as well as in Hosdurg Sub-tahsil of South Kanara through fair price shops through which the imported rice quota which is wholly allotted to these areas will be distributed to consumers.

Statutory Rationing to Cease

It will thus be seen that in all municipal and urban areas, where there has been statutory rationing so far, this system will now cease. Some ration shops will function as fair price shops and through these shops rice will be available to consumers on an informal rationing basis, until in the free market rice is available to consumers in adequate measure. There is no need therefore for any alarm in the areas hitherto under rationing. Every change is necessarily attended with some inconvenience at the outset.

But the change is certainly worthwhile. In the municipal areas of surplus districts informal rationing now obtaining will be abolished. In the fair price shops the existing scale of rations will continue to be issued on the existing ration cards until the free market settles down. So also in the informally rationed areas of Malabar and Nilgiris the existing scale will continue to be issued on the existing ration cards. After some time, which is estimated to be four weeks, the scale can be reduced as the free market rice becomes available in adequate measure.

The existing stock of rice at the disposal of Government, which is about 4½ lakhs tons, will be utilised for disposal through our fair price shops. Wholesalers who are now handling the reserve stocks of Government and retailers who will manage the fair price shops will not be allowed to deal in the open market rice.

Reserve Stock of Rice

In order to meet any emergency, we have kept our present stock of 4½ lakhs of tons of rice in reserve so that we may rush to any part of the State quantities required for meeting any emergency as well as for distributing rice through fair price shops. For the coming year, it is proposed to build up an annual stock of 1½ lakhs of tons by an easy levy system in a few surplus districts, in order to serve as an emergency reserve.

Locally produced millets have already been decontrolled in the State. We have now decided that the sale of imported wheat and milo should also be completely decontrolled and derationed. The State will receive supplies from the Government of India and distribute them amongst wholesalers and co-operative societies selected by the Collector of each district. These wholesalers and co-operative societies will be allowed to deal with these grains and supply them to merchants for

distribution to the consumers. There will be no control over the sale price of wheat. As regards milo, we shall sell milo at specified prices in order to pass the benefit of the Government of India's subsidy to the consumers. There will be no limit to the quantity of wheat and milo that any consumer may buy. Some reserve stocks of wheat and milo will be kept by the Government in a few places in order to meet any emergency.

Madras Leads the Way

Although I have been meeting the keen and bright representatives of the Press once every fortnight, I have not been sharing my ideas with them on this subject of procurement and rationing. Indeed, it may be said that I have been in a measure even misleading them. I did not wish to take the risks of premature publication of our ideas. I was afraid of the great monster "Greed" whose shadow is upon our unfortunate society in all departments. I did not wish exploiters to take advantage of any half-baked proposals and ideas.

Further, I could not in this matter be sure of the final decision, as the considered approval of the Central Government was necessary, before any new policy could be started. The Central Food Minister of India, who was here at my request the other day, has obtained the approval of the Central Economic Committee of the Cabinet in New Delhi. Madras may take credit for having led the way to the restoration of freedom of movement and trade in foodgrains. We have the full moral support of the Prime Minister of India and his advisers.

Appeal to Farmers and Dealers

Farmers and dealers, you will no longer be under harassing restrictions. May God protect us from greedy thoughts and ward off all ill-luck from our path!

There is enough food in the land, if we are careful and avoid waste. The restrictions we have borne all these years have taught us how to be careful and how to exercise restraint. We should not lose the good habits we have acquired under compulsion. Those who raise foodcrops with considerable difficulty and anxiety and those wholesalers who buy and store the grains, and the numerous traders who distribute them among consumers should all consider themselves as trustees and patriotic citizens of the Republic and comrades of the Government. Unwatched and unharassed by officials we should all endeavour to demonstrate that we can be honest and patriotic and God-fearing and prove ourselves worthy of the trust imposed on us. I am confident that my hopes will not be belied. I have taken a great risk and my Colleagues have agreed to it and the Prime Minister of India and his Cabinet have approved of the venture we are taking. I hope and trust you will not let me down. Opinion among decent grain merchants in every town and city should guard and protect me.

Farmers, may God bless you! You may now take your grain to any place, anywhere and sell it as you like to anyone, anywhere, and no one shall interfere with you in any way. There is no need to hide and walk under cover, as if you did not own what you possessed. You are free and can dispose as you choose of what is yours.

(By Courtesy, A.I.R., Madras)

Extension Service in Agriculture

By SRI N. MURUGESA MUDALIAR, Deputy Secretary, Department of Food and Agriculture, Government of Madras

Those of you who have followed the recent discussions on Agriculture and glanced at the Reports of the Fiscal and Planning Commissions would have observed the importance that is coming to be attached to Extension Service in Agriculture and Rural Extension Service generally. The term 'Extension Service' is, however, nowhere precisely defined, and consequently it might convey different ideas or at any rate it might not precisely specify the role that Extension has to play. My intention in this talk is to give an account of the Extension Service in countries like America and the United Kingdom where it has been developed for a number of years, and touch upon the scope for development in this country.

According to an American definition, "Extension is simply the effort to put the vital information of the Agricultural Scientist, whether he be physical or social scientist, at the disposal of the farmer and his wife". It is "a battle to narrow the gap between ever advancing knowledge and practice". Extension is therefore simply a word used "to indicate the whole complex of activities which enter into a programme which is educational in its policy, its focus, its objectives and its methods". The term Extension Service as applied in the United States was not used in the United Kingdom and other countries, but the same field of work was being carried out more or less. Agricultural Science has advanced considerably during the past 60 years. If the existing knowledge made available by the Agricultural Scientists, viz., the Plant Breeder, the Chemist and the Farm Economist, was put into universal practice, there would be a significant rise in production; but, actually, this knowledge has not been put across to agriculturists by more than a small portion.

Extension Service, therefore, addresses itself to the problem of conveying to the farmer the results of research workers in their laboratories, research stations and agricultural colleges. But Extension Service is something more than mere communication of information or ideas to the farmers. It aims at entering into the life of the farmer both in his farm and in his home to discuss with him his problems, to give solutions to them and actually working with him.

County Agents in America

The conception of Extension work in the United States was developed nearly 40 years ago following the enactment in 1914 of the Federal Law, known as the Co-operative Agricultural Extension Act, and popularly as the Smith-Lever Act. Extension work started in a small way. The Federal and State appropriations for the purpose barely exceeded two million dollars. In 1944-45, the cost of Extension was estimated at 87 million dollars. It dealt with a population of about 30 millions located on six million farms and other rural areas. The key person in the Agricultural Extension Organization in the United States is the County Extension Agent who works and lives among the people whom he serves. These Agents include not only Agricultural Extension Agents, but also Home

Extension Economists. The former work with the farmers and the rural youths and the latter with rural women. The Agents who work among the youths are generally known as the 4 H Club Agents.

All these Agents are carefully selected men who have a love for country life and are graduates of Agricultural Colleges or in Home Economics. They look for help in their technical problems from the Extension Specialists employed by the State Agricultural Colleges. These Specialists visit the counties from time to time to acquaint the County Agents with the latest results attained at their Experimental Stations in agronomy, horticulture, dairying, animal husbandry and so forth. Every State has got an Extension Director appointed by the State Agricultural Colleges. The Federal Government has a team of Technical Specialists who help the States in their plans for Extension work and carry to the States the findings of the Federal Research Departments.

Voluntary Enlistment of Workers

The most important thing to be noticed in the County Extension Agents' approach to their work is the voluntary enlistment of successful farmers, farm-women, rural teachers and other interested rural workers as co-operators to carry the messages of better farming and better homes. These voluntary workers known as the 'local leaders' are trained by the Extension Agents and they are the backbone of the Extension Organization in America. The Extension Agents not only channel down information for better agriculture and better homes by keeping face-to-face contact with the farmer and his family, but also carry out demonstrations, which are of two kinds, viz., demonstration of method and demonstration of results. The demonstration of method merely teaches, while the demonstration of results establishes confidence in the practices recommended. The latter is usually conducted through the help of a progressive farmer so that he not only learns by doing himself but also makes his neighbours do by telling them what he himself was able to do. The result of the demonstration might be to illustrate the increased yield by application of fertilisers, higher milking yield by correct feeding of milching animals or correcting underweight of children by improved nutrition—all the matters in which the farmer and his family are intensely interested.

The Second World War broadened the interest of the farm people and they realised that the problems they faced were related to national and international conditions. Extension work thus became an important factor in a social change and transformation. It helped the rural population to discuss their problems in their clubs and group meetings, plan their programme and achieve results with the help and guidance of the official agencies. This identification and partnership is the most significant role of the Extension Service in America.

Farm Institutes in Britain

In the United Kingdom, the Development Fund Act of 1909 fostered research and the spread of agricultural

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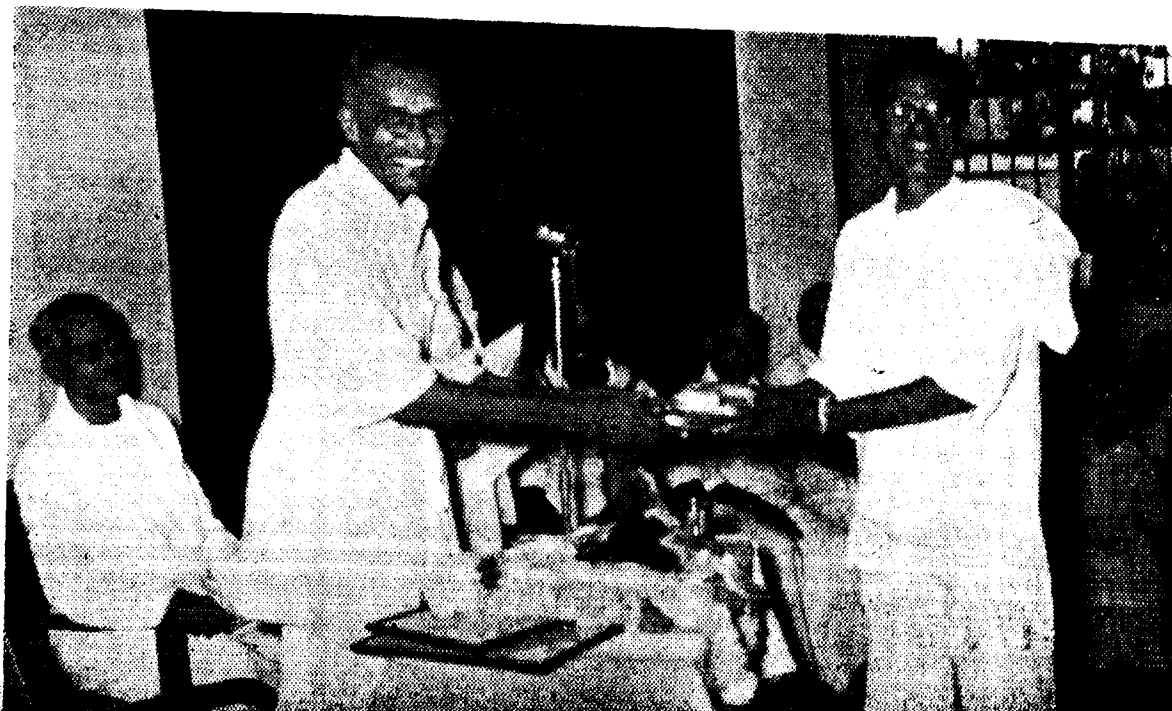
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education with State financial assistance. It also developed the formation of Farm Institutes to supplement agricultural institutions. Up to the outbreak of the last war, Extension work was carried out by two Agencies, viz., the County Agricultural Service and Agricultural Advisory Service. The County was divided into a number of Advisory Provinces, with headquarters at an Agricultural College or the University Department of Agriculture. The Specialists like Agricultural Chemists, Mycologists and Entomologists stationed at these centres, acted as consultants to the County Agricultural staff.

The County Agricultural Service was a local service and the Chief Officer was called the Agricultural Organiser. Some of these counties have Farm Institutes which provided agricultural education for boys and girls and the farms attached to these Institutes served as demonstration units where the results of the research work were tried out and tested under local conditions. The Institutes also provided a forum for discussions by farmers and served as the headquarters for Young Farmers' Clubs and such other organizations. The Committee of the County Council responsible for Extension work was largely composed of farmers, and the Agricultural Organiser appointed by the Committee was associated with activities like talks, lectures, educational films, etc. The Extension Service not only provided technical advice to farmers but also developed a spirit of leadership among them. During the last war which demanded an immediate increase in the home production of food, War Agricultural Executive Committees were set up for each county and their job was to execute the Government's agricultural policy. The membership of the Committee was small and most of them were farmers or land-owners.

The Technical Sub-Committee of the Committee was mainly responsible for all the duties of the Extension Service.

CROP COMPETITION—DISTRICT PRIZE-WINNER: The Hon'ble Dr. R. Naganna Goud, Minister for Agriculture, presents the District prize in the crop competition to Sri S. V. Sambandam of Chingleput District who grew 6,700 lb. of paddy per acre.



Common National Purpose

The most important result of this war-time organization was that the farmers were put to the necessity of planning and executing their programmes and of working as a team with fellow-farmers for a common national purpose. The War Agricultural Executive Committees carried out a survey of all the farms and graded them according to the degree of efficiency in their management. It was the duty of the Committees to raise the efficiency of the farms up to the maximum. The farms were visited by the technical officers of the Committee at frequent intervals to give technical advice and supplies necessary. The Extension staff also maintained farm production records to watch the promotion of farms in the lower grade to the higher. This war-time organization which gave exceedingly good results has now been organized into a National Agricultural Advisory Service.

In Canada while the Federal Government is in charge of research and the enactment of various laws, the provincial departments are mainly in charge of agricultural education and Extension. In all the provinces what are called illustration farms are run by the Federal Government. These farms belong to private farmers who enter into an agreement with the Federal Government to carry out trials of new improved cultural and manurial methods and remedial methods for controlling insect pests and fungus diseases. These farms are subsidised by the Federal Government subject to a maximum of 300 dollars per farmer. As in America 4-H Clubs are organized for the sons and daughters of the farmers and Agricultural Associations for adults. State contribution is given to these associations on the basis of membership up to a maximum limit of 100 dollars.

Royal Commission Report on India

Now let us turn to India. The report of the Royal Commission on Agriculture in India, 1928, placed consider-

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Diesel Engine for Winner

The Government of India have notified that Messrs. Amar Daxini and Sons of Bombay have donated a Diesel Engine worth Rs. 2,100 to be awarded to the All India Prize winner in paddy crop during 1951-52. The prize will be in addition to an award of Rs. 5,000 declared by the Government of India.

to adopting the results of research recommended, within his own means and with the aids provided by Government, but he is too shy to approach official agencies and explain his problems and difficulties.

Need for Official Guidance

Further, the average farmer is a person of very restricted means and he cannot afford to incur extra expenses on improved techniques. He lives in perpetual fear of loss or debt. The result has been that in spite of the assistance given by Government and the increase in official staff, agricultural production has not registered as much increase as could be wished. Certain recent experiments have revealed that the response of the agriculturists was wonderful if the official agencies could reside in villages and work with them and guide them in the day-to-day work and inspire confidence by securing joint village participation. The need for a different methodology in demonstration and propaganda thus became manifest in order to realise the production programme of the country.

The Indian Council of Agricultural Research which was mainly concerned with the development of research has

TALUK PRIZE-WINNERS: Three of the prize-winners. The Taluk Prize-winners in the Crop Competition were Sri S. V. Sambandam of Chingleput Taluk (also District Prize-winner), Sri Ayyaswami Mudaliar of Madurantakam Taluk (6,527 lb. per acre), Sri Doraiswami Mudaliar of Tiruvellore Taluk (4,700 lb. per acre) and Sri Jagannatha Chetty of Sriperumbudur Taluk (5,140 lb. per acre).



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amended its constitution last year to provide for an Extension Board as a counterpart to its Board of Research to organise an extension programme on a nation-wide scale. It has appointed an Extension Commissioner and has asked the States to appoint similar Extension Directors to be solely in charge of Extension activities in order to have a co-ordinated scheme of Extension. The Council has also suggested to the States to organise a land army of voluntary workers to maintain contact with the Extension Agencies and the enterprising farmer who is the pivot for all agricultural reform and land transformation.

Extension Work in Madras State

In the Madras State we anticipated the need for honorary workers and have already appointed progressive and influential farmers as honorary propagandists to concentrate on the propagation of improved methods of farming in their local areas. Model farms have also been organised in each taluk as illustration farms and village co-operative societies are being converted as far as possible into multi-

purpose societies to introduce better farming methods by taking up village survey, reclamation of waste lands and supply of fertilisers, seeds and implements. In order to integrate and focus greater attention on Extension work, a Board of Extension has just been ordered to be constituted and an Extension Director is also being appointed.

There are possibilities of the rapid development of Extension work under the recent Indo-American Technical Assistance Agreement and similar assistance by the F.A.O. and under the Colombo Plan. Fifty rural-cum-urban Community Projects are contemplated to be set up in different parts of the country of which Madras is expected to have at least five. In these selected areas, intensive work will be done to improve the living of the rural people. Extension Service will fail, if it does not touch the whole life of the rural community and it will also fail if we do not put our hands as well as heart to the work. As is aptly said, Extension is what Extension does and what it does will depend upon the will and determination of the people and the Administration. (By Courtesy, A.I.R., Madras)

Food Offences and Punishments Awarded

During the fortnight ending March 31, 1952, 642 cases of prosecutions against food offences were disposed of in the Madras State, except in the districts of Bellary, Chittoor and Nellore. The accused persons in these cases were people of all classes. Fines ranging from Re. 1 to Rs. 450 and sentences of imprisonment up to six months were imposed.

T. Sriramulu of Krishna District was awarded a fine of Rs. 200 or two months' simple imprisonment, for failure to comply with the directions of the Government in the dealing of foodgrains. In Madras City, Muthumalai Nadar, ration-shop-keeper, Chintadripet, was sentenced to undergo imprisonment till the rising of the Court and also to pay a fine of Rs. 200 or rigorous imprisonment for two months, for illegal disposal of ration articles.

For failure to sell surplus paddy to the agent authorised by the Government, P. Alavikutty, cultivator, Kalikavu, Malabar District, was fined Rs. 450 or four months' rigorous imprisonment. In the same district, Alavai Kunhivulla was fined Rs. 250 or rigorous imprisonment for two months, for illegal transport of 24 paras and 3 edangalis of paddy. A fine of Rs. 200 or three months' rigorous imprisonment was imposed on Eda Pitchiah of Angalakuduru and K. Subba Rau of Pedagalavamu of Guntur District, for running a mill without a licence, hulling of paddy without permits and non-maintenance of accounts. In the same district, P. Satyanarayana, a businessman of Rudravaram, was fined Rs. 200 with simple imprisonment till the rising of the Court, for possession of excess stock of foodgrains.

S. Satyam of Thogummi of West Godavari District, who stored rice without licence under

the Madras Foodgrains Control Order, was awarded rigorous imprisonment for six months and also fined Rs. 300, in default rigorous imprisonment for six months. For unauthorised transport of foodgrains, G. Appalaraju and two others of East Godavari District were each fined Rs. 200 or rigorous imprisonment for three months.

During the same fortnight, other departmental punishments such as warnings, fines, forfeiture and enhancement of security deposits, suspension or cancellation of retail and wholesale licences, etc., were also awarded to persons, who were dealing in foodgrains, in 238 cases.

During the fortnight ending April 15, 1952, 382 cases of prosecutions against food offences were disposed of in the Madras State (except in the districts of Bellary, Chittoor, West Godavari and Nellore). The accused persons in these cases were people of all classes. Fines ranging from Re. 1 to Rs. 300 and sentences of imprisonment up to two months, were imposed.

Nagu Naika, Nire village, Karkal Taluk, South Kanara District, was fined Rs. 300 or rigorous imprisonment for three months, for non-delivery of surplus foodgrains to Government. A fine of Rs. 200 or rigorous imprisonment for three months was imposed on each of Nalla Veeraiah, Amartalur and Pavaluri Ramulu of Govada, Guntur District, for running a huller mill without a licence, hulling paddy without permits and non-maintenance of accounts.

During the same fortnight, other departmental punishments such as warnings, fines, forfeiture or enhancement of security deposits, suspension or cancellation of retail and wholesale licences, etc., were also awarded to persons, who were dealing in foodgrains, in 154 cases.

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Irrigating Cotton in Rice Fallows

In order to make this State self-sufficient in cotton, extensive propaganda is being done in Tanjore District for sowing P. 216 F. cotton in rice fallows. Growing cotton in between two rice crops will not only improve the economic condition of the cultivator but also improve the yield of the succeeding rice crop due to the addition of a liberal quantity of leaves amounting to 5,000 lb. per acre.

Cotton in summer requires about ten waterings during the five months of its growth. This could be minimised if there are periodical rains. In Tanjore District, there seems to be an unfailing underground water in the rice fallows at varying depths between 20 feet to 30 feet. Sinking wells in these sandy soils will be costly and also present peculiar disadvantages. This could be avoided with the help of filter points. More than 20 filter points have been driven in this district and are being utilised for pumping water for cotton crop. In places where sinking wells is not economical or possible these filter points could be used with advantage.

The State Agricultural Department has undertaken the work of erecting filter points for all ryots who want to benefit by them. The actual cost of material used and a nominal departmental charge is being levied. Also, preference is being given for getting oil engines on hire-purchase system for those erecting filter points.

For further particulars and advice all ryots in Tanjore District are requested to contact the Assistant Agricultural Engineer, Tube Wells Scheme, Mayuram.



COTTON IN RICE FALLOW: In Tanjore District, ryots are encouraged to grow cotton in rice fallows. Here is an experimental crop in the Agatharai Farm.



IMPROVES RICE YIELD: Cotton cultivation improves the yield of the succeeding rice crop by addition of liberal quantity of leaves amounting to about 5,000 lb. per acre.

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CASH CROP: P 216 F cotton crop cultivated on a farm in Vadaver. Ryots gain by growing cotton between two rice crops.

Notes for Farmers

Grow More Food Schemes in South Arcot

Nearly 9,700 tons of additional foodgrains are estimated to be produced as a result of the implementation of Grow More Food Schemes in South Arcot District.

Seventeen borewell schemes and 67 artesian wells have been completed successfully to tap the artesian springs in the region, thus bringing under cultivation an extent of 3,393 acres; 23 minor irrigation schemes, works regarding three new tanks and repairs to 68 old tanks were completed. Forty-eight wells have been sunk during the month of March alone, bringing the total number of wells sunk so far in the district to 3,006.

Irrigation facilities were provided with the aid of 329 units of oil engine-pumpsets and 288 units of electric motor pumpsets, to nearly 9,000 acres of land. Nine tractors were in operation, bringing under the plough 210 acres of land. Due to the supply of chemical manures such as ammonium sulphate, superphosphate, etc., and compost manure, green manure and improved seeds, more than 63 acres were benefited, yielding an additional output of 3,000 tons of foodgrains.

Short Duration Paddy Crop

After rains, special arrangements have been made by the Agriculture Department to procure and supply short duration paddy variety to the agriculturists.

Experiments conducted by the Agriculture Department in raising short duration paddy crop were successful and the raising of 216F variety of cotton during the time sowed between one crop and the other, is becoming very popular in the Tanjore Delta area. Vast areas of land are now available in the fallow period for cotton cultivation, due to the popularity of the short duration paddy crop. In order to solve the problem of marketing and supply of seeds to the ryots, the Tanjore Delta Cotton Marketing Society is being organised by the Agriculture and Co-operative Departments. The Minister for Agriculture inaugurated it at Aduthurai, Tanjore District, on June 17, 1952.

Subsidy for Superphosphates Suspended

The Government of Madras have decided not to subsidise any longer the sale of phosphatic manures in this State. The Joint Director of Agriculture has been requested to take immediate steps to discontinue the subsidy for the sale of superphosphates with immediate effect. Phosphatic fertilisers will be sold to the ryots in future at full prices.

Instalments Due on Tractors

The Government have directed that the collection of the instalments towards the cost of tractors, supplied to agriculturists under the hire purchase system, due in March 1951 in the areas affected by adverse seasonal conditions, be postponed by one instalment period, i.e., one year, without any additional interest being charged in the postponed period. The remaining instalments will also be postponed by one year without any interest in the postponed period.

Supply of Seeds to Schools and Land Colonisation Societies

The Government of Madras have sanctioned an expenditure not exceeding Rs. 4,000 (Rupees four thousand only) for the purchase of vegetable seeds by the Director of Agriculture for distribution to schools and land colonisation societies at half cost during 1952-1953.

Intensive Manuring Scheme Extended for Another Year

The Government have directed that the intensive manuring scheme, which provides for the grant of special interest-free loans to ryots for the purchase of chemical fertilisers, should be introduced in the following districts in 1952-53 also:

The entire districts of Srikakulam, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Nellore, South Arcot, Tanjore, Tiruchirappalli, Madurai, Tirunelveli, South Kanara, Malabar and Chingleput. Certain specified areas having an ayacut of 5,000 acres and above in the five districts mentioned below: Bellary, Kurnool, Cuddapah, Coimbatore and Salem.

Promising Dry Paddy

Budama culture No. 130 is a pureline selection from rainfed Budama paddy grown in the Eastern Delta of Godavari. It has been under trial for the last four years and has given higher yields ranging from 11 to 37 per cent over MTU 17 Kodi Budama Paddy, in the Agricultural Research Station, Samalkot. In the district trials it has given an increased yield of 33-1/3 per cent over MDU Kodi Budama. The duration of the crop is one hundred days and the rice is red. It is a promising type worth growing in rainfed areas.

Superior Saline Resistant Paddy

This culture is a cross between S. R. 26-B the popular saline resistant paddy and MTU 1. It is specially evolved for cultivation on saline soils. It gives very fine rice, has 208 days duration and is suitable for growing in the first crop season. It has given an average yield of 3,333 lb. grain per acre, i.e., 10 per cent over the SR 26-B.

Special Interest-Free Loans

The scheme for the grant of Special Interest-Free Loans to the seed farm ryots in select areas in the State for enabling the seed farm ryots to produce large quantities of improved paddy and millet seeds and to make them available to the Agricultural Department for distribution, has been extended by the Government for 1952-53 and till the end of June 1953.

Scheme for Uplift of Todas Extended

The Government have approved the continuance of the scheme 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, for a further period of one year from May 1, 1952.

Electricity Review for March 1952

Review of electricity work done in March 1952 is presented below:

Machkund Hydro-Electric Scheme.—Lands yet remain to be handed over. All the bridges and culverts in Lamput headworks road were completed and in Soguru-Jalaput road metalling was done for 5 miles 2½ furlongs. Works on bridges and culverts were progressing. In the diversion dam 17.28 per cent of work has been completed and in the flume channel 59.58 per cent of work was over. In the tunnel pond dam excavation in right flank was completed and 97 units of masonry were laid during the month besides 20 units of apron concrete for bucket portion.

In the pressure tunnel, concreting, lining and open cut excavation were completed. Erection of shuttering for first length at exit end of the flume tunnel was done and timber shutting for concreting was progressing. Grading valve house and penstock slopes and levelling transformer yard were in progress. Levelling for powerhouse area was completed and foundation excavation was in progress. At Jalaput foundation excavation for the main dam was in progress and 350 units of masonry have been completed for the upstream coffer dam on both sides and middle dividing wall. Construction of temporary buildings at Jalaput and permanent buildings in Onakudelli was progressing; 15 numbers penstock pipes were transported to site and some lighter packages of No. 1 generator set were transported to Machkund. Total labour force during the month was 6,623.

Moyar Hydro-Electric Scheme.—All civil works from headworks to powerhouse have been almost completed. The first generating set was undergoing heat run prior to tests before being put on commercial load. Erection of generator units 2 and 3 was progressing.

Pykara III Stage Extensions.—Construction of masonry for main dam and wing walls was in progress. Work on earthen dam and core wall was progressing. Erection of outlet pipes and valves was completed. All the required pipes for the erection of the penstock have been received at site and erection work up to anchor was completed. For the two distribution pipes, erection work was nearing completion. Erection of differential surge tank was almost completed. Foundation for the extension of powerhouse at Singare was already completed and erection of outdoor structure for Moyar bay was progressing.

Madurai Thermal Scheme.—Component parts of the 10,000 KW turbo set were being received and stored. Contracts for the works of foundation for the 10,000 KW turbo set and cooling pond have been awarded and the works have also been taken up.

South Kanara Scheme.—Tree valuation and preliminary alignment in Hiriadka-Udipi, Hiriadka-Karkal 33 KV line routes were progressing.

Tungabhadra Hydro-Electric Scheme.—Drilling operations for the investigation of soil at Canal powerhouse were continued. Detailed survey for transmission lines was proceeding. One hundred and seventy-nine miles of detailed reconnaissance and 217 miles of theodolite alignment and 229 miles of levelling were completed.

Madras Plant Extensions.—Building steel work was practically completed. Erection coat of red lead paint for the steel works was nearing completion. For boiler No. 4 brick work and sealing of boiler soot blower piping and erection of boiler mountings have been completed. The boiler No. 4 is getting ready for setting slow fires early in April. Erection of stator and rotor, fixing of packing and expanding of condenser tubes were progressing for the turbo alternator. Erection of steel work of coal conveyor 3 and wing tripper was progressing. Erection of 1 and 2 ash conveyors was completed.

Vijayavada and Visakhapatnam Powerhouse Extensions—Vijayavada.—Work on II raw water well was progressing. Excavation of the well was in progress. Sub-station staff quarters at Nellimerla Sub-station were taken up for execution.

Visakhapatnam.—The contractors have completed foundations for seven stanchions. Fabrication of steel structures for south wide extensions was in progress. Work on the 6th boiler foundations was entrusted to Messrs. Gannon, Dunkerley and Company.

Nellore Thermal Scheme.—Works connected with outdoor sub-stations at Nellore and Gudur were in progress. These are expected to be completed by July 1952 when the operation of the Nellore-Gudur line will be changed over from 11 KV to 33 KV.

Operation Branch

Hydro Areas.—The water conditions in hydro-electric areas continued to be unsatisfactory and the three Hydro-Electric Systems continued to run in parallel with the Madras Electricity System this month also taking relief from Madras to the maximum possible extent. The 25 per cent cut in consumption continued to be in force during this month. The number of units generated, peak load and services connected during the month in the three Hydro-Electric Systems were as follows:—

Name of System.	System peak load in K.W.	Generation in millions of units.	Services connected.		
			Agricultural.	Industrial.	Domestic.
Pykara ..	38,900	23.511	..	..	..
Mettur ..	36,300	9.338	92	..	132
Papanasam ..	20,500	* 11.866	54	10	103

* This includes 2.0741 million units generated at Madurai Thermal Station during the month.

Thermal Areas and Ceded Districts (Madras, Andhra and Rayalaseema Power Systems).—Supply conditions in the areas were satisfactory.

Chitrada Agraharam in Pendurti firka was energised during the month. The 11 KV line from Bobbarlanka to Amalapuram along with Amalapuram Distribution was energised on 27th March 1952. The 11 KV lines in Kadim firka from Kadim to Muramanda were energised on 28th March 1952. Veeravasaram, Dalla and Muram Uppada villages were given supply during the month. Samalkot railway station was electrified during the month.

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Supply to Nuttaki-Pedapalem area in the Vijayawada Division was also affected during the month.

The generation, peak load and the number of services connected up during the month in the several areas were as follows:—

Name of System.	System peak load in K.W.	Generation in millions of units.	Services connected.		
			Agricultural.	Industrial.	Domestic.
1 Madras ..	28,400	15.020	24	17	248
2 Vijayawada—					
Steam ..	8,280	3.682	12	..	13
Diesel ..	500	0.0038	..	..	..
3 Visakhapatnam—					
Steam ..	3,500	1.518	2	1	68
Diesel ..	900	0.120	..	..	..
4 Kakinada ..	720	0.0069	..	..	..
5 Rajahmundry ..	598	0.007	1	1	20
6 Narasaraopet ..	94	0.017	..	..	2
7 Srikakulam ..	104	0.016	..	..	4
8 Parvathipur ..	..	..	..	..	..
9 Ongole ..	98	0.019	..	1	17
10 Narasannapet ..	15	0.0029	..	..	..
11 Nellore ..	..	..	..	..	..
12 Proddatur ..	92	0.023	..	..	13
13 Kurnool ..	340	0.109	..	..	9
14 Anantapur ..	175	0.051	..	1	19
15 Cuddapah ..	205	0.075	..	6	29
16 Nandyal ..	110	0.019	..	2	43
17 Tadpatri ..	60	0.011	..	..	12
Power purchased from Mysore—					
18 Hindupur ..	190	..	..	..	..
19 Ceded Districts.	2,976	..	..	..	..

In the Madras Electricity System 71 D.C. services with an approximate connected load of 86.71 KWs were changed over to A.C. supply.

MACHKUND BOARD: The Hon'ble Sri C. Rajagopalachari, Chief Minister, with Members of the Machkund Board. The Hon'ble Sri Naba Krishna Choudhuri, Chief Minister of Orissa, and other officials of the Orissa Government, attended the meeting, to discuss the progress at Machkund, a joint enterprise undertaken by the Madras and Orissa Governments.



Schemes Sanctioned

The Government have sanctioned the following schemes:

Madras Electricity System.—(1) Extension of supply of electricity to 38 agricultural services and 19 domestic services for villages in Saidapet Taluk, Chingleput District, at an estimated cost of Rs. 1,38,800. (2) Extension of supply of electricity to 97 agricultural pumpsets, three industrial loads and 29 domestic services at Maduravayal, Vangaram, Chettiaragaram and Tandalam villages in Saidapet Taluk, Chingleput District, at an estimated cost of Rs. 2,62,700. (3) Extension of supply of electricity to 85 agricultural services at Damal, Melothivakkam and Pilapakkam villages in Kancheepuram Taluk, Chingleput District, at an estimated cost of Rs. 2,03,000. (4) Extension of supply of electricity to 61 agricultural services at Damal, Muttavakkam and Sirunaiperugal villages in Kancheepuram Taluk, Chingleput District, at an estimated cost of Rs. 1,75,700.

Mettur Electricity System.—(1) Extension of supply of electricity to 65 agricultural pumpsets and two industrial services at Sirukarambur, Ocheri, Ayarpady and Melpulam villages in Arkonam Taluk, North Arcot District, at an estimated cost of Rs. 2,08,100. (2) Extension of supply of electricity to 74 agricultural pumpsets and one additional load to the existing flour mill at Puder, and Annathangal villages in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 1,20,400. (3) Extension of supply of electricity to 55 agricultural pumpsets and three industrial loads for villages in Krishnagiri Taluk, Salem District, at an estimated cost of Rs. 1,90,700. (4) Extension of supply of electricity to 85 agricultural pumpsets, six industrial loads and 12 house service connections for villages in Puttur Taluk, Chittoor District, at an estimated cost of Rs. 2,26,800.

Pykara Electricity System.—Extension of supply to industrial load of 10 HP and house service connections totalling 106.7 K.W. for villages in Ootacamund Taluk, Nilgiris District, at an estimated cost of Rs. 2,32,000.

LAND REVENUE

13

MADRAS INFORMATION

Reduction of Rents in Estates

Prior to the passing of the Madras Estates Land (Reduction of Rent) Act, 1947, the rents levied by the landholders from their ryots were in many estates in this State substantially in excess of the assessment charged by the Government on similar lands in the neighbouring ryotwari areas and were far beyond the capacity of the ryots to pay. With a view to give immediate relief to the ryots till such time as the estates were finally taken over by the Government in accordance with their policy of estates abolition, the Madras Estates Land (Reduction of Rent) Act, 1947, was passed. The Act provides for the reduction of the rents payable by ryots in the estates governed by the Estates Land Act approximately to the level of the assessments levied in the ryotwari areas in the neighbourhood.

Rates of rent as reduced under the 1947 Act were payable either in cash or in kind or partly in cash and partly in kind according as the rent before the reduction was payable in cash or in kind or partly in kind and partly in cash. While the object of the Act was achieved more or less in the areas in which rent is payable in cash, it was not achieved in the areas where rent was payable in kind or partly in kind and partly in cash. As it was difficult to collect grain and store it, Government passed orders that the ryots should pay the value of the grain at the prevailing price declared by the Board of Revenue from time to time. On account of the rise in prices of food-grains, the aggregate money value of the rent payable in the latter areas even after reduction under the Act, was many times more than what it would have been if the rent had been payable entirely in cash.

Ryots paying rent in grain therefore made numerous representations to the Government that this anomaly and the hardship caused thereby should be removed. The Government recognized the justice of these representations and took steps to amend the Rent Reduction Act. The result is the Madras Estates Land (Reduction of Rent) Second Amendment Act, 1951, which provides that in estates where rent was originally payable in kind or partly in kind and partly in cash, the aggregate money value of the reduced rent for any class of land should not exceed the highest rate of ryotwari assessment for the same class of land in the district. The Amendment Act has been given retrospective effect so as to give relief to the ryots from the commencement of fasli 1357.

The ryotwari settlement of the estates taken over will take some time to be completed. Until then, it is not possible to say whether a particular grain rent field is similar to a land paying a cash rent or assessment of Rs. 10, Rs. 8 or Rs. 5. The provision restricting the aggregate money value of the rent to the highest ryotwari rate of the district was, therefore, adopted as a working arrangement until the ryotwari settlement of the areas in question.

The ryots in the grain rent areas in the estates taken over in the Pattukkottai Division of the Tanjore District have requested that the land revenue payable by them may be restricted to the highest ryotwari rate of the taluk. Compliance with this request at this stage is financially impossible in view of the commitments of Government in regard particularly to compensation to be paid to the old estate holders. No such concession has been shown to the ryots of similar areas in the estates in

the rest of this State. The Government regret they cannot therefore accede to the request.

Abolition of Zamins: Deposit of Advance Compensation

On behalf of the Government, the Director of Settlements, Madras, has deposited certain additional amounts towards advance compensation with the Chairman, Estates Abolition Tribunal, Vizianagaram and Chittoor, in respect of certain zamin and under-tenure estates, notified and taken over by Government. In respect of some other estates, the amounts already deposited have been withdrawn either in whole or in part. The names of the estates concerned, the amount deposited or withdrawn in respect of each estate, the date of the transaction and the reason for the same are published at pages 301-302 of Part II of the *Fort St. George Gazette*, dated 4th March 1952, and pages 399-401 of Part II of the *Fort St. George Gazette*, dated 25th March 1952.

Exemption from Water Cess

The Government have sanctioned the grant of exemption from water cess for a period of eight years from the year of plantation, for use of Government water in private and public topes, cultivated with all kinds of green manure and fuel trees in the Rayalaseema area and in the arid taluks of Coimbatore, Tirunelveli and Ramanathapuram Districts, subject to the conditions specified below:—

(1) That the plantation is azmoished by the Revenue Inspector or other suitable officer, who should verify the karnam's remarks in the adangal; and (2) that the remission will be granted for each fasli for a period of eight years from the fasli of plantation, provided that the trees are kept alive on these lands during that fasli.

The concession referred to above will apply to topes planted with tress in faslis 1361 and 1362, and will not apply to fruit bearing trees.

Inam Estates Notified

A large number of inam estates in Madras State which have been declared as inam estates by the Miscellaneous Settlement Officers under Section 9 of the Estates (Abolition and Conversion into Ryotwari) Act, 1948, have been notified and taken over by Government in two batches on October 1, 1951, and November 22, 1951, respectively. Some of these come within the scope of Section 38 of the Act, either wholly or in part and in respect of them only tasdik allowance, etc., for the entire village or part concerned, as the case may be, as prescribed in that Section, are payable annually to the institutions who held them immediately before the notified date. In respect of other cases where advance compensation was found to be payable, the Director of Settlements has, on behalf of the Government, deposited the amount payable with the Estate Abolition Tribunals concerned between March 21, 1951, and March 31, 1952. The name of the estate, the amount deposited in respect of it, the date of deposit and the name of the Estate Abolition Tribunal with which it is deposited are published at pages 579 to 590 of Part II of the *Fort St. George Gazette*, dated 7th May 1952.

What Cloth to Buy

By HON'BLE SRI C. RAJAGOPALACHARIAR,
Chief Minister, Madras



I have taken up a few minutes of All-India Radio * in order to make an appeal on behalf of the lakhs of families who are still engaged in what made India famous throughout the world in the old days, viz., the noble craft of weaving. The cottage handloom industry flourishes today as well as

it did in ancient times and the fingers of the weavers are as deft today as ever they were. There are more looms today than there were in the old days. There was no competition whatsoever in ancient days, but today there is a giant competitor in the shape of mill-manufactured cloth which has copied the handloom and like an ungrateful child seeks to kill the mother.

The handloom weavers of our State are some of the best craftsmen in the world. Is it not a great pity that they are suffering and their families are starving on account of want of purchasers of their cloth? Should men go and buy mill cloth leaving the handloom weavers in distress? I have no hesitation in assuring everyone that the cloth produced on the handloom in our State is as good cloth as any textile of that class produced by machinery. If it is a question as to whether one should buy mill cloth or handloom cloth, I have no hesitation in making my most earnest appeal that you should prefer the handloom cloth and feed the families of the handloom weavers who follow an honest and noble occupation.

Handlooms have Survived

In spite of many decades of competition handlooms have survived. The mill industry with plentiful capital and a strong organization for production and distribution and for propaganda, has not been able to kill the handloom, thanks to the fly-shuttle and to the traditional skill of our weaver families. The handloom has maintained its own against the mill and is not only not dead, but is quite able to supply plenty of cloth, and very good cloth and cloth which is attractive enough to suit the tastes of consumers of real good taste, both men and women. I am sorry the dyers by using cheap dyes have brought the reputation of handloom cloth down. Our people are very fastidious and particular about colour and it was criminal to let cheap dyes ruin the weavers' market.

Top to bottom : (1) Reeling the yarn into hanks. (2) Making the bobbins. (3) Stretching on the road. (4) Brushing the threads.

No mathematical calculations or economic doctrines can be a substitute for human happiness where numerous families are concerned, who follow a traditional occupation based on family apprenticeship. The State provides no workshops, no training centres and no educational facilities. Everything is provided in the little cottage of the weaver and in his family life. No call is made on the State for land or capital or training institutes or supervision. This national asset we should not lose or allow to be destroyed by neglect.

No Letting Down of Khadi

My appeal on behalf of the handloom should not be understood to be a letting down of Khadi. A social welfare movement should not deteriorate into an obscurantist-denominational doctrine or metaphysics. The weaver prefers to use mill yarn. Let him do it for it enables him to produce enough to maintain himself against the competition of the weaving mills. Khadi is also handloom cloth. The appeal on behalf of the handloom is automatically an appeal on behalf of Khadi also.

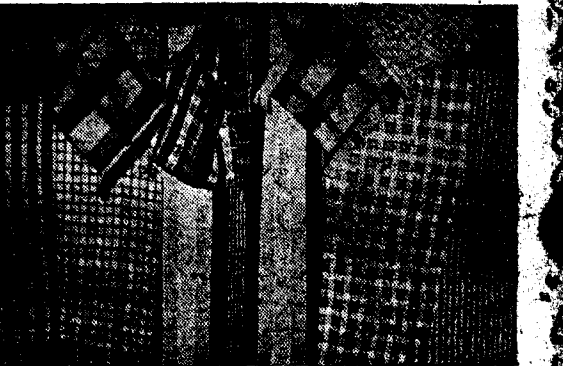
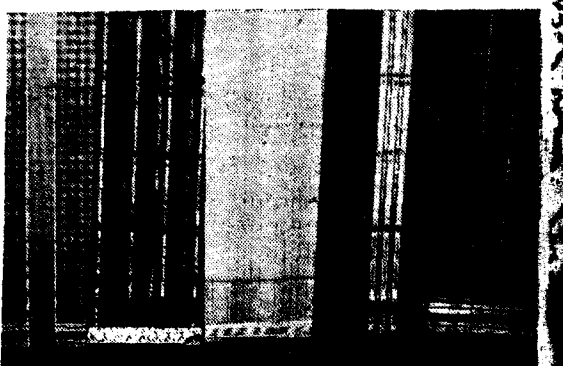
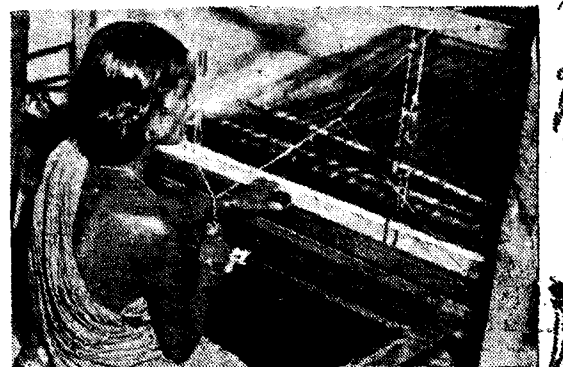
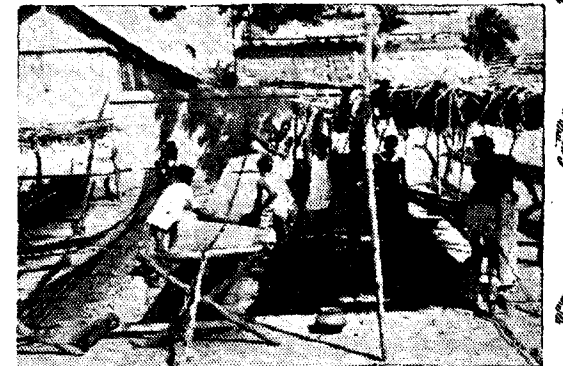
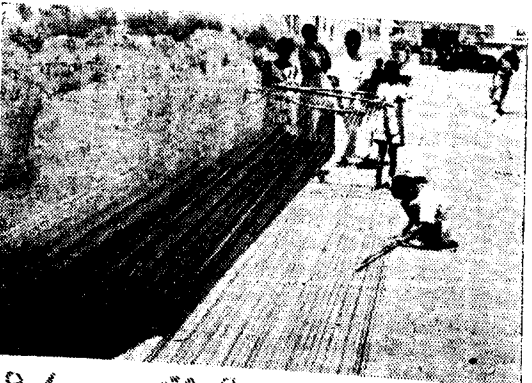
Let any weaver buy any hand-spun yarn that might be offered for disposal and made available to the weaver. If it is good cheap yarn, he will buy and use it up. Let him mix it as he likes with such mill yarn as he finds it necessary to use. Let us leave the matter entirely to the skilful weaver who knows his business. Let him adjust his materials and his requirements. Only, let us insist that he should not call his product by the name of 'Khadi' if he has used mill yarn or mixed mill yarn with hand spun. If he does not tell people that his cloth is pure hand spun, we need not put obstructions in the way of his normal weaving business. Both hand-spun yarn and mill-spun yarn may be woven on the handloom and the cloth is handloom cloth, though not Khadi or called by that name.

We Must Save Handloom Weavers

I earnestly appeal to everyone to patronise handloom cloth wherever it may be available and for every purpose for which it can be used, in preference to mill-cloth. We should help the weak. We should save the handloom weavers and their families from starvation. We can make everything we wish out of handloom cloth, provided we pay a little attention.

No subsidies and other help can come up to the help that the public can give. Ultimately any subsidy can help only if the public will buy. If the people decide to help the handloom weaver and buy his cloth which is both durable and decent, our handloom weavers need not be unhappy. One out of every twelve families in our State is a weaving family that desires to maintain itself on honest labour and seeks to clothe the people for a very moderate wage. The children are brought up in the family craft without any assistance from the general public or the State. A part of the house is the workshop and family life is not broken up or endangered as in the case of factory work. A self-respecting and self-supporting section of the population of the order of six million appeals to you, and the appeal cannot be rejected. Buy handloom cloth

Top to bottom : (1) View of the brushing-yard, (2) At the loom, (3) Handloom saris with dazzling borders and attractive palloo, (4) Gay checks pattern handloom curtains, bedspreads and hand-bags.



INDUSTRIES

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MADRAS INFORMATION

whenever you want cloth. Do not let mill-cloth printed and made up to appear like handloom cloth attract you. Do not be deceived by such imitations. It would be a crime—deliberately to prefer the imitation to the real hand-woven cloth.

Freedom and political rights must rest on occupational balance. Political freedom cannot but break down if we neglect the foundations of national life. Every twelfth person in our State is a weaver. Do not let him starve.

(By Courtesy, A.I.R., Madras)

*From the Broadcast by the Hon'ble Chief Minister, at A.I.R., Madras, on June 11, 1952, at 9-30 p.m.

Minimum Rates of Wages in Scented and Chewing Tobacco Manufactories

The Government have fixed, with effect from March 31, 1952, the minimum rates of wages payable for each class of work in respect of employees, working in any scented and chewing tobacco manufactory.

Exempted from Sales Tax

The Government have directed that the textile dyeing and printing works should be exempted from the liability to sales tax from the year 1951-52.



AT THE WHEEL: Veteran hands ply the wheel to prepare hanks of yarn.

Aid to Village Artisans in Rayalaseema

The Government have permitted the Director of Industries and Commerce, Madras, to sanction loans not exceeding Rs. 100 to each of the artisans in famine-affected areas of Rayalaseema, on his personal security, provided the applicant is a bona fide and deserving artisan.

This action has been taken in order to alleviate the sufferings of the village artisans in the famine-affected areas of Rayalaseema and to rehabilitate them.

Postwar Services Reconstruction Fund

The Government have nominated the Hon'ble Dr. U. Krishna Rao, Minister for Industries and Labour, as a member of the Committee of Administration of Madras Share of the Postwar Services Reconstruction Fund, in the vacancy caused by the resignation of Sri H. Sitarama Reddi from the Cabinet.

RURAL RECONSTRUCTION

17

MADRAS INFORMATION

Enriching Village Life

By HON'BLE SRI S. B. P. PATTABHIRAMA RAO, Minister for Rural Welfare

"If the inertia of centuries has to be overcome, it is essential that all the resources at the disposal of the State should be brought to bear on the problem of rural welfare. What is required is an organised and sustained effort by all those departments whose activities touch the lives and the surroundings of the rural population." This is what the Royal Commission on Agriculture has said and what the Rural Welfare Scheme of our Government aims at doing.

What is rural welfare? Where exactly should we begin and what should we tackle first? These are questions which naturally arise in the minds of all those who are interested in the welfare of the villages. Rural welfare consists, in general, of everything necessary for or conducive to the safety, health, convenience and education of the rural population. Any programme for rural welfare should, therefore, naturally include provision of water-supply, communications, sanitation, medical relief, agriculture, cottage industries and education. The remedy for the present deterioration in village life lies in, (i) increasing production both of the soil and of cottage industries, (ii) reduction of waste, (iii) improvement of health and (iv) putting the home right—that is to say, educating and training the women so that they can run their homes and bring up their children as they should. The first two go together. It is no use trying to increase the wealth of the people if they still go on wasting their wealth in litigation and expensive social ceremonies. Where the people are well off, we need not bother about the first part of the remedy but concentrate immediately on the other three; where the people are poor, it is no use trying to teach better things unless we can also help them to increase the food supply by better farming and subsidiary occupations.

New Life in the Villages

Health is wealth. Cleanliness is the beginning of health. Cleanliness of person, of home and of village means a conscious desire to rise to better things. No less important than cleanliness is the education of the girls in all the domestic duties. Village uplift means work for all. The best educative propaganda is done by those who themselves live the new life in the village.

Like all experiments, the Rural Welfare Scheme may involve the making of mistakes and mistakes must naturally be paid for, but without experiments and mistakes no progress can ever be made. The attempt itself will provide the stimulus and the opportunity for study and, through them, for progressive improvement in the technique to be used. We can travel along the road to rural uplift at a speed with which the people themselves can keep pace and not faster. The pace of movement has to be set by the villagers themselves. It is useless to plan ahead of men and money. Once a policy is worked out and a programme of rural reconstruction suitable to a place is drawn up, the actual task must be carried out by representatives of the people themselves. What could be achieved by the people themselves has been strikingly demonstrated in several places. The programme must be

simple and practical and must not be beyond the people's ideas to command respect.

Scope and Objectives of Scheme

The Rural Welfare Scheme provides the necessary leadership and technical knowledge and tries to persuade villagers to give free labour for works of common interest to the village. The scheme was first started in 34 selected areas in 1946 and was later extended to 50 more firkas in 1950. The scheme is implemented by the Collectors of the districts with the assistance of Rural Welfare Officers. Two or three firkas in each district are put in charge of a Rural Welfare Officer who is of the grade of a Deputy Tahsildar. He is assisted by about ten Grama Sevaks of the status of a Revenue Inspector. Each Grama Sevak is in charge of a group of five to ten villages into which each firkha has been divided. To assist them in the actual execution of works, Government have sanctioned technical staff such as P.W.D. Supervisors, Minor Irrigation Overseers, Agricultural fieldmen, Junior Inspectors of Co-operative Societies and the like.

If the scheme is not to become abortive, the first task is to ensure that the nucleus of administration is sound. The main administrative requirements of planning are—right recruitment, right training, right allocation. The Government have kept these requirements in view in organising the administrative machinery. Substantial work has been done in these villages during the last five years with the assistance of the villagers, the departments of the Government and the special staff appointed for the purpose. It will not be possible for me, in this short talk, to catalogue the various works done under the Rural Welfare Scheme, but I shall attempt to refer briefly to the principal items of work done till now.

Principal Items of Work Undertaken

Under this scheme, provision of drinking water-supply in the villages receives the highest priority and the proposals consist of repairing and renovating existing and old sources of supply and sinking of new wells: 658 new wells were sunk and 654 old wells were repaired.

Special attention has been paid to the improvement of village communications: 568 miles of roads have so far been constructed and 116 miles of roads were improved while cart-tracks, village rathas and footpaths were formed to a length of 111 miles. In order to make these roads passable, 329 culverts and 120 road dams and foot-bridges had to be constructed. Side by side, the post-war road development programme of the Highways Department, in so far as it relates to the selected areas, is being pushed through vigorously.

Under agriculture, the main object is to increase the productivity of lands by such means as supply of better seeds and manure, protection of crops against pests and diseases, use of better implements and better livestock and by the utilization of waste lands. Seeds and implements are supplied at half the cost price. Farmers are encouraged to manufacture compost and farmyard manure for their

Non-Official Members of Rayalaseema Development Board

The Government have nominated the following gentlemen from the districts noted against them as non-official members of the Rayalaseema Development Board, reconstituted in the Order, dated May 3, 1952. The members will hold office till December 1, 1954.

Anantapur District.—Sri K. V. Vema Reddi, M.L.A. and Sri Kallur Subba Rao; *Bellary District.*—Sri Kotrabasavana Goud, M.L.A. and Sri Y. Mahabaleswarappa, M.L.C.; *Cuddapah District.*—Sri V. Chidanandam, M.L.A. and Sri P. Parthasarathy; *Chittoor District.*—Sri P. Thimma Reddy, M.L.A. and Sri N. P. Chengalraya Naidu; *Kurnool District.*—Sri K. Venkata Setty, M.L.A., Sri P. V. Subba Reddi, Sri H. Sitarama Reddi, M.P., Sri N. Sanjeeva Reddi, R. Suryanarayana Rao and Sri T. N. Raghunatha Reddi.

nes. In order to give them practical lessons, 71 model agricultural farms and 794 demonstration plots were started.

To improve the cattle wealth of the village, the village livestock improvement scheme has been introduced in select centres, and stud bulls and rams have been supplied to the villagers.

Irrigation and Education

Execution of repairs and improvements to irrigation sources receive high priority. Minor irrigation sources, namely, tanks and ponds were repaired; supply channels were excavated, sluices were improved, dams were constructed where necessary, silt clearance was carried on on large scale; three irrigation schemes at a cost of a little

over Rs. 1,13,000 were completed. Supply of electricity for helping lift irrigation received special attention. Electrification schemes costing about Rs. 87 lakhs have so far been sanctioned in order to supply power for agricultural, irrigation and domestic purposes. Supply of power has been extended actually to 115 villages in the selected firkas and other schemes are still in progress.

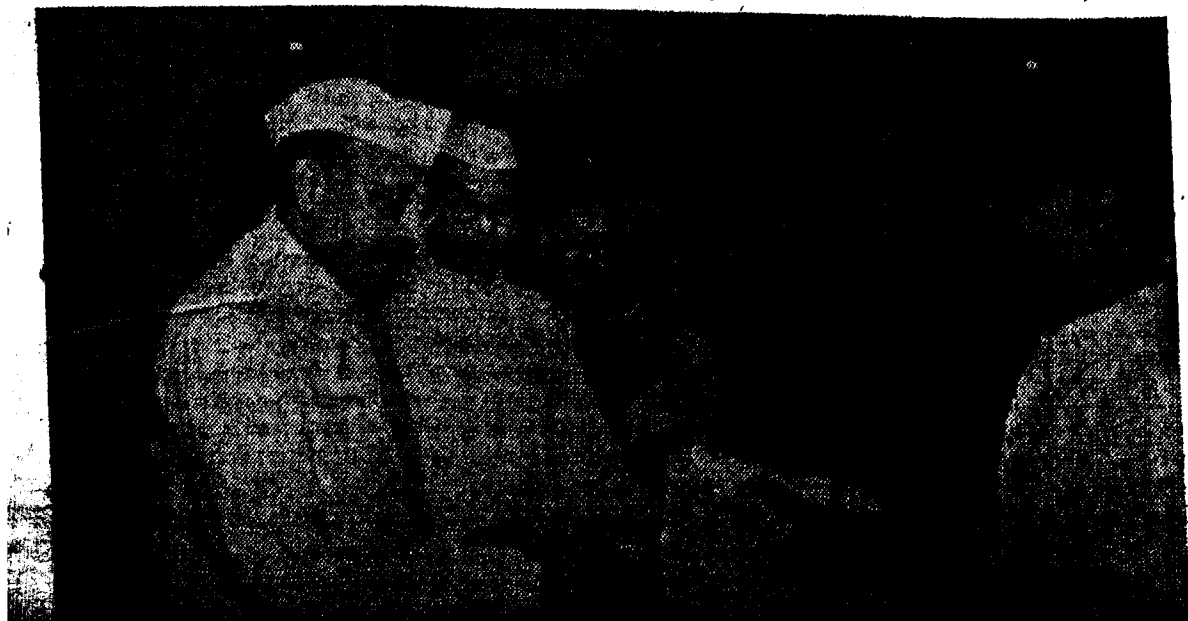
In no other field has Rural Welfare work shown so much progress as in education. The extraordinary impetus given to village education by Rural Welfare work can be gauged from the fact that up to the end of 1951, 347 elementary schools, 530 night schools, 408 adult centres, 40 Basic education schools and 16 Basic educational training schools were started; 161 school buildings were constructed, each costing three or four times the grant given by the Department; 25 central libraries, 270 reading rooms and 623 branch libraries were newly started and 150 old reading rooms were revived; 243 radio sets were installed and 53 radio houses were built.

Under this scheme, co-operative societies made considerable progress. Out of 2,337 villages in selected firkas, as many as 2,103 villages are served by co-operative societies. Seventy full-fledged multipurpose co-operative societies were also organized in three firkas to start with, as an experiment.

Sanitation: Industries

If there is one aspect of village life on which too much emphasis can never be laid, it is the sanitation of a village. A definite programme of work for the systematic improvement of sanitation in villages has been drawn up and is being implemented. The programme aims at developing the civic consciousness of the villagers who are encouraged to form sanitation squads. Sanitary latrines, urinals, dust-bins, soakpits and drainage are provided and cheap disinfectants are also supplied. The villagers are not only given useful information but also are trained in the actual use of these amenities. As prevention is better than cure, the preventive aspect of health is better emphasized and health education is given a definite place in the Rural

CENTRAL INDUSTRIAL MUSEUM: H.E. Sri Sri Prakasa, Governor of Madras, recently visited the Central Industrial Museum. Here the Secretary Sri M. Baptiste displays some choice Khadi products to the Governor.



Welfare Scheme. As many as 100 dispensaries, maternity and child welfare centres have been opened for the benefit of the sick, nursing mothers and children.

As part of rural welfare, Government have sanctioned the Village Industries Scheme. It is designed to revive speedily all dying village industries. Small scale or cottage industry managed and worked by the craftsman himself with his own tools, technique and labour in his own home has a definite place in our welfare scheme. Under this scheme, important labour saving tools and implements to the value of Rs. 6.0 lakhs have been supplied to the artisans and raw materials costing Rs. 12.0 lakhs have been sold to them through co-operative societies at cost price and model centres for village industries have been established. More than 2,000 artisans have been supplied with free tools and implements at a cost of over Rs. 2.0 lakhs. The artisans have been trained in the use of these tools by village industries demonstrators appointed for this purpose.

In the dry tracts where cotton is grown, spinning has been the traditional home industry providing work for the peasantry during the off-season. Khadi development forms an integral part of the Rural Welfare programme. There are eight intensive Khadi centres and 40,000 families are benefited by the scheme.

Social Work Among Women and Children

In order to do social work among women and children and look after their welfare, Government have created the Womens' Welfare Department. The Women's Welfare Officer who is the head of the department is assisted by assistant officers and organisers in the districts. They are running 279 centres which are intended primarily to promote civic consciousness, community life by means of contacts and social education programmes. Their work comprises the educative, preventive and rehabilitation aspects of social service. Child care, hygiene, sanitation and medical aid receive special attention.

Under the Rural Welfare Scheme, Government encourage the acquisition of suitable lands for development of poor

people's housing. There is a danger in any class of people living in seclusion from others. It is suggested that a cross-section of the population which does not suffer from the sameness of everything in life should live in each colony. Combined living will help better social contact, remove prejudices and secure the benefits of mutual association of different classes of people. Government have therefore been experimenting, on a limited scale, on the development of such colonies in selected areas.

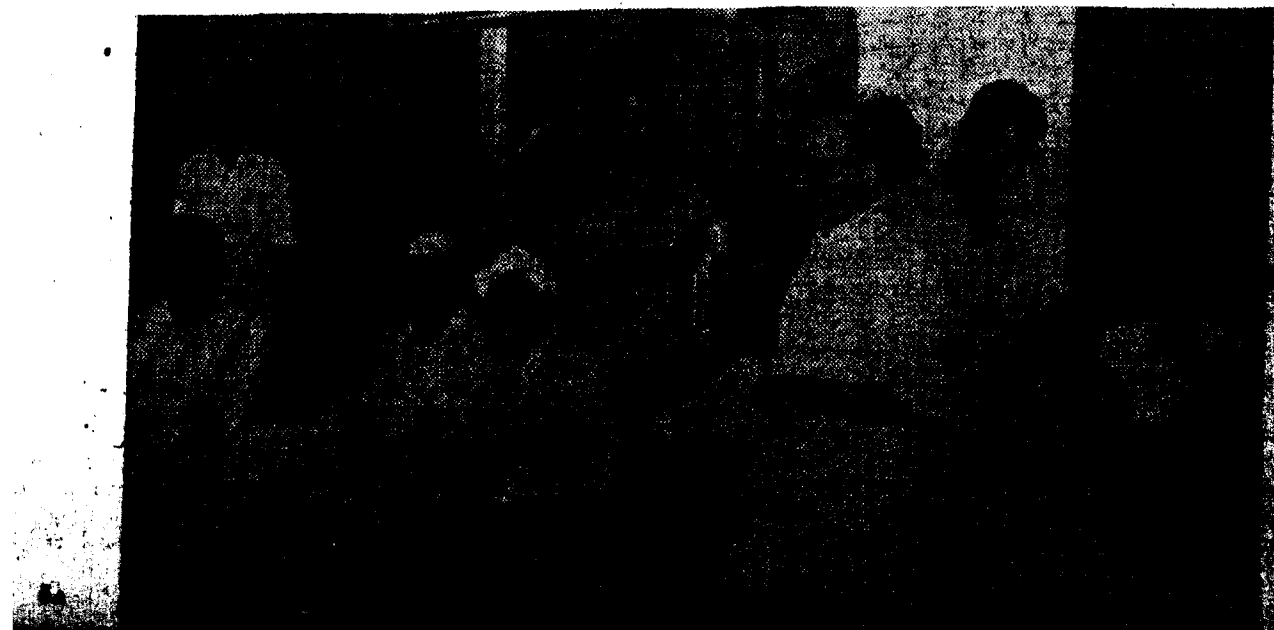
Substantial Progress

The work so far done under the Rural Welfare Scheme is encouraging. Although there are still vast possibilities of the villagers giving better co-operation than at present yet what they have done so far is substantial. In 21 districts, Government have spent Rs. 33,91,953 on works such as roads, wells, latrines, drains, agriculture, education etc., while the total contribution made by the villagers either in cash or in labour came to Rs. 33,41,890. The various departments which had hitherto been functioning independent of each other have been brought together to work out a common plan in which the interest of the villager is the only factor reckoned with.

If the vast number of villages should develop, decentralization of work and execution with the co-operation of the villager are more essential. Of course, dissipation of purpose or deterioration of efficiency should be guarded against. The Rural Welfare Scheme has immense potentialities for the welfare of the masses living in the villages and there is every reason to hope that with the extension of the scheme to other firkas in the State and with the willing co-operation of the rural population, our object will be achieved. The Rural Welfare Scheme depends for success on the co-operation of the people. The educated youth and elders in the village should as soon as possible be made to realise that each one should play his or her part and put their shoulders to the wheel of progress. Government can achieve their aims only with the help of the intelligentsia among the people. *Jai Hind!*

(By Courtesy, A.I.R., Madras)

LABOUR MINISTER'S VISIT: The Hon'ble Dr. U. Krishna Rao, Minister for Industries and Labour, reading the Annual Report on the occasion of the 12th Anniversary of the Central Industrial Museum.



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, during March 1952, is given below:—

Bellary District.—During the month of March 1952, 26 sanitary drives were conducted; 17 compost pits were formed and 24 charka demonstrations were held. A sum of Rs. 640 was spent for the purchase of books for the Grama Sevak Sangams.

South Kanara District.—In Kumbla firka, a new elementary school was opened in Kodiamme of Ichlampady village. One acre of waste land was terraced. Improved strains of paddy seeds and superphosphate were supplied to ryots at 20 per cent subsidy. Two beehives were introduced, three foot-bridges and one road work were completed at a total cost of Rs. 3,213-12-0; the Government grant paid was only Rs. 1,200 and the balance of Rs. 2,013-12-0 was met by the local people. The Collector supplied agricultural implements worth Rs. 85 to Koragas at Bela.

In Manjeshwar firka, new buildings were constructed for two schools and two school buildings were improved at a total cost of Rs. 7,720, the Government grant being Rs. 2,500. One culvert, a pathway and a water trough were constructed at a total cost of Rs. 6,499-7-0, the Collector's grant being only Rs. 2,996-1-0. The balance of Rs. 3,503-6-0 was met by local contributions. Improved strains of seeds were supplied to poor ryots at 20 per cent subsidised rates and a subsidy of Rs. 169-11-0 was spent.

In Mulki firka a bhajan hall for Harijans was constructed at Goljam at a cost of nearly Rs. 2,500, the Government grant being Rs. 750, Rs. 1,750 being contributed by ryots. One library was opened at Alikala. Five foot-bridges and one culvert were constructed at a total cost of Rs. 8,639-8-0, the Government grant being Rs. 3,310 only. The tile factory owners of Mangalore donated 4,000 tiles for the Kinnigoli Housing Scheme and the Durga Parameshwari Motor Company transported them free to the site. Tiles and materials worth Rs. 500 were supplied by the Director of Rural Welfare.

In Nileshwar area, a spinning class for 20 ladies belonging to ex-tappers' families was opened at Thottamath in Nileshwar, and 19 charkas were supplied to the class.

West Godavari District.—In Polavaram firka, a mass sanitary drive was conducted at Madhapuram, a Koya village. One hundred box charkas were introduced at Polavaram village. Arrangements were made for the introduction of 800 kisan charkas in the Koya villages. A model vegetable garden was organised at Pydipaka village. In Dendulur firka, paddy seed worth about Rs. 3,000 was distributed among the poor ryots at concessional rates.

North Arcot District.—A cattle show was conducted on 9th March 1952 at Vedanthavadi village and prizes worth Rs. 200 were distributed to the deserving ryots in the shape of agricultural implements. Eighty-three compost pits were dug in the villages. A sum of Rs. 518-15-11 was paid as 20 per cent subsidy to the poor and deserving ryots for the purchase of chemical manures and food crop seeds.

Nilgiris District.—During the month 49 compost pits and nine manure pits were opened. Four trench latrines were constructed. Thirty-three compost pits were cleaned and about 81 tons of compost manure were utilised. An area of 24 acres was planted with medium-sized potato seeds. An agricultural loan of Rs. 1,470 was paid to four ryots for purchasing seeds and manure; 812 tubes of insecticides were supplied to the ryots from the Ootacamund Agricultural Department. The Khadi Co-operative Society at Balacola and Kathaimandal at Nanjanad spun 135 hanks of yarn.

The Quarterly Agricultural Exhibition was held at the Agricultural Research Station, Nanjanad. The use of improved agricultural tools and better methods of cultivation was explained. Prizes were awarded to the best exhibits. A sanitation drive was conducted by the Grama Sevaks in their respective groups.

Tiruchirappalli District.—In Musiri firka, 24 charkas were introduced in the month, and 873 hanks of yarn was collected from spinners. Khadi to the value of Rs. 62-9-3 was sold.

In Vellakoil area, 17 latrines were cleaned and 17 were newly put up; 25 soak pits were constructed and 15 cleaned. Sixteen mass sanitation drives were conducted, 28 compost pits were opened and eight manure pits were renovated. Twenty-two bhajans and 18 public meetings were conducted during the month.

Madurai District.—The Grama Sevaks Constructive Workers Day was celebrated on 10th March 1952 at Mangammalpatti. On that day, about 100 villagers, one representing each house, assembled in the early morning with implements and baskets and attended to the formation of a road from the village to the Kanmoi; a length of four furlongs was constructed. The annual Harijan Day was celebrated in the village of Alam-patti on 30th March 1952. An adult school was also opened for the Harijans in their chavady on that day by the District Educational Officer. Inter-village sports for school children were conducted. A large number of villagers took part in the sports. A spinning competition was also conducted. Prizes were distributed to the winners by the District Munsif. A drama on rural development and the evils of drink was staged by the Grama Sevaks and the villagers of Kundathur. Six cinema shows were conducted in six villages during the month to an audience of about 7,000 villagers. Fifty-four new charkas were distributed during the month and 5,092 hanks were produced. A sum of Rs. 285-4-8 was paid towards Khadi on self-sufficiency basis. An area of 133 acres of waste land was brought under tractor ploughing and 20 acres levelled by bulldozers.

Srikakulam District.—Forty-one sanitary drives were conducted; 27 charkas were introduced; ten yards of self-spun yarn were woven; 28 poultry units were formed and 29 spinning demonstrations were conducted.

Ramanathapuram District.—Khadi to the value of Rs. 52-14-0 was distributed to the villagers in exchange of hanks. A sum of Rs. 7-14-0 was spent as subsidy to self-spinners. The benefits of compost pits and trench

latrines were explained to the ryots through 24 propaganda meetings. Twenty-three compost pits were dug during the month. Ten old wells and two new wells were repaired and constructed during the month. Twenty-one sweeping campaigns were conducted.

Cuddapah District.—Twenty-nine new charkas were introduced; 56 compost pits were dug; 64 sanitation drives were conducted; 30 cess-pools were constructed and three magic lantern shows were operated. Fifty-eight education classes were conducted by the Grama Sevaks.

Tirunelveli District.—Eighty-three compost pits were dug. Twenty charkas were sold and 1,010 hanks of yarn was spun. Tools to the value of Rs. 1,280-1-0 were distributed to the artisans free of cost.

Coimbatore District.—In Vellakoil Centre, a sum of Rs. 4,495 was spent on well works. The Rural Welfare staff visited 36 cheris and 69 hamlets. Thirty-two soak pits were constructed, 32 were cleaned and 22 mass sanitation drives were conducted.

The Special Agricultural staff visited 40 farms and intensive propaganda was done on compost making, as a result of which 46 new compost pits were dug. To prevent soil erosion, contour bunding was advocated and bunds were formed in six holdings. An Exhibition and Cattle Show was conducted in which the Agricultural and Animal Husbandry Departments took active part and exhibited many improved agricultural implements.

South Arcot District.—On 5th March 1952, the Grama Sevaks of Kadambuliur and some of the villagers of Badrakottai village staged a drama *New Life*, after the short spinning course started in February 1952 in the village came to a close. At Kalathur village in Tirunavalur firka, a new spinning course for women was started on 7th March 1952 with 20 women trainees. Sixty-six new charkas were introduced and 798 hanks were produced.

In Chinnasalem centre, cattle shows were held at Ammapet and Chinnasalem. Prizes worth about Rs. 250 were distributed to the best exhibits. Over 500 exhibits were brought to the show. Six spinning competitions were conducted during the month. A Women's Welfare Centre was opened in the month in Paithanthurai village.

Guntur District.—Twenty-four individual sanitation drives and six mass sanitation drives were conducted. Two unhealthy pits were levelled up; three soak pits were dug; six Grow More Food gatherings were addressed. Forty-eight acres under Korra crop were raised under lift irrigation system. Fourteen pairs of cart tyres, 18 crowbars and 22 plots were distributed to ryots. Five thousand rupees worth of paddy seed, cholam and green manure seed and pesticides were distributed to deserving poor ryots. Nine new charkas were introduced and 12 old charkas were renovated. Eight spinning demonstrations were conducted and 38 hanks of yarn was produced. Twenty-six compost pits were formed; 13 old pits were newly started and 140 tons of

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compost manure were carted to fields. An amount of Rs. 775 was spent from the Collector's Discretionary grants in Ongole firka, with a total contribution of Rs. 4,242-5-0. An amount of Rs. 958 was spent under Village Communications in Ammanabrole firka. An amount of Rs. 2,184-7-0 was spent under Rural Water-supply scheme in Ongole firka and an amount of Rs. 514 was spent under Rural Water-supply scheme in Ongole firka.

Anantapur District.—Two spinning competitions, two group tournaments and one cattle show were conducted and prizes awarded. Twenty-five new charkas were introduced under the Extensive khadi scheme.

East Godavari District.—A total of 676 compost pits were dug; 106 were set right; 19 sanitation drives were conducted; 79 manure heaps were removed and 44 spinning demonstrations were conducted.

Visakhapatnam District.—In Pendurthi firka, 44 sanitation drives were conducted. Three charkas were introduced; 25½ hanks of yarn were spun and 36 trees were planted.

Chittoor District.—A Cattle Fair and Agricultural Exhibition was held at Nagari.

Tanjore District.—Forty-eight compost pits were dug; 42 cherries were cleaned; five insanitary pits were filled in; 47 congregational spinning organizations were conducted and seven new charkas were introduced.

Malabar District.—In Tellicherry, Kuthuparamba and Mattanur firkas, 25 compost pits and 28 trench latrines were dug. Eight Malta lemons, 8 lb. of manure and 25 mango grafts were distributed among the ryots. Fourteen charkas and implements were distributed under the Extensive khadi scheme. Four persons were given training in carding. A cinema show on Adult Education was conducted at Paral. In Payyanur area, 37 tons of compost manure were produced in Kokkanisseri and Vellur villages.

Nellore District.—Eighty-four spinning demonstrations were conducted and 691 hanks of yarn and 137 yards of Khadi cloth were produced. Seventeen new compost pits were dug and 208 tons of compost manure produced.

Krishna District.—A cattle show was held at Agiripalli village on 14th March 1952 and the best specimens of cattle exhibited were awarded prizes.

Rifle Clubs to be Formed

The Government have decided that three rifle clubs may be opened initially in this State, one in Madras City, one in Coimbatore and the third in Visakhapatnam.

This decision was taken on the suggestion of the Government of India that rifle clubs should be granted all reasonable facilities and their formation encouraged where they are not in existence already. The necessary licences should be obtained from the Board of Revenue.

Detailed instructions have been issued regarding the formation of these clubs and their work. The Collectors and the District Superintendents of Police in the mofussil districts and the Commissioner of Police and a Deputy Commissioner in Madras City, shall be the President and Vice-President respectively of the clubs. The membership will be thrown open to officials and non-officials. Instructions in the use of rifles will be given by proper officers

Advance to Central Land Mortgage Bank sanctioned

The Government have sanctioned, subject to certain conditions, the grant to the Madras Co-operative Central Land Mortgage Bank Limited, of a loan of Rs. 5 lakhs for a period of five years for purposes of giving extension of time to the borrowers from the Primary Land Mortgage Banks in the following places, in respect of instalments due to be paid by them in May and August 1952 :—

I. Chingleput District.—(a) Chingleput, (b) Saidapet, (c) Kilacheri, (d) Madurantakam, (e) Ponneri and (f) Kancheepuram.

II. North Arcot District.—(a) Tiruvannamalai, (b) Cheyyar, (c) Wallajah, (d) Wandiwash, (e) Polur, (f) Arkonam, (g) Ambur and (h) Vellore.

III. South Arcot District.—Tindivanam.

IV. Coimbatore District.—(a) Udumalpet, (b) Erode and (c) Perundurai.

V. Anantapur District.—(a) Dharmavaram, (b) Hindupur and (c) Tadpatri.

VI. Cuddapah District.—(a) Cuddapah, (b) Proddatur and (c) Rajampet.

VII. Kurnool District.—(a) Kurnool and (b) Nandyal.

VIII. Chittoor District.—(a) Chittoor, (b) Chandragiri and (c) Madanapalle.

to the members of the club. No club should expect any financial assistance from the Government, and the cost of arms, ammunition and other facilities should be met out of the monthly subscriptions of members and donations raised locally.

'Kurubar' Community

The Government have ordered that the community known as "Kurubar", may be designated as "Kurubar" in all Government records.

Dental Clinic at Karkala

The Government have sanctioned the opening of a Dental Clinic at the Government Hospital, Karkala, South Kanara District.

Central Road Traffic Board

There is provision for the appointment of two non-officials to the Central Road Traffic Board. The Government have decided to appoint two retired District Judges to the Board and it is expected that their long judicial experience would be very valuable in disposing of cases coming before the Central Road Traffic Board.



RICE DECONTROLLED IN MADRAS STATE

Madras State took a momentous step recently, when the Government formulated a scheme for the decontrol of rice. The Hon'ble Chief Minister announced the new scheme on June 6, 1952. There is now no control as regards price or as regards quantity of rice to be sold to any consumer or trader in the free market.

Madras State has been divided into six zones, each zone with one or two surplus districts supplying through a free market the needs of the attached deficit districts. Government procurement of rice and the levy system have been given up. Statutory rationing has been abolished, though informal rationing continues in the highly deficit districts.

The pictures on this page show the brisk trade in rice in the free market, with the public buying their requirements without the limiting check of the control era—the ration card.





CHIEF MINISTER TOURS RAYALASEEMA

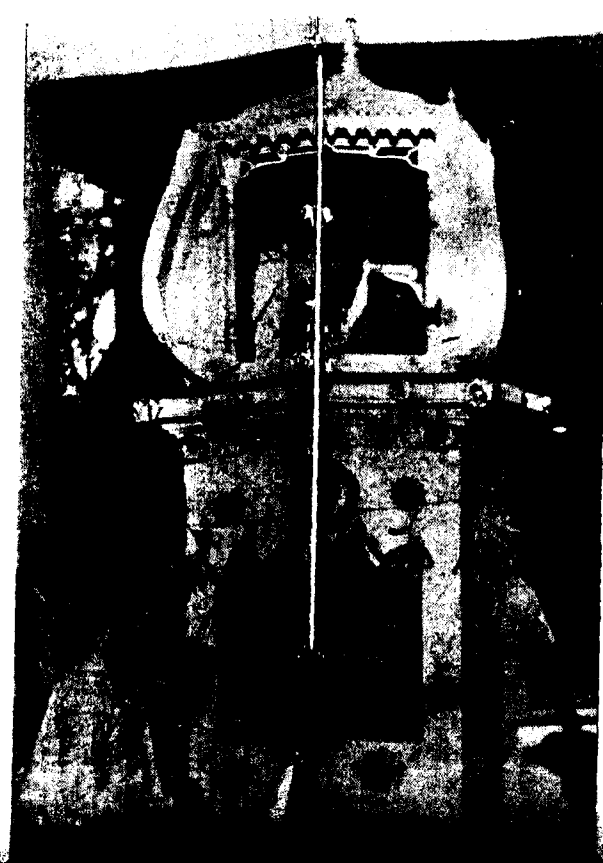
The Hon'ble Sri C. Rajagopalachari, Chief Minister, recently toured the stricken areas of the Rayalaseema Districts, and inspected the relief measures launched in the scarcity areas.

Top left: The Chief Minister laying the foundation stone of the Cuddapah College.
Top right: Addressing a public meeting at Cuddapah.

Left (top to bottom): 1. At the family relief centre organised by the Women's Welfare Department at Rayachoti, women sit and stitch leaves, largely used for serving food. 2. Barring the babe in the cradle, the entire family works. 3. This old woman was the first to seek employment at the centre.

Right (top to bottom): 1. Carding cotton. 2. A play centre for children organised by the Women's Welfare Department. 3. Maternity aid.

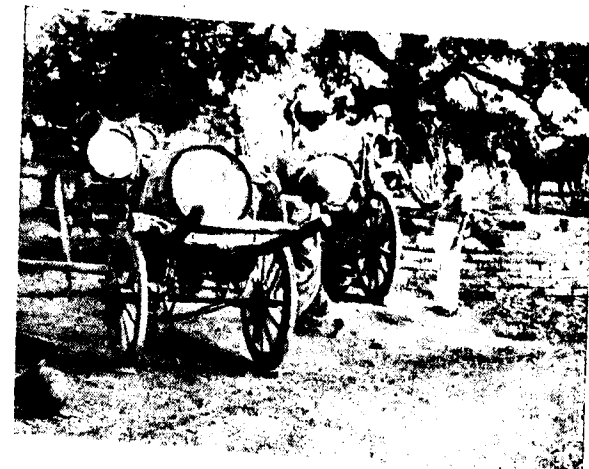
Below: The Chief Minister unveils a bronze bust of Mahatma Gandhi in the premises of the District Board Office, Anantapur.





RAYALASEEMA SCENES

1. Power drill of the Industries Department at work in Belum Village (Kurnool District).
2. Repairs being done to a minor irrigation tank in Kamachinnepalli (Chittoor District).
3. Gruel Centre at Singanapalli (Kurnool District).
4. Children's milk centre at Tadpatri (Anantapur District).
5. Water Carts at Kolimigundla (Kurnool District).
6. Military lorries filling up water from a tank in Akkumalla Village (Kurnool District).
7. Army men supervise the distribution of water from military lorries.



PROGRAMMES

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MADRAS INFORMATION

Community Projects

By SRI J. M. LOBO PRABHU, I.C.S., Secretary to Government, Development Department.

Most of you may have heard of Community Projects, but not many may know what precisely they are, and what they mean to the country. The history and the theory of community projects are important for properly understanding them. Historically, the idea of developing the potentials of our villages goes back to twenty years when the growing political movement revealed how pitifully equipped the rural masses were for democracy. Beginning with the experiment at Gurgaon, the movement for rural development spread throughout the country. In our State it took a pronounced shape in what was called 'Firka Development'. The Planning Commission from a study of the different experiments, found that the pattern of rural development in Etawah District of Uttar Pradesh, and urban development at Nilokheri and Faridabad, evoked the best response and secured the best results.

The Hon'ble Chester Bowles, U. S. Ambassador, in his search for a scheme to help India, seems to have been convinced that a combination of the Etawah and Nilokheri projects represented the best integrated development for the country. I know Etawah having been Collector of a neighbouring district and I know Faridabad having been connected with rehabilitation of refugees. I was therefore greatly interested in the ideas of the American Ambassador, which he discussed with me here in Madras for nearly an hour. He sold those ideas to the American Congress and obtained a grant of 50 million dollars to establish 50 community projects on the pattern of Etawah throughout the country. Six of the 50 projects are located in Madras.

Ideas Behind the Projects

The ideas behind the projects are roughly four: first, that land and labour, which history and custom have impoverished, should be fully employed; second, that this cannot be done without outside help in money and guidance; third, a substantial measure of the help spread over the project area of 300 villages can effect transformation of the land, which will be an example to the rest of the country, and fourth, that the experiment will generate self-help to the point of giving the work its own momentum. To ensure that the work achieves certain targets, a common pattern and time schedule will be imposed.

The common pattern derives from the origins of the scheme. Its justification is first, that it has been found workable and reproducible and second, that for the large contribution that the U.S.A., is giving, a minimum achievement is assured. For this reason, in respect of staff, surveys, strategy of operations, finance, items of work, certain standards have been fixed. What evolve under the influence of a given set of forces should within limits be the same in all the projects. It is obviously the intention that this common result which will be apparent in 50 different areas throughout the country will demonstrate what the application of a plan can do to improve the rural conditions. In a sense, the 50 projects will be "fashion plates" to the rest of the country for a new order. This idea to use a mould to produce certain results may be American in conception. For that very reason it may possess the dynamism which is characteristic of American enterprise.

To Make Every Man A Builder

I do consider that the scheme of Community Projects is something of very great importance, not merely because you can sum up and write down on paper the material achievements of such a project, which I hope will be considerable and good—all the additional food grown, the houses built, schools and dispensaries, better roads, tanks, wells and so on. You can make a list of them and it is pleasing to see that list, but somehow my mind gropes beyond that list to the man, woman or child behind it. The house may be good, but it is the builder of the house that counts ultimately, not the house or even the occupant of the house. Therefore, it is to the builder my mind goes and we want to make the people of India all builders. So, this scheme of community projects appears to me to be something of vital importance not only in the material achievements that they would bring about, but much more so because they seek to build up the community and the individual and to make the latter a builder not only of his own village centre but in the larger sense, of India.

—JAWAHARLAL NEHRU,
Prime Minister.

Pattern for Finance

The pattern for finance is an allocation of 65 lakhs for each project, to be spent in three years. The distribution of this amount is 5.74 lakhs on personnel, 1.95 lakhs on equipment including nine jeeps and demonstration equipment, 46.75 lakhs on construction, including 20.25 lakhs on irrigation, 4 lakhs on drinking water-supply, one lakh on drainage, 11.6 lakhs on roads, 7 lakhs on education, 3 lakhs on land reclamation, 4.5 lakhs on cottage industries, and various small sums on other items. In addition to the total provision of 65 lakhs, Madras Government have suggested a large provision for short-term loans required for issue of seed and fertilizers.

The work pattern is also stereotyped, subject only to variations arising from local conditions. In agriculture the emphasis is on irrigation, seeds, manures and Extension services. At least half the cultivated area in every village in the project is to be brought under irrigation. The importance of this should not be overlooked. It has recently been computed that irrigation increases the yield of rice by 70 per cent, of millets by 125 per cent and cotton by 200 per cent. The Extension service designed to improve agricultural technique under the close supervision of a worker for every five villages has great potentialities. Due to various obsolete practices the yield of our fields is a small fraction of the optimum and about half of an easily

attainable average. A general increase will create purchasing power to rehabilitate not only the cultivator, but the impoverished general economy of the country. Good seed and adequate manuring also multiply the yield, while soil conservation and plant protection will eliminate the large loss of food taking place now. Improvement of livestock through the Key Village Scheme for breeding pedigree stock should remove a grave deficiency in the agricultural economy.

A Challenge, says Union Finance Minister

In the conception of the community development programme opportunity has been given for the first time for planning from the bottom and, if the idea succeeded, it would be possible to stretch the programme substantially, observed Sri C. D. Deshmukh, Finance Minister, addressing the State Development Commissioners in their discussions on community projects held in New Delhi in May. During the conference the Development Commissioners visited Etawah, Faridabad and Nilokheri to have first-hand knowledge of the projects that have been operating in those places.

The community projects, the Minister said, constituted a challenge to the Development Commissioners to show what they could do, the necessary wherewithal being found by the co-operative effort of the Central and the State Governments. If the programme was well managed, it would be possible to stretch it to other parts of the country but in the execution of the plan the most important thing was that it should be done with the people. They were well aware of their needs, the Minister observed, and for a more attractive place which was the objective of the Welfare State.

Sri Chintamun Deshmukh further said that technical assistance, including assistance of foreign experts, should be available for the community development programme from the very beginning. Planning should be very careful as, initially, every plan would be in the nature of a pilot one and to the extent that it was practical, its success would ensure extension of the programme in other areas. The Minister, however, thought that along with careful planning, such work in the project areas which could be undertaken before the final plan emerged, should be carried on as the objective was to increase production within a stipulated period. For example, he said, that if a project included the larger use of fertilisers for increasing production, the fertiliser part of the programme could be taken on hand straightaway. The increase in production thus demonstrated would facilitate public co-operation for the plan.

For cottage industries, which can utilise the unemployed and under-employed present in all villages, the Plan is to provide finance, electricity, technique and marketing. In Education, vocational training will receive special attention. Otherwise compulsory elementary education for the young and social education for the adults will be organised. The Plan for Health and Housing will see the realization of projects which have been waiting long for finance. The Plan for Communications will remove the present isolation of many villages. All in all, the aim is to fully utilise the land and labour in the village by methods that money and organisation can find. A certain measure of urban development will be added so that the surrounding villages may have within call superior services in all branches of development.

Five Stages of Implementation

The time schedule of three years contemplates five stages, the first of conception of three months when the project area will be intensively surveyed, the second of initiation of six months during which materials will be assembled and foundations laid, the third of operation of 18 months which will cover top speed activity, the fourth of consolidation, and last of finalisation when the village will be put in gear to be part of the normal administrative mechanism. This scheduling is intended to maintain tension on the work so that all the three hundred villages in each project move forward bound together.

Of the 50 projects in India, six have been allocated to Madras, the first in the Kurnool-Cuddapah Canal area, the second in Coimbatore, the third in Malabar, the fourth in East Godavari, the fifth in South Kanara and the sixth in Madurai. All areas have assured rainfall and a margin for improvement visible from their natural and human factors.

Why these Projects will Succeed

The question will be raised why these community projects should succeed when so many other attempts in the same direction have failed. Though the answer is for the future to give, the Community Projects contain certain trends which are new and urgent. The first is the impact of a large expenditure on certain admitted deficiencies. Sixty lakhs is a very considerable sum of money to be spent in small areas, the effect of which will be to employ on a scale unknown in the past. The resulting atmosphere of change may well lift the villages out of the slough in which they have been lying for centuries. It will discover to them the capacities of their land and labour, creating a new mental attitude to work and life.

Secondly, the trend of the Projects is to impart an irresistible impulse. On account of the precise definition of objectives, staff, methods and schedules, the Projects will have the urgency of a military operation. The stress will be such that all will be swept into the strategy designed for implementing the Indo-U.S. Technical Co-operation Plan.

Thirdly, the Projects are to be based on the precise survey and study of the assets and deficiencies of the villages in the project areas. The Projects pride themselves for being on a schematic footing, taking account of some 100 factors which are being surveyed. This Government have suggested that there should be a balance sheet drawn up for each village, the villagers' contribution also being indicated.

Comprehensive Strategy

Otherwise this Government have suggested first that all expenditure should be related to tangible results, which will be self-supporting; secondly, that the basic aim may be to fully utilize the manpower and land in each village, the plan being based on a survey of labour available and the schemes necessary to fully employ it; thirdly, that to secure the full co-operation of the village, some elected authority may be created and charged to enforce the collective responsibility of the village to reach the prescribed targets.

It may be possible to detect small defects here and there in the Plan, but these will be corrected as the work proceeds. All in all, the Community Projects represents the first total strategy to realize the potentials of our villages, and to bring them in line with others in the world.

(By Courtesy, A.I.R., Madras)

Recognition of Diplomas

The Government of India have decided to recognize the Diplomas in Electrical and Mechanical Engineering awarded by Government Technical Institutes, Gorakhpur, Jhansi, and Lucknow as equivalent to diplomas in corresponding subjects of recognized institutions, for purposes of recruitment to subordinate posts under the Central Government, provided the diploma-holders have the minimum educational qualifications required for the studentship examination of the Institution of Engineers (India).

Full Co-operation

The Community Projects, as I understand it, is quite different. I thought that I would meet opposition from Ministries, from people working in different agencies. To my surprise I found there was co-operation and an eagerness to help which I could never suspect. It was amazing; the co-operation came not merely from official and non-official agencies, from Assembly Members, from Parliament Members, from roadside men, from everyone. You know everything that Government sponsors in this country is subjected to the severest scrutiny and severest criticism at the hands of the Press. Surprisingly enough, there has not been one single statement in the Press against the community project.

—S. K. DEY,
Community Projects Administrator.

Electricity for Malli Firka

Extension of electricity was given on June 4, 1952, to Malli Firka in Srivilliputtur Taluk, Ramanathapuram District.



COMMUNITY PROJECTS: Sri S. K. Dey, Administrator for Community Projects, addressing a Press Conference in Madras to explain the scope and possibilities of the new scheme designed to enrich community living.

The People's Right to Health

By HON'BLE SRI A. B. SHETTY, Minister for Health

The idea has grown that in a modern Welfare State every citizen should have the right to get the benefit of the best medical service that is available, just as it was recognized some time earlier that he should get the maximum possible education. This is part and parcel of the Socialist idea of giving equal opportunities and fair shares to all in the material and cultural benefits of present-day civilized life. The idea of the right to health has been converted into practical reality in the National Health Service Scheme inaugurated by the Labour Government in the United Kingdom in 1948. Under this scheme all forms of hospital care and treatment are provided to everyone of the citizens. The professional attention of family doctors also is made available to all who need it. Free medicines and appliances like spectacles and artificial limbs are supplied as part of the service.

In the present conditions in India we cannot hope to have such a comprehensive National Health Service. The Employees' State Insurance Scheme which has been inaugurated by Pandit Nehru in February this year seeks to provide by July 1954 medical benefits to 2½ million industrial workers in our country. The scheme has already come into force in Kanpur and Delhi. This scheme is a step towards the attainment of the Welfare State on which India too has set her course. Doctors will have to play an important role in working this scheme, the success of which will be watched all over the country.

Planning for Health

The economically advanced countries of the world have used their scientific knowledge and made it possible for their people to reach a high level of health and live longer lives. We belong to one of the under-developed countries where the people are "ill-fed, ill-housed, illiterate and riddled with disease". Poverty and ignorance have truly been said to be the two basic factors underlying the health problem of our country. Death-rates are highest and disease most common among the poorest and most illiterate sections of our people. The general raising of health standards is basically an economic problem. The Five-Year Plan is the first step in a comprehensive plan for the rehabilitation of our economy. The primary objective of our national planning is first to strengthen the economic base so that in later years an increasing proportion of our resources can be applied to the development of social services like education and health. Therefore, major irrigation and power projects which are vitally necessary for increasing agricultural production and industrial output have been allotted Rs. 80 crores out of Rs. 137 crores—the estimated cost of the development schemes in the Five-Year Plan, while medical and public health schemes get only Rs. 12 crores.

Under medical schemes there is provision for expansion of the facilities for medical education, extension of medical

The 18th Andhra Provincial Medical Conference, Tenali: May 20, 1952—Inaugural Address by Hon'ble Sri A. B. Shetty.

relief by improvements to hospitals and dispensaries, opening of new T.B. sanatoria, promotion of anti-leprosy campaign, anti-malarial work, etc. Improvements to the existing teaching colleges and hospitals, development of the Guntur Medical College into a full-fledged college and the establishment of a new Medical College at Madurai have been included in the Plan. The Planning Commission have rightly said that during the next five years additional resources should be concentrated on preventive work rather than on curative services. Medical cost will decrease when preventable illness is eliminated. In rural areas a great part of medical treatment is provided by those who have no professional qualifications. The Planning Commission want that the rural areas must receive much greater attention than in the past. We have yet to tackle the problem of extending medical services adequate both in quantity and quality to the rural people who are today medically under-privileged.

Health Propaganda

Due stress has been laid by the Commission on the importance of the spread of health education. Without health education we cannot create a health conscience in the people nor can we remove the difficulty in the application of the sanitary measures. Health propaganda among the masses is therefore as necessary as the improvement of their economic status for the success of any attempt to raise the standard of public health. Food production is not keeping pace with the increase of populations in the world as a whole and it is much more so in this country. The question of the world's over-population and the need for family planning to meet this problem is now engaging the attention of the World Health Organization. Our Planning Commission also have drawn attention to the need for family planning and the education of public opinion in regard to it.

The Commission have observed that the sale of adulterated and sub-standard drugs and blackmarketing in drugs have become a major evil in this country. If drugs and other medical requisites can be produced on a sufficiently large scale within the country under State control, it will reduce the cost of imports. The medical profession should warn the public against being duped by alluring advertisements of worthless or harmful preparations. Our medical journals should refuse to give publicity to spurious patent medicines or so-called health foods which are manufactured and sold by commercial enterprises, bent on making profits at the expense of the people's health.

Preventive Medicine

The dramatic and magical aspects of certain wonder drugs seem to have been pushed far more than they deserve. All and sundry have taken to use them indiscriminately. Bacterial resistance to chemotherapy and anti-biotics have created new problems for medical science. The rich persons have a pathetic faith in the medicine bottle and the injection needle. They are far more concerned with cure than with prevention. Doctors should create in the public

mind a new attitude to health. Instructing the public in healthier ways of living is one of the big tasks of preventive medicine. The recently published report of the Hotel Sanitation Committee reveals what danger lurks in the infection of food and drink in our catering establishments to which all sections of the public are resorting in increasing numbers for meals or refreshments. The purity and nutritive quality of food being the most important single factor in the maintenance of health, it is very necessary that the public should be educated about the need for better standards of catering.

Legislative measures alone will not solve the problems unless the public appreciate the value of sanitary measures. Doctors in private practice are content to leave prevention to the Health Officer and his staff and regard it as none of their business. So far have they carried this attitude that they are accused of having virtually acquired a vested interest in disease. Co-operation and mutual understanding between the health workers and the general medical practitioners will go a great way in promoting public health and welfare.

Practitioners of Modern and Indigenous Medicine

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The People's Right to Health

By HON'BLE SRI A. B. SHETTY, Minister for Health

The idea has grown that in a modern Welfare State every citizen should have the right to get the benefit of the best medical service that is available, just as it was recognized some time earlier that he should get the maximum possible education. This is part and parcel of the Socialist idea of giving equal opportunities and fair shares to all in the material and cultural benefits of present-day civilized life. The idea of the right to health has been converted into practical reality in the National Health Service Scheme inaugurated by the Labour Government in the United Kingdom in 1948. Under this scheme all forms of hospital care and treatment are provided to everyone of the citizens. The professional attention of family doctors also is made available to all who need it. Free medicines and appliances like spectacles and artificial limbs are supplied as part of the service.

In the present conditions in India we cannot hope to have such a comprehensive National Health Service. The Employees' State Insurance Scheme which has been inaugurated by Pandit Nehru in February this year seeks to provide by July 1954 medical benefits to 2½ million industrial workers in our country. The scheme has already come into force in Kanpur and Delhi. This scheme is a step towards the attainment of the Welfare State on which India too has set her course. Doctors will have to play an important role in working this scheme, the success of which will be watched all over the country.

Planning for Health

The economically advanced countries of the world have used their scientific knowledge and made it possible for their people to reach a high level of health and live longer lives. We belong to one of the under-developed countries where the people are "ill-fed, ill-housed, illiterate and riddled with disease". Poverty and ignorance have truly been said to be the two basic factors underlying the health problem of our country. Death-rates are highest and disease most common among the poorest and most illiterate sections of our people. The general raising of health standards is basically an economic problem. The Five-Year Plan is the first step in a comprehensive plan for the rehabilitation of our economy. The primary objective of our national planning is first to strengthen the economic base so that in later years an increasing proportion of our resources can be applied to the development of social services like education and health. Therefore, major irrigation and power projects which are vitally necessary for increasing agricultural production and industrial output have been allotted Rs. 80 crores out of Rs. 137 crores—the estimated cost of the development schemes in the Five-Year Plan, while medical and public health schemes get only Rs. 12 crores.

Under medical schemes there is provision for expansion of the facilities for medical education, extension of medical

The 18th Andhra Provincial Medical Conference, Tenali: May 20, 1952—Inaugural Address by Hon'ble Sri A. B. Shetty.

relief by improvements to hospitals and dispensaries, opening of new T.B. sanatoria, promotion of anti-leprosy campaign, anti-malarial work, etc. Improvements to the existing teaching colleges and hospitals, development of the Guntur Medical College into a full-fledged college and the establishment of a new Medical College at Madurai have been included in the Plan. The Planning Commission have rightly said that during the next five years additional resources should be concentrated on preventive work rather than on curative services. Medical cost will decrease when preventable illness is eliminated. In rural areas a great part of medical treatment is provided by those who have no professional qualifications. The Planning Commission want that the rural areas must receive much greater attention than in the past. We have yet to tackle the problem of extending medical services adequate both in quantity and quality to the rural people who are today medically under-privileged.

Health Propaganda

Due stress has been laid by the Commission on the importance of the spread of health education. Without health education we cannot create a health conscience in the people nor can we remove the difficulty in the application of the sanitary measures. Health propaganda among the masses is therefore as necessary as the improvement of their economic status for the success of any attempt to raise the standard of public health. Food production is not keeping pace with the increase of populations in the world as a whole and it is much more so in this country. The question of the world's over-population and the need for family planning to meet this problem is now engaging the attention of the World Health Organization. Our Planning Commission also have drawn attention to the need for family planning and the education of public opinion in regard to it.

The Commission have observed that the sale of adulterated and sub-standard drugs and blackmarketing in drugs have become a major evil in this country. If drugs and other medical requisites can be produced on a sufficiently large scale within the country under State control, it will reduce the cost of imports. The medical profession should warn the public against being duped by alluring advertisements of worthless or harmful preparations. Our medical journals should refuse to give publicity to spurious patent medicines or so-called health foods which are manufactured and sold by commercial enterprises, bent on making profits at the expense of the people's health.

Preventive Medicine

The dramatic and magical aspects of certain wonder drugs seem to have been pushed far more than they deserve. All and sundry have taken to use them indiscriminately. Bacterial resistance to chemotherapy and anti-biotics have created new problems for medical science. The sick persons have a pathetic faith in the medicine bottle and the injection needle. They are far more concerned with cure than with prevention. Doctors should create in the public

mind a new attitude to health. Instructing the public in healthier ways of living is one of the big tasks of preventive medicine. The recently published report of the Hotel Sanitation Committee reveals what danger lurks in the infection of food and drink in our catering establishments to which all sections of the public are resorting in increasing numbers for meals or refreshments. The purity and nutritive quality of food being the most important single factor in the maintenance of health, it is very necessary that the public should be educated about the need for better standards of catering.

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Women's Welfare Centres in Rayalaseema

Relief Centres organized by the Women's Welfare Department of the Government are doing very useful work in the famine-affected areas of Rayalaseema. Three Centres in Chittoor District (Veppanjeri, Karvetnagar and Renigunta) and three in Cuddapah District (Rayachoti, Badvel and Chitvel) are already functioning successfully and two more Centres in Kurnool District, one at Cumbum and the other at Markapur, will be opened very shortly. Relief work is done on a moderate scale at Nagari and Nindra Centres in Chittoor District.

Each Centre gives some work to the hunger-stricken people and helps to earn their bread. Care is taken to see that special types of work are allotted to the old people and expectant mothers. Leaf-stitching, spinning, tape-weaving, etc., are taught to them and wages are paid immediately. Medical aid is also given to the needy. Training is given in the particular village crafts and cottage industries which can be easily encouraged in the area concerned.

Each Centre is managed by three officials of the Department, namely, the Welfare Organizer, the Midwife and the Technical Assistant. Nearly 80 to 100 people get financial help from each Centre. One Assistant Women's Welfare Officer is supervising this work in a district and the State Women's Welfare Officer tours these areas frequently to intensify the relief measures.

mortality. Undue physical strain through hard work, particularly in the advanced stages of pregnancy, is equally dangerous. What affects the mother affects the child before and after child birth.

Maternity and Child-Welfare Centres

Pregnant women should visit maternity centres regularly and get appropriate advice and timely treatment. Proper medical examination during the ante-natal period can find out and correct several abnormalities, and ensure the safe delivery of a healthy child. At the time of delivery the skilled assistance of a maternity assistant (midwife) should be sought. A well-trained maternity assistant who knows her duty will not meddle with the natural process of child-birth. Abnormal labour takes place in only a small percentage of women and in such cases the services of a doctor must be availed of.

Powdered milk received as a gift from the UNICEF has been distributed at these centres. It will prove a great boon to mothers and infants if our local bodies can make it possible to supply milk and shark-liver oil free of cost at all these centres. We require a larger number of women medical officers, health visitors and maternity assistants for

extending maternity aid in rural areas and for the periodical check up of children's health during the pre-school age.

Family Planning

The health of many women, particularly of the low income groups, breaks down when there is frequent child-bearing. A large number of children is a burden upon the family income. It means more poverty and malnutrition. The Bhore Committee has placed upon Government the responsibility to provide instruction regarding contraception in maternity and child-welfare centres and in dispensaries and hospitals administering medical aid to women. The references made to family planning in the report of the Planning Commission and the statement made in support of it by Prime Minister Jawaharlal Nehru has focussed public attention on the importance of family planning to the economy of India. Many of the maternity and child-welfare institutions in India have become centres for educating women about the need for limitation of family and giving them instruction in the matter of spacing births.

Voluntary agencies like the National Family Planning Association are doing valuable publicity work in this matter. The "Rhythm Method" is widely talked about today. At the instance of the Central Ministry of Health the World Health Organization is establishing pilot studies in the cause of Rhythm Method or safe period Method for birth control in our country. A pilot enquiry is proposed to be started at the Poonamallee Health Unit, Madras, on Family Planning as an experimental measure. Where the standard of living is high, there is more of voluntary restriction of the size of the family. The new movement for family limitation must reach our villages and the poorer sections of the people who are multiplying fast and bringing down the quality of the population.

Future Developments

Madras State can claim to have made greater progress than other States in developing maternity and child-welfare work on systematic lines. We are having today about 504 Maternity and Child-Welfare Centres and Homes in our State. The Women and Children's Hospital in Madras City is acknowledged to be one of the largest and best organized maternity hospitals in this country. Obstetrics and Gynaecology has become a major clinical subject. It has been decided to upgrade this department in our Women and Children's Hospital in order to make it an All-India Institute for post-graduate teaching and research in this subject. Pediatrics is one of the important specialities today. We have to get more of our medical men trained in this speciality so that we may have pediatricians, at least one in every district headquarters hospital to begin with.

A team of the World Health Organization and UNICEF visited Madras in April last with a view to assist the Government in the development of maternity and child-health services as an integral part of an overall health programme with emphasis on training and their development in rural areas. In view of the high mortality and morbidity amongst mothers and children in our country, it is essential that women doctors, nurses, health visitors and maternity assistants who work in the field of maternity and child health should have special training. The team members have proposed a project for three years covering maternal

and child health work in its complete curative and preventive aspects, and giving facilities for integrated training in existing institutions. Special emphasis is to be laid on work in rural areas, since 80 per cent of our population live there.

The World Health Organization and UNICEF have offered to give help to the Government in implementing this

The Campaign against Tuberculosis

Dr. Shankunny Kallat and Dr. Arumugum are doing a great service to the suffering people in establishing this tuberculosis sanatorium here. This district is already having at Perundurai a well-conducted sanatorium which has earned a good name and become deservedly popular. A tuberculosis sanatorium was recently started at Tanjore. Four more sanatoria are now under construction in Nellore, Malabar, South Kanara and Ramanathapuram. Efforts are now being made by the people at Madurai and some other places to set up sanatoria in their districts. Government policy is to encourage the opening of more such institutions by similar kind of private effort in order to relieve the pressure on State hospitals and sanatoria. The co-operation given by the Provincial Welfare Fund in establishing tuberculosis institutes in various centres in our State is most welcome. Two of our well-known experts—Dr. Benjamin and Dr. Vasudeva Rao—have recently suggested that the employers of large number of persons such as the railways, mills and other industrial concerns should come forward to provide institutes for their employees either separately or attached to the existing hospitals and sanatoria.

The World Health Organization has recognized the magnitude of the tuberculosis problem and given it a high priority to the international control of this disease. Tuberculosis is usually associated with poverty and all that goes along with it, such as improper nutrition, bad housing and hard conditions of work. It is no wonder, therefore, that tuberculosis is widely prevalent in our country where the masses are leading a sub-standard existence.

Incidence of T.B.

The incidence of T.B. is particularly high in our urban industrialised areas on account of overcrowding and over-strain. The economically advanced countries of the world have improved the social and economic conditions of their people. They have made it possible to have more adequate nutrition and a higher hygienic status for their population as a whole. These countries have made great advances in many aspects of T.B. control work during the past three decades. The T.B. death rates there have therefore decreased to a remarkable extent. The percentage of deaths from this fell disease is still high in this country. Open cases disseminating infection must be very large in number.

Two big changes have recently taken place and these are (1) increase of population and their concentration

*Inauguration of the Pollachi Tuberculosis Sanatorium:
Address by Sri A. B. Shetty, Minister for Health, 27th May 1952.*

project by providing personnel, equipment and fellowships. More of our women must take opportunities of getting higher training as doctors for this kind of work and as health visitors and maternity assistants. This will enable us to develop properly maternity and child-welfare work which forms really a most important part of the general health service.

in cities, resulting in overcrowding and bad housing conditions, (2) food shortage and as a consequence of it, undernutrition. These two dangerous conditions are likely to increase still further the incidence of tuberculosis. The existing facilities for detection, isolation and treatment are very meagre. There is lack of trained personnel, particularly doctors, who have specialised in this line of work. Tuberculosis treatment has now to a large extent become the job of a specialist surgeon. With a view to overcome the shortage of trained staff and raised the standard of T.B. work now prevailing in many countries, travelling fellowships have been made available from the World Health Organization and other sources. In Madras two courses of training, namely, the T.D.D. course and the University Diploma course, are being run for giving specialised training to medical men. But the number of practitioners who take advantage of this course are few.

Need for Early Detection, Treatment and After-care

Tuberculosis is curable, if it is found early and treated properly. The early detection of this disease is not an easy matter in our country. Mass radiography is now widely used in the West to discover early and treatable cases and examine contacts. This method is useful for dealing with large groups of people if there are laboratory and clinical facilities for follow-up of the suspicious cases discovered and establishing an exact diagnosis. We have one mass radiography outfit at present. We can hardly afford to have more of such outfits. Ordinary X-Ray plants have been installed at our district headquarters hospitals.

A large percentage of the detected cases have to be put on the waiting list and they become relatively advanced at the time of their admission for treatment, because the beds available at the sanatoria are lamentably short of requirements. In a considerable percentage of patients discharged after treatment, the disease flares up within one or two years, when they go back to the normal strains of life. Suitable conditions of life and employment and continuous medical care are necessary for some time at least for ex-patients. There are only two small rehabilitation centres for this purpose in our country, one at Arogyavaram (Madanapalle) and another at Tambaram (Madras). The establishment of Homes is necessary for advanced cases and incurables, but we have not yet been able to provide for them.

Socio-economic Improvement

Tubercle bacillus is said to be ubiquitous—it is everywhere and everywhere. Large sections of people get infected at an early age; children, young adults and low-income groups are more likely to develop the disease.



SPINNING CENTRE: Women ply charkhas in the famine area of Varadappanpalayam Village near Kangayam (Coimbatore District)

Adequate nutrition, healthy conditions of living, avoidance of physical strain and freedom from mental worry can fortify the power of resistance. A case is said to be open when tubercle bacilli are present in the sputum. Such open cases must be hospitalised or isolated at least in their own homes to prevent the spread of the disease.

The provision we have at present for early detection, effective isolation and timely treatment is only a minute fraction of what is needed to make any impression on the tuberculosis problem in our country. The improvement of socio-economic conditions will require a long-range plan. It will take time and require colossal sums of money to improve the sanitation, the housing conditions and the food situation and thus remove the basic causes of tuberculosis.

B.C.G. for Immunization

We cannot make any appreciable progress in the control of T.B. by the present method of treating individual patients, however much we may expand the provision of clinics, hospital beds and sanatorium. Even medically advanced and prosperous countries have not been able to provide sufficient institutional accommodation for adequate isolation and treatment of all cases. In order to arrest the spread of T.B. with greater chances of success, attempts have to be made in three directions: (1) the prevention of the spread of the disease from known infectious cases to others in their homes or in their places of work, (2) the protection of susceptible groups—children and adolescents—highly exposed to tuberculosis, and (3) health education.

B.C.G. vaccine has been in vogue in several Western countries for the last three decades and it is said to have proved its efficacy in affording a considerable degree of immunity. Since the end of World War II 36 million children and adolescents have had tuberculin testing and 16 million of that number have been safeguarded with B.C.G. vaccination. B.C.G. vaccination is considered necessary particularly for doctors, nurses and hospital workers and persons exposed to infection at home. Government have under consideration the

question of extending the B.C.G. campaign to mofussil places with the help and co-operation of the local bodies.

Health Education

In combating the disease an important factor is educating the people about the nature of tuberculosis and the measure for its prevention, cure and after-care. Every clinic, hospital and sanatorium can well become a centre for such education of the patient and his family. The expansion of health visiting services will be greatly useful in this matter. The public health nurse can warn the family about the danger of careless spitting by the patient. She can teach them how to dispose of infectious material and how to obtain at least partial isolation in the home.

The World Health Organization has repeatedly recommended that T.B. institutions can be of the simplest type and that expensive buildings are not essential for the purposes of isolation, treatment and after-care. We must reduce the capital and maintenance cost of institutional accommodation. Otherwise the progress of anti-tuberculosis work will be held up. Government will always be anxious to avail themselves of the lead which comes from such a great organization as the World Health Organization and also of the co-operation which voluntary organizations and the public can give in the anti-tuberculosis work that has to be done in this State.

Forward Trading in Cotton Seed

The Government of India have issued a notification prohibiting forward trading in cotton seed. This Order takes effect, after the close of business, on May 22, 1952. The contracts outstanding at the close of business on 22nd May 1952, shall be deemed to close out at the market rate, applicable to the contract at the close of business on the said day for cotton seed.

No person shall, after the 22nd May 1952, enter into any forward contract, except the following contracts: (i) forward contracts of specific qualities or types and for specific delivery at a specified price, delivery orders, Railway receipts or bills of lading, against which contracts are not transferable to third parties; (ii) contracts for the delivery at some future date of cotton seeds to Government or any authorised officer of Government; and (iii) contracts, which the Central Government may, by notification in the official Gazette, exclude from the provisions of this Order.

All differences arising out of any contract so deemed to be closed out shall be payable on the basis of the market rate as aforesaid and the seller shall not be bound to give delivery and the buyer shall not be bound to take delivery. Payment of all differences legally due from a member of an Association to another member of such Association in respect of any forward contract closed out under this clause shall be made to the clearing house of the Association and for the purpose of calculating such differences, the market rate shall be deemed to be the settlement rate fixed by the Associations under its by-laws or other regulations, which shall for the relevant purpose continue to have effect, subject to the provisions of this Order.

Central Five-Year Plan

A provision for Rs. 4,37,19,000 has been made in 1952-53 in the Budget estimates of the Central Ministry of Education for the schemes included in the educational programme of the Five-Year Plan, said Sri Gulzarilal Nanda, Minister for Planning and River Valley Schemes, in answer to a question in the House of the People on May 22, 1952. The Educational programme under the Five-Year Plan was still under consideration, the Minister added, and that it was expected to be equalised soon.

In a statement laid on the table of the House the Minister gave details of heads under which the provision of Rs. 4.37 crores was to be expended. The heads include basic and social education and scientific and technical education. An amount of Rs. 99.25 lakhs is earmarked for expenditure on schemes for intensive educational development in selected areas, improvement of existing secondary education, production of literature and audio-visual aids in the Federal and other Indian languages and promotion of the Federal language and grants to States, voluntary bodies, etc., and for cultural and educational improvements and experiments.

For the Indian Institute of Technology the provision made is for Rs. 1.29 crores while for the Indian Institute of Science, Bangalore, the provision is to the extent of Rs. 37.20 lakhs. For development of higher scientific and technical education and research including grants and interest-free loans to universities and institutions a provision of Rs. 41 lakhs has been made. Stipends for practical training and scholarships for research training would cost Rs. 15.50 lakhs, while grants to selected engineering and technological institutions under the scheme of the All-India Council for Technical Education would cover Rs. 80.29 lakhs. For higher education (General) including "Humanities" and libraries in universities a provision for Rs. 34.20 lakhs has been made.

Propagation of Hindi

A five-year plan with an estimated expenditure of Rs. 17,08,000 has been drawn up by the Ministry for the development and propagation of Hindi, states a Report on the activities of the Ministry of Education during 1951-52 and Programme for 1952-53 which was presented to Members of Parliament. The plan aims at taking necessary measures to make Hindi the official language of the Union within the stipulated period of 15 years, as contemplated in the Constitution. The plan was approved by the Standing Finance Committee and during 1951-52 a beginning has been made by undertaking the following work:—

A new Hindi Section has been created in the Ministry and most of the staff has been appointed. A Central Hindi Organization (Hindi Shiksha Samiti) has been formed to advise the Ministry from time to time on matters relating to the propagation and development of Hindi, specially in the non-Hindi speaking areas.

Scientific Terminology

In 1950, a Board of Scientific Terminology was set up with a view to preparing dictionaries of scientific, administrative and other technical terms in Hindi. During 1951-52 a Committee of Experts and ten Experts Committees have been set up to prepare the dictionaries.

been recently appointed in order to implement the recommendations of the Board regarding the preparation of dictionaries. Work is in hand to release the preliminary lists of terms in various sciences like Physics, Chemistry and Mathematics. Comments on these terms will be invited from scholars, linguists, State Governments, universities and after these have been considered by the Board of Scientific Terminology, final lists will be published to help in the standardization of terms in text-books and for administrative purposes. A budget provision of Rs. 3 lakhs has been made under this head for 1952-53.

In the field of Basic and Social Education, facilities for training of teachers have been considerably expanded. As a mark of appreciation of the role of primary school teachers, an official reception for all Heads of Primary Schools in Delhi State was held at the Rashtrapati Bhavan.

At the Central Institute of Education an interesting experiment has been undertaken with the object of adapting Basic Education to the needs of the urban community. A Janata College has been established at Alipore for training promising young men from villages in rural leadership. In order to reorganise Secondary Education on proper lines, Government have decided to set up a Secondary Education Commission which will make a comprehensive survey of the whole field and formulate proposals for reform.

Cultural Scholarships

Among the cultural activities of the Ministry the scheme for the award of Cultural Scholarships has been continued. The number of these scholarships will be increased to 100 during 1952-53. The scheme is expected to play an important part in developing cultural relations and fostering better understanding between India and the participating countries.

The Hon'ble Prime Minister inaugurated in February this year the National Art Treasure Fund set up by the Government of India in co-operation with State Governments.

There has been a considerable increase in our international contacts in various fields. The Ministry of Education has received valuable assistance from various international organizations. Under the UNESCO Technical Assistance programme, services of several distinguished technical experts have been made available and nine Fellowships for Indian students have also been offered in various fields. Under the Colombo Plan six mobile cinema vans have been offered by the Australian Government for furthering the Audio-Visual and Social Education programmes.

Under the Fulbright and allied schemes a number of teachers and other educational workers have been given the opportunity to receive training and to participate in study tours. Under the Indo-German Co-operation Scheme the Ministry has received the offer of 50 free-studentships in German universities and of practical training facilities for 250 Indian engineer-apprentices in heavy industry workshops. Awards have also been made under the schemes of UNESCO Workers Fellowships and United Nations Social Welfare Fellowships and Scholarships.

Educational Concessions for Children of Non-Gazetted Officers

The Government have directed that, with effect from the school year 1952-53, the following educational concessions be granted to the children of all non-gazetted employees of the State Government, all employees of local bodies drawing pay not exceeding Rs. 300 per mensem and all teachers employed in aided elementary schools and aided secondary schools.

The Government wish to make it clear that the educational concessions apply to the children of all non-gazetted employees of the State Government irrespective of their pay. The income limit of Rs. 300 will apply only to the employees of local bodies.

The concessions will be restricted to the sons and daughters of the classes of employees mentioned above and will not be extended to their relatives or dependants. Pensioners, village officers or casual workers, who are paid wages at current market rates and who are not employed regularly, will not be included in the scope of the concessions.

The concessions in the case of the children of these employees will be by way of the remission of full tuition fees, in the case of those studying in elementary schools and in secondary schools, up to and inclusive of Form III, and by way of the remission of one-half of such fees, in the case of those studying in the high school classes (Forms IV to VI of a secondary school).

The concessions will not apply to any of the special fees levied for specific purposes, such as medical inspection, library, games, laboratory, etc. Children already enjoying educational concessions up to the extent specified above, either as members of backward communities or on grounds of poverty or for any other reasons, will not be given further concessions.

The fee income lost by the managements of aided elementary schools and aided secondary schools, as a result of the concessions in this Order, will be made good to them in full. One-half of the fee income, lost by the local bodies, will be made good to them and the other half should be borne by local bodies. The reduction in the fee income of local bodies should not be taken as an item of cost in reckoning the Government grant due to the local bodies.

The production of a certificate that the person claiming the concession is a non-gazetted employee of the Government or an employee of a local body or a teacher in an aided elementary or secondary school, should be insisted on, in all cases of grants of concessions. In the case of employees of local bodies, the certificate should contain information about their monthly salary. The certificate shall be issued by the head of the office or institution in which the person concerned is employed.

Financial Assistance to Displaced Students

The Government of India have notified that they have decided, subject to the following conditions, that the concessions mentioned in paragraphs 5 (a) and 5 (b) of the scheme for financial assistance to displaced students and trainees from Pakistan, notified in the Ministry of Rehabilitation Order, dated July 6, 1951, should also be extended to those displaced students who join collegiate courses after passing the School Certificate examination of the Cambridge University.

(i) The candidate should have secured Class I or equivalent gradation in the said examination, and should belong to the category of deserving displaced students whose parents or guardians are not in a position financially to bear the expenses of their education, and at the same time to maintain them. (ii) The total expenditure in implementing the scheme as a whole will not exceed the allotment made to the State Government for educational grants during the financial year concerned.

As regards the question whether Pharmacy courses are covered by the scheme mentioned above, the Government of India have ordered that if the Pharmacy course is undertaken at a recognized institution it is covered by

the term "Medical Course" mentioned in paragraph 6 (iii) of the scheme. If it is a degree course, the rate of stipend will be Rs. 60 per mensem per head (vide item No. 3 of the Schedule of the scheme); but if it is a Diploma Course, the rate will be covered by item No. 5 of the Schedule. If, however, it is a post-graduate course in Pharmacy, it will be covered by paragraph 7 of the scheme read with item No. 7 of the Schedule.

'Pass' and 'Honours' Subjects

With reference to the scheme for financial assistance to displaced students and trainees of Pakistan sanctioned by the Ministry of Rehabilitation, the Government of India have notified that if a displaced student is pursuing a 'degree' course providing for 'Pass' and 'Honours' subjects, he will be eligible for a stipend, if he secures not less than 60 per cent marks in the 'Honours' subjects, regardless of the percentage of the marks he secures in the 'Pass' subjects or in the aggregate.

Village Renamed

The revenue village "Lanjavada" in Rampachodavaram Taluk, East Godavari District, has been renamed as "Gandhinagar".

Refresher Course in Educational Statistics

The need has been increasingly felt to have reliable and accurate statistical data on matters pertaining to Education. Various educational plans and policies are in the formative stage and statistics is the sheet-anchor of all planning. Consequently there was on the one hand the requirements of the local and the Central Governments asking for more and more statistical data and on the other the departmental officers who had to know the technique. There was also the need for accuracy and prompt submission of the returns. It was therefore felt that to improve the quality and availability of statistical information, the departmental officers should be given adequate guidance and training.

A short course in educational statistics for the benefit of the departmental officers was therefore organised and this course is the first of its kind in the State. The Universities were also invited to send in their representatives.

Thirty-three officers of the Education Department, one from each educational district, drawn from among Personal Assistants to the District Educational Officers, Deputy Inspectors or clerks besides the representatives, one from Madras and another from Annamalai Universities, underwent the course. The Statistics Section Superintendent in the Director's office who has had special training in educational statistics under the Ministry of Education, Government of India, New Delhi, undertook the training of the officers in addition to his normal duties, and he was assisted by the Superintendent of the Elementary Education Section.

A special publication entitled *Handbook of Instructions on Educational Statistics* was also brought out on the occasion to serve as a basis for work during the course and for use generally by all educational institutions and departmental officers. The course was of a week's duration commencing from Monday the 26th May 1952.

The topics covered during the course included such items like drafting of pro-formas, collection and consolidation of data and drafting of the reports. A talk was also given with suitable illustrations on diagrammatic and graphical representation of statistical data to stress the point that one of the important functions is to present the data in a manner that is readily intelligible. Talks were also given on population census, school-age census and literacy figures in the State. The course was rounded off with a lecture on the progress of education in the State from the advent of the British to the present day. A small exhibition to show the evolution of the statistical forms in use and a few specimens of maps and charts prepared by the Statistical Section was also got up in connection with the course.

Ordinary Elections to Corporation of Madras Ordered

The Government have ordered that ordinary elections to the Council of the Corporation of Madras should take place in the months of August-September 1952.

The term of the office of the present Councillors and Aldermen of the Corporation of Madras expires on November 1, 1952.

Courier—Organ of Unesco

The UNESCO COURIER is an international illustrated monthly devoted to activities and developments throughout the World in the sciences, arts and education. It is published in English, French and Spanish. It is a magazine designed for readers who are interested in people of all nations, and who are alert to today's events and problems.

COURIER is addressed specially to teachers in primary and secondary schools, to young people, trade unions, organizations working in the field of education, science and culture, United Nations Associations, UNESCO Clubs and Associations, journalists, professors and public men who are working for international understanding and co-operation. The publication of this magazine is a very important activity of UNESCO in promoting its aims and ideals.

Typical of COURIER'S graphic and meticulous studies of world problems are some of the articles in recent issues:

January, 1952: A report on the pilot project in fundamental education launched in the Marbial Valley in the Republic of Haiti; the many aided question of the world newsprint famine.

February, 1952: Safety on the high seas—the control of maritime hazards by UN agencies; the revolution wrought by electronic calculators; scientific restoration of 'old masters'.

March, 1952: The battle against illiteracy in Southern Italy; the rationalization of the Braille alphabet; the art treasures of the Temple of Koryuji at Kyoto, Japan.

These random samplings will suffice to indicate the vital role COURIER plays in popularizing the cherished objectives of UNESCO. Individual readers and groups like international relations clubs, scientific and literary societies need COURIER to keep abreast of world advances in a new spirit of mutual goodwill and social co-operation.

There are no currency difficulties in subscribing to the COURIER. You may send the subscription of Rs. 7-14-0 to Messrs. Oxford Book and Stationery Co., Scindia House, New Delhi (UNESCO's Sales Agents in India) who will book the order for a year's supply of the COURIER to your address. The firm will then forward your order to the Headquarters in Paris, where from you will receive your copy regularly every month for twelve months.

Irrigation Schemes Sanctioned

Activities of the Irrigation (Food Production) Department during the month of April 1952:

P.W.D. Irrigation Schemes

Nellore District.—An estimate amounting to Rs. 1,00,000 for works, or Rs. 1,30,200 including direct and indirect charges, has been sanctioned by the Government for the formation of a new tank across the Nerellavagu at about two furlongs above Sankavaram village in Udayagiri Taluk, Nellore District. The scheme is intended to benefit an extent of 115 acres of patta dry lands, 63 acres of assessed waste and 22 acres of poramboke lands. The net additional production anticipated as a result of execution of the scheme is reckoned at 50 tons of rice per annum. The work will afford relief to unemployed agriculturists affected by adverse seasonal conditions in the area.

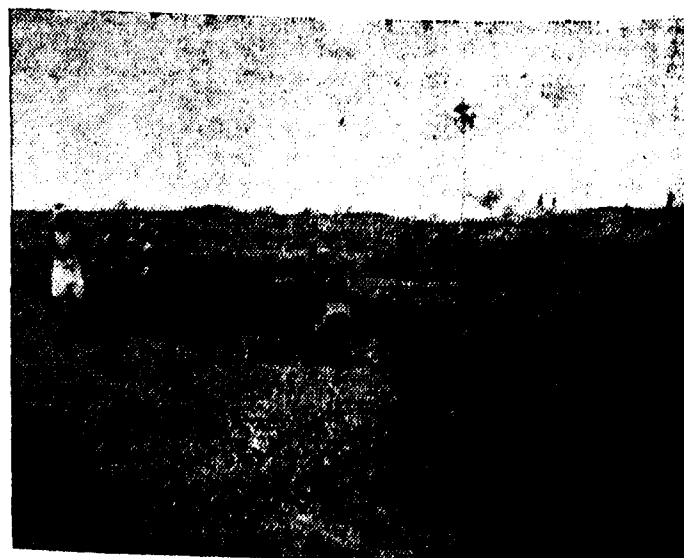
Tank Improvement Schemes

(1) **Nellore District.**—An estimate amounting to Rs. 29,700 for works, or Rs. 38,546 including direct and indirect charges, has been sanctioned by the Government for carrying out improvements to Kondappa tank in Ramapuram village of Darsi Taluk of Nellore District. The scheme is intended to benefit a new extent of 67 acres besides assuring better supplies to the existing extent of 115 acres. The net additional production anticipated as a result of execution of the scheme is reckoned at 53 tons of foodgrains per annum. The work will provide employment to unemployed agricultural labourers affected by adverse seasonal conditions in the district.

(2) **North Arcot District.**—An estimate amounting to Rs. 33,000 for works, or Rs. 42,829 including direct and indirect charges, has been sanctioned by the Government for the construction of a masonry outlet and carrying out other repairs to the Athi Eri supply channel in Vallambakkam village of Tiruvannamalai Taluk, North Arcot District. The scheme is intended to bridge the gap of 25 acres between the registered ayacuts and the extents now under cultivation under the three tanks fed by the channel, besides assuring better supplies to the existing cultivated extent of 291 acres. The net additional production anticipated as a result of the execution of the scheme is reckoned at 50 tons of rice per annum. The work will provide labour to unemployed agriculturists affected by adverse seasonal conditions in the area.

Recovery of Takkavi Loan Instalments

The Government first directed that the recovery of takkavi loan instalments in certain areas of Guntur, Kurnool and Nellore Districts and in Alangudi, Tirumayam and Kolathur Taluks in Pudukottai Division in Tiruchirappalli District and in the entire district of Chingleput which were affected by adverse seasonal conditions should be postponed till fasli 1372. The Government now direct that the recovery of subsidy loans granted under all the well subsidy schemes be postponed to the kist season in fasli 1362 as in the case of loan instalments under the Land Improvement and Loans Act in the entire district of Chingleput, in Alangudi, Tirumayam and Kolathur Taluks in Pudukottai Division in Tiruchirappalli District and in the affected areas of Guntur, Kurnool and Nellore Districts, instead of on 30th June 1952 as already ordered.



MINOR IRRIGATION: Repairs being done to the Budur Tank in North Arcot District as part of relief work in Tamil Nad

Tank Improvement Works

With a view to hasten the execution of Tank Improvement Works, Government have authorised the Collectors to permit the Executive Engineer after discussion on each scheme costing Rs. 10,000 or less, to commence works in anticipation of sanction in all cases where they would provide employment in needy areas and where the execution of the works could be justified even if the financial return might not be adequate. In respect of works costing above Rs. 10,000 and not more than Rs. 30,000 prior approval of the Commissioner of Food Production should be obtained except in case of dire urgency. The Collectors should submit to the Commissioner of Food Production for sanction all cases taken up under the above delegation within two weeks of their being taken up in anticipation of sanction.

The above delegation will not apply to the following cases:—

1. Formation of new tanks or cases in which land acquisition is involved and
2. Cases in which objections have been raised by any group of villagers that their interests would be affected and these rights have to be adjudicated on.

Honorary Magistrates

Hitherto, Honorary Magistrates were appointed by the Government on the recommendations of Committees constituted of both officials and non-officials, both in the City as well as mofussil districts. The Government have recently decided to do away with this agency and to make appointments on the recommendations of the Collectors in the District and of the Chief Presidency Magistrate in consultation with the Commissioner of Police, in the City.

Ameliorative Activities

Ameliorative activities in the districts, in connection with the Prohibition campaign, including the rehabilitation of ex-addicts and resettlement of ex-tappers, during the month of April 1952, are given below:

BELLARY.—Two villages at Alipuram and Veniveerapuram were contacted for collection of share capital for the proposed Milk Supply Societies. The construction of godowns by three societies have gone beyond basement level and in one society, i.e., the Harpanahalli Marketing Society, to roof level. Investigation was made for a land colonisation society at Bennikal village and report was submitted to the Registrar. The Udegolam Tenants Society was got registered and is pending starting. The Sreedaragadda Milk Supply Society was started on its work. The Alur Firka Federation and the four multipurpose societies in the firka were recommended for a subsidy of Rs. 4,000 for 1952-53 for agricultural, social, recreational and cottage industries purposes.

THE NILGIRIS.—The Ootacamund Taluk Ryots Conference and Jamabandi Exhibition was held at Ootacamund on 30th April 1952, presided over by the Collector. The Nilgiris Co-operative Marketing Society and the Ootacamund Co-operative Milk Supply Society participated in the exhibition. The propaganda van was also in attendance. The Gudalur Co-operative Milk Supply Society was started on work. The propaganda van visited 19 hamlets and information films were screened in the places visited. The shows were witnessed by large crowds.

NORTH ARCOT.—At the Kalasapakkam Cottage Industries Federation a meeting of the artisans was convened and raw materials necessary for woodwork, smithy-work, leather-work and oil-pressing were estimated and resolved to be purchased. B.P. sheets were distributed to the artisans. Timber and iron purchased amounted to Rs. 1,157-3-0 and sales effected amounted to Rs. 844-3-0. Out of materials so distributed six Wardha model latrines and three double-bullock carts were made and completed. Rope-making was demonstrated in the meeting with the coir brought from Beypore with a view to see if this industry can be introduced.

SOUTH ARCOT.—There were 25 Jaggery Manufacturing Co-operative Societies in Tirukoilur circle with 890 members. The palmyra tapping season has commenced in the circle and 586 licences for the tapping of palmyra sweet juice for the manufacture of jaggery were issued up to the end of April 1952. The total quantity of jaggery produced is 4,901 lb. valued at Rs. 904-13-0. There was no difficulty in finding a market for the jaggery produced. The entire quantity has been sold out. The ex-tappers have all been provided with employment. There is no agitation for employment.

Milk Supply Co-operative Societies.—The Milk Supply Co-operative Societies at Kaveripakkam, Semmananganur and Tiruvannainallur, started for the benefit of the ex-tappers, are having normal business. The Semmananganur Milk Supply Co-operative Society is maintaining a breeding bull.

Libraries.—The Eraiyur and Thaniyal Grama Sangams are running libraries; the Vihandai Co-operative

Society and Alagramam Co-operative Society are also running libraries for the benefit of members and non-members.

Thrift.—The thrift scheme was explained in all the propaganda meetings and all the people were exhorted to save in the hundi boxes. During April 1952 a sum of Rs. 513-13-3 was saved in hundi boxes and a sum of Rs. 4,136-8-0 was saved under thrift deposits.

CHINGLEPUT.—The Government have permitted the tapping of palmyra trees for sweet toddy for jaggery manufacture in the two taluks of Ponneri and Madurankam in the Chingleput District in their Memorandum No. 117926/S/51-2, dated 17th January 1952. On representations made in this behalf, the Government have been pleased to order in their Memorandum Development No. 16948/S/52-2, dated 12th April 1952, permission to tap palmyra trees for sweet toddy for jaggery manufacture in the remaining taluks of Chingleput District also through selected co-operative societies in areas acceptable to the District Prohibition Officer. All the 14 societies in Ponneri and Saidapet Taluks have been selected for grant of licences. Up to the end of March 1952, 74 licences were issued to members of Jaggery Manufacturing Co-operative Societies and more are under issue.

WEST GODAVARI.—All the five Rural Welfare Officers in the District have been absorbed as Junior Inspectors and they were sent up for training in the Rama Does Co-operative Training Institute, Rajahmundry. Thus there is no staff to attend to the ameliorative activities in the District. During the month, the Special Senior Inspector for Jaggery Societies issued 874 licences to ex-tappers, bringing the total number of licences issued up to the end of the month to 8,274 for manufacturing palmyra jaggery.

TIRUCHIRAPPALLI.—Propaganda for thrift was continued to be made by Central Bank staff. A sum of Rs. 777-15-0 was collected under thrift deposit through hundi boxes. The propaganda van was on tour for 23 days in Dindigul area and visited 18 villages and exhibited pictures in 14 villages.

EAST GODAVARI.—With a view to propagate the benefit accruing to the ex-tappers by the manufacture and marketing of palm jaggery through co-operative effort, a stall was opened on the occasion of the Sri Rama Navami Exhibition of All-India Arts, Crafts and Industries held at Rajahmundry from 3rd to 10th April 1952. Best samples of palm gur manufactured in the neighbouring palmyra jaggery manufacturing societies of Rajahmundry, and palm gur products were exhibited. Free samples of palm gur and palm sugar were also distributed to the visitors. The stall attracted a good crowd of about 1,000 persons per day.

SOUTH KANARA.—During the month of April 1952 one Fishermen Co-operative Society was registered at Kaup. The Pilya, Permannur, Hejmadi, Kadi, Mala and Palli Rural Credit Societies were started on work during the month.

Distribution of chemical fertilisers and iron and steel.—The S.K.C.O. Works, Limited, sold through its retail depots 16 tons 935-5 lb. of ammonium sulphate and 10

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tons 1,792 lb. of superphosphate. The primary societies sold 1,092 lb. of ammonium sulphate and one ton 483 lb. of superphosphate during the month. The Central Stores also sold 942.5 lb. of M.S. Flats, eight tons 1,147.9 lb. of M.S. Rounds and 385.5 lb. of octagonal steel bars.

Promotion of thrift.—The thrift collections effected during the month amounted to Rs. 10,258.

Harijan Welfare.—The Central Bank issued a loan of Rs. 250 to one Adi-Dravida Co-operative Society during the month. The Special Co-operative Inspector, Udipi, inspected one Adi-Dravida Co-operative Society during the month, and the Special Co-operative Inspector, Mangalore, inspected 14 Adi-Dravida Co-operative Societies. Collections to the tune of Rs. 611-3-6 were effected by the Special Co-operative Inspectors during their visits to the societies. Two societies, viz., the Baikady and the Thanirabhavi, were revived during the month.

RAMANATHAPURAM.—One co-operative society was organised during the month. At the end of the month there were 171 Jaggery Manufacturers' Co-operative Societies in this district, with 18,179 members and a paid-up share capital of Rs. 30,208. A total of 801 licences for tapping sweet juice and 424 permits for the sale of sweet juice for personal consumption as beverage were issued during the month, raising the total number of valid licences and permits to 5,926 and 2,598, respectively, at the end of the month. Eight hundred and fifty-eight maunds of palmyra jaggery valued at Rs. 3,512 were produced, and the entire quantity was sold for Rs. 4,530 while 51,040 of Madras measures of sweet juice were sold for Rs. 6,617-8-0 as beverage for personal consumption during the month. Training was imparted to 16 members in three jaggery societies, and the Palm Gur Instructor conducted four demonstrations.

At the end of the month there were 533 rural credit societies with 49,492 members and a paid-up share capital of Rs. 6,91,126. The number of villages and population

served by these societies are 1,331 and 2,47,460 respectively, the percentage of villages and population served being 55 per cent and 17 per cent respectively, during the month. Four hundred and sixty-five rural credit societies have changed their names to multipurpose rural credit societies and adopted the latest model by-laws prescribed by the Registrar. The volume of transactions under the multipurpose activities of the rural credit societies amounted to Rs. 200 during the month.

MALABAR.—During the month one rural credit society, viz., the Taloor Multipurpose Co-operative Credit Society and a weavers' society, viz., Pandicode Weavers' Co-operative Production and Sale Society, were registered. In the existing rural credit societies 239 new members were newly admitted and a paid-up share capital of Rs. 2,169 was collected. One society was revived during the month, three members were newly admitted and the panchayat reconstituted. The Society has applied for a loan of Rs. 2,000.

The 38 jaggery societies working in the district have a membership of 12,722 with a paid-up share capital of Rs. 74,392. During the month eight tapping licences were newly issued. During the month 5,410 maunds and 16 lb. of jaggery were produced and sales to the extent of 14,554 maunds were effected. All these sales were effected through the societies themselves. The Elapully Jaggery Production Co-operative Society provided subsidiary occupation to its members in the shape of production and sale of milk. During the month the members produced milk to the value of Rs. 1,033-14-0 and sold it for Rs. 1,303-9-0 through the society.

The Palm Gur Instructor gave demonstration on the manufacture of improved variety of jaggery to the members of Elapully, Pallassana and Parli Jaggery Societies. These societies produced 1,180 lb. of refined jaggery worth Rs. 147-8-0 and sold it for Rs. 266-4-0.

TESTING OF PRESTRESSED CONCRETE BEAM: An interesting engineering test was conducted at the site of the Palar Bridge at the 38th milestone on the Great Southern Trunk Road, about four miles from Chingleput. The first of its kind in India, the test was designed to prove the strength of prestressed concrete to be used for beams in the Palar Bridge. Engineers from all over India attended the test, and here they are seen inspecting load measuring instruments.



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ANANTAPUR.—The Milk Supply Unions at Gooty and Dharmavaram formed for the benefit of ex-tappers sold 4,535 Madras measures of milk for Rs. 4,271 during the month. The Hindupur Firka Cottage Industries Co-operative Federation purchased raw materials such as iron and steel, timber, hides and bark for Rs. 961-2-0 and issued to the artisans stocks to the value of Rs. 3,506-0-10 during the month. At the end of the month the value of stock on hand was Rs. 5,870-1-2.

Two multipurpose rural credit societies were registered during the month, thus bringing the total number of rural credit societies to 462 at the end of the month. The percentage of villages and of the population served by rural credit societies in the district rose from 61.39 and 14.83 respectively at the beginning of the month to 61.63 and 15.03 respectively at the end of the month, while the targets are 50 per cent and 30 per cent respectively. The number of societies wherein multipurpose activities were introduced continued to be 295 at the end of the month: 1,181 members were benefited by these societies and a sum of Rs. 5,917 was involved in their transactions. During the month loans to the extent of Rs. 46,248 were issued to rural credit societies under the cheap loans scheme.

The propaganda van visited 36 villages during the month. Seventeen film shows and twelve magic lantern shows were screened during the month. The P.A. System was utilised during the month for giving wide publicity to the famine relief measures undertaken by the Government. Sixteen Harijan members of the Gooty Palmyra and Date Products Workers' Co-operative Society underwent training in the manufacture of palmyra and date products. Nine members attained proficiency. The Society purchased raw materials (40 head-loads of leaves and colours) for Rs. 68 and supplied them to the trainees. During the month the Society manufactured 50 date mats for Rs. 25 and sold stocks for Rs. 6-14-0.

MADRAS CITY.—Licences for tapping palmyra trees for the production of jaggery have been issued to 45 members of the Nallankuppam Jaggery Manufacturing Society only. The members produced 4,350 lb. of jaggery in the month. It was sold by the members themselves on their individual account. The stock of jaggery left at the Guindy Engineering College still remains undisposed of. The Senior Inspector has been instructed to contact the President of the Society and arrange for the disposal of the jaggery.

Recreational activities.—Film shows were arranged in the evenings in over ten of the cherries in the city through the propaganda van that toured in the month. The residents of the cherries were very much pleased by the newsreels which, according to them, provided good recreation after the day's labour. Propaganda on the benefits of Prohibition and the small savings schemes were also conducted in the centres.

TANJORE.—During the month under report, a sum of Rs. 1,513 was collected as savings through the thrift savings scheme. One Palmyra Jaggery Co-operative Society was started on its work at Thottu in Tanjore Taluk. Four licences were issued for tapping sweet juice for palmyra trees for the manufacture of jaggery to members of jaggery manufacturing co-operative societies.

NELLORE.—Propaganda was carried on in the rural areas of the circle, on the evils of drink and on the various benefits conferred on the poorer sections of the rural population by the introduction of Prohibition. The ex-addicts are being encouraged to join the local co-operatives and take to thrift-savings with the aid of hundi boxes. They have come to realise by their own living experience the social and economic benefits conferred by the enforcement of Prohibition.

GIRDER FOR THE TRIAL: The prestressed concrete beam of 90 feet span used in the test. Loads were applied till cracks appeared in the beam. Designed for a 30-ton load, the beam withstood even 150 tons. Prestressed concrete can effect 80 per cent saving in steel and 40 per cent in concrete.



Madras State Famine Relief Fund

The donations to the Madras State Famine Relief Fund reached the total of Rs. 5,39,105-8-2 on May 20, 1952. The following is the list of donations of Rs. 100 and above :

	RS.	A.	P.
Amount received up to 6th May 1952 (already published in newspapers).	3,75,313	5	11
1 The Madurai Mills Company Limited, Madurai.	20,000	0	0
2 Messrs Amalgamations Limited, Madras.	10,000	0	0
3 The Andhra Cement Company Limited, Vijayavada.	5,001	0	0
4 A. K. Abdullahoy & Co., Madras.			
5 Messrs T. V. Sundaram Iyengar & Sons, Madurai.			
6 Messrs Buckingham and Carnatic Company Limited, Madras.	5,000	0	0
7 Messrs Burmah-Shell Oil Storage and Distributing Company of India Limited, Madras.			
8 The East India Distilleries and Sugar Factories Limited, Madras.	3,000	0	0
9 N. Gopal Das & Co., Tiruchirappalli.			
10 Sri N. Kanuge, M.P., Cuttack-2			
11 Messrs Binny & Co. (Madras) Ltd., Madras.			
12 The Bangalore Woollen, Cotton and Silk Mills Company Limited, Bangalore City.	2,500	0	0
13 Messrs A. & F. Harvey Limited, Madurai.			
14 The Imperial Tobacco Company of India Limited, Madras.			
15 Madurai Municipal Council, Madurai.			
16 Rajah Sri Muthiah Chettiar of Chettinad, Madras.			
17 Metal Box Company of India Limited, Madras.	2,000	0	0
18 Messrs Gordon Woodroffe & Co. Madras.			
19 Messrs Rallis India Limited, Madras.			
20 Messrs Best & Co., Ltd., Madras.			
21 The President, Wholesale Co-operative Stores, Anantapur.	1,830	0	0
22 A. M. Goolamally & Co., Madras.	1,776	0	0
23 Collections of sale of tickets to the variety entertainment at Tirumangalam.	1,701	0	0
24 Goolamally Abdul Hussein & Co., Madras.	1,652	0	0
25 Proceeds from the film show, "The River."	1,576	8	0
26 The Revenue Divisional Officer, Anantapur (sale-proceeds of drama tickets).	1,392	0	0
27 The Hon'ble Sri C. Subramaniam, Minister for Finance (being donations received from various Merchants' Associations of Coimbatore).	1,337	8	0

	RS.	A.	P.
28 Collector of Bellary ..	1,288	0	0
29 The Canara Industrial and Banking Syndicate Limited, Udipi.	1,001	0	0
30 Sri V. P. Malhotra, Calcutta			
31 The Madurai Hotel Keepers' Association, Madurai.			
32 Srimathi Jaya Shri Raigi, M.P., Bombay-26.			
33 The Andhra Bank Limited, Masulipatnam.			
34 The Secretary, Anantapur District Co-operative Central Bank Limited, Anantapur.			
35 Sri Karumuthu Thiagarajan Chettiar, Sree Meenakshi Mills Limited.	1,000	0	0
36 The Bombay Company Limited, Madras.			
37 Messrs Gillanders Arbuthnot and Company Limited, Madras.			
38 The General Electric Company of India Limited, Madras.			
39 Messrs Caltex (India) Limited, Madras.			
40 The East Asiatic Company (India) Limited, Madras.			
41 The Madura Rice and Oil Mill Owners' Association, Madurai.	750	0	0
42 Sri V. Ramabhadra Naidu Garu, Zamindar of Vadagarai.	700	0	0
43 Honorary Secretary, Madras Jewellers and Diamond Merchants Association, Madras.	663	0	0
44 S. Akbarali Haidarali and Company, Madras.			
45 S. D. Rangawalla and Company, Madras.	552	0	0
46 A. Ahmedally and Company Limited, Bangalore.			
47 Donation from the United Christian Association, Delhi.	525	15	9
48 M. Goolamally Abdul Hussein and Company, Madras.	501	0	0
49 Donation from the Repalle Co-operative Bank Limited, Repalle.			
50 The Madurai Paddy Merchants Corporation, Madurai.			
51 Mr. J. R. Marshall, Director, Madurai Mills Company Limited.			
52 Sri P. R. K. Kadiresan, Pattiveeranpatti.	500	0	0
53 Janab Mohamed Meera Rowther, Uthamapalayam.			
54 T. B. B. S. Raja Pandia Naicker, Zamindar, Bodi.			
55 Sri Kuppa Mudaliar, Tiruparankundram.			
56 The Commissioner, Eluru Municipal Council, Eluru.			

57 The Madura Bread, Biscuits Manufacturers' and Merchants' Association, Madurai.			
58 Madurai Unavu Pangeedu Sillarai Viyaparigal Sangam, Madurai.			
59 His Excellency the Governor of Uttar Pradesh.			
60 Sri M. S. Savarimuthu Udayar, Royappanpatti.			
61 P. V. Kottaisamy Thevar, Gudalur.			
62 Commissioner, Kodaikanal Municipality, Kodaikanal.			
63 Sri M. Janakirama Kullama Naicker and Sri M. Kullamma Naicker, Neikkarapatti.			
64 Messrs. Greaves Cotton and Company Limited, Madras.			
65 Messrs. Glaxo Laboratories (India) Limited, Madras.			
66 The Chartered Bank of India, Australia and China, Madras.			
67 The National Bank of India Limited, Madras.			
68 The Lloyds Bank Limited, Madras.			
69 The Eastern Bank Limited, Madras.			
70 The Mercantile Bank of India Limited, Madras.			
71 Guntur District Wholesale Co-operative Stores Limited.			
72 Abdulla Brothers, Madras ..			
73 A. T. Kharkaiwalla and Company, Madras.			
74 Sri K. M. S. Lakshmana Iyer, Madurai.			
75 Sri V. T. Nagu Pillai, Madakkulam.			
76 W. P. A. Chandrasekara Nadar, Pattiveeranpatti.			
77 Collections made by Srimathi Ammana Raja and the Revenue Divisional Officer, Kovvur.			
78 Sri A. S. An. Alagappan, Ceylon ..			
79 The Hotel Owners' Association, Palni.			
80 M. M. Abbas Brothers, Madras ..			
81 The Standard Brick and Tile Company (Yelahanda) Limited, Yelahanda.			
82 The Calicut Tile Company, Feroke.			
83 Srimathi Savita Kamdar, Madras ..			
84 Donation from the Madras Secretariat Association, Madras.			
85 The Retailers' Association, Dindigul.			
86 A. M. Hassanally and Company, Madras.			
87 The Village Common Fund, Gullapuram.			
88 The Standard Pottery Works Limited, Alwaye.			
89 H. A. Taiyebally and Company, Madras.			
90 Hussein Abbas and Company, Madras.			
91 Ebrahim Saifuddin and Company, Madras.			

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- 132 A. H. Taker and Company, Madras.
- 133 M. Hateembhoy Lodghar, Madras.
- 134 H. Abbasbhoy Ahmedally and Company, Madras.
- 135 Calcutta Light Casting and Company, Madras.
- 136 Abdul Hussein Salehbhoy and Company, Madras.
- 137 Janab M. Kolar Rowther, Cumbum.
- 138 Janab M. K. Chinnappa Rowther, Cumbum.
- 139 Sri N. S. K. Kannappa Gounder, Gudalur.
- 140 N. S. K. Ponniah Gounder, Gudalur.
- 141 The Sacred Heart College, Kodai-kanal.
- 142 Retailers' Association, Palni.
- 143 Assistant Engineer, B. Canal Sub-division, Kavali.
- 144 Sri T. Rama Reddy, Nellore.
- 145 Deputy Registrar, Co-operative Societies, Nellore, North.
- 146 Janab K. S. S. Mohamed Yusuf, Natham.
- 147 Sri K. Ramachandran, Bombay.
- 148 Sri N. Krishnan, Jackanarai village, The Nilgiris.
- 149 F. Saifuddin and Company, Madras.
- 150 A. M. Badruddin and Company, Madras.
- 151 A. N. Faida Hussein and Company, Broadway.
- 152 Sri R. Kumaravelu, Singapore-1.
- 153 Sri P. V. Kabali Chetti, Madras.
- 154 Sri S. V. Das, Deputy Collector, Madras.
- 155 Janab A. A. Mohammed Ibrahim, Dindigul.
- 156 Dr. S. G. Joshi, Bombay.
- 157 Sri D. M. M. Durai Raj Chettiar, Dindigul.
- 158 Sri T. A. Bangaruswami Naidu, Dindigul.
- 159 M. S. Duraiswamy Chettiar & Sons, Dindigul.
- 160 Janab K. S. M. Seeni Rowther & Sons, Dindigul.
- 161 Dindigul Rice Mill Owners' Association, Dindigul.
- 162 Sri H. K. Mahatab.
- 163 Sri S. S. Arunachalam Chettiar, Madurai.
- 164 Sri M. Nataraja Nadar, Palni.
- 165 Messrs. M. S. P. Periaswami Manigarrar and Company, Palni.
- 166 Sri M. S. V. A. Natchimuthu Chettiar, Palni.
- 167 Sri B. M. Sornam Pillai, Dindigul.
- 168 Messrs. N. S. Ramaswamy Achari & Sons, Limited, Chinnalapatti.
- 169 Messrs. Chandra Talkies, Batlagundu.
- 170 Batlagundu Co-operative Stores, Batlagundu.

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125 0 0
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120 0 0
117 0 0

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- 171 Sri S. R. Subramania Nadar, Patti-veeranpatti.
- 172 Sri V. T. S. Chandrasekara Mudaliar, Sholavandar.
- 173 Janab K. Kadir Meera Rowther, Uthamapalayam.
- 174 Janab M. K. Mohamed Abdul Hameed, Uthamapalayam.
- 175 Janab M. Kaderkutti Rowther, Uthamapalayam.
- 176 Janab M. N. Peer Rowther, Uthamapalayam.
- 177 Janab C. A. Abdul Azceez, Cumbum.
- 178 Sri Muthusamandia Pillai, Cumbum.
- 179 Sri S. T. Koneri Pillai, Cumbum.
- 180 Sri S. Michael, Thevaram.
- 181 Mr. R. E. Castel, Madras.
- 182 Sri K. Umamaheswaran, Madras-18.
- 183 Sri N. Srinivasa Iyer, Secunderabad (Dn.)
- 184 Sri E. C. Eshwar, Indore City.
- 185 Sri S. Muthuswami Chettiar & Sons, Madurai.
- 186 Sri S. K. B. Sokkalingam Chettiar, Madurai.
- 187 Messrs. A. S. S. M. Somasundaram Chetty, Madurai.
- 188 Sri A. P. Periaswami, Anangur.
- 189 Sri S. M. Venkataraman, Pandamangalam.
- 190 Sri N. G. Ramamoorthi Naidu, Nadanthai.
- 191 Sri R. Palanappa Mudaliar, Mohanur.
- 192 Messrs. M. S. Karuppuswami Gounder and Company, Palni.
- 193 Sri E. A. S. S. N. Somasundaram Chettiar and Company, Madurai.
- 194 Sri R. M. Appavoo Chettiar, Madurai.
- 195 Sri S. Balasubramaniam Chettiar, Madurai.
- 196 Dr. C. A. Amesur, Bombay.
- 197 Dr. R. A. P. Cooper, Bombay.
- 198 Sri V. P. Ocha Thevar, Uthampuram.
- 199 Sri T. R. M. Sivasubramaniam Nadar.
- 200 Sri A. T. Doraiswamy Nadar.
- 201 Sri K. P. M. Kuppan Chettiar.
- 202 Sri A. A. S. Chinnappa Arumuga Nadar.
- 203 Sri N. SK. Suruliyandi Gounder, Cumbum.
- 204 Sri K. P. Subramania Thevar, Gokilapuram.
- 205 Sri S. Kanakapillai Rowther, Guzzanur.
- 206 Sri G. P. Periaswamy Thevar, Gokilapuram.
- 207 Sri R. Subramaniam, Gudalur.
- 208 Sri S. Krishna Sastrigal, Gudalur.
- 209 Sri Vedachari Iyer, Othamapalayam.
- 210 Janab K. E. Kader Meeran, Othamapalayam.

RS. A. P.

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each.

RS. A. P.

- 1 Janab A. E. Kader Mohideen, Othamapalayam.
- 2 Sri N. K. Ponnuswamy Thevar, Chinnamanur.
- 3 Sri A. S. A. Sami Nadar, Chinnamanur.
- 4 Sri M. M. Guruswamy Nadar, Chinnamanur.
- 5 Sri S. V. Veerappan Naicker, Chinnamanur.
- 6 Sri D. Rajamanickam, Chinnamanur.
- 7 Sri T. Sudalaimuthu Nadar and Company.
- 8 Sri P. S. Bappuswamy Gounder, Gudalur.
- 9 Sri M. Vallinayyagam Pillai, Bodi.
- 10 Sri Meenakshinageswara Iyer, Periakulam.
- 11 Sri Dorai Rama Chidambaram Pillai, Periakulam.
- 12 Sri B. S. Somasundaram Iyer, Periakulam.
- 13 Janab P. M. Syed Meera Rowther, Natham.
- 14 Srimathi Rm. S. Rm. S. P. Umayalachi, Vallalapatti.
- 15 Sri SN. VR. Narayanan Chettiar, Melur.
- 16 Messrs. Rajamani Stores, Kodai-kanal.
- 17 Janab S. N. Syed Ghani, Keeranur.
- 18 Sri T. Karuppana Pillai, Keeranur.
- 19 Janab C. K. V. Abdul Wahas, Rv. Keeranur.
- 20 Sri S. A. Chidambaram Nadar, Theni.
- 21 Sri A. S. Guruswamy Nadar, Theni.
- 22 Sri K. A. S. Pandithuraisamy Nadar, Allingaram.
- 23 Sri S. R. M. Sathappa Chettiar, Usilampatti.
- 24 Sri Gopalaswami Reddiar, Avalsoorampathi.
- 25 Sri P. P. P. Chidambaram Nadar, Tirumangalam.
- 26 Sri Thiruvankada Reddiar, Agathapatti.
- 27 Collections through R.K. Sundararajulu Naicker, Jalakantapuram.
- 28 Messrs. Fraser and Ross, Madras.
- 29 Janab Syed] Kalai Rowther, Cumbum.
- 30 Bhagat Estates Limited, Madras.
- 31 A. Mohamed and Company, Madras.
- Miscellaneous collections (below Rs. 100) received after 6th May 1952.

100 0 0
each.

1,552 0 0
each.

7,403 2 0

Total .. Rs. 5,39,105 8 2



GRUEL CENTRE : Women and children wait for gruel at a centre in Paranj in North Arcot district.

Madras State Famine Relief Fund

A sum of Rs. 20,000, collected by the Borah Muslim community of Madras at the instance of His Holiness Sardar Dr. Syedna Taher Saifuddin Saheb, as subscription towards the Madras State Famine Relief Fund, has been received by the Hon'ble Chief Minister of Madras.

The Madras Chamber of Commerce has contributed a sum of Rs. 60,675, being the first instalment of subscriptions received from its members to the State Famine Relief Fund. Messrs. Parry & Co., Ltd., have further contributed 100 cases of condensed milk, valued at Rs. 4,300, and Messrs. Volkart Bros., condensed milk, valued at Rs. 2,000.

The contributions have been gratefully acknowledged by the Government.

The Government have accepted with thanks the free gift of articles made by the Indian Red Cross Society, Madras State Branch, for the use of mobile units working in famine-affected areas in the State and also its offer to donate a sum of Rs. 1,500 towards the cost of maintenance of one of the mobile units.

A sum of Rs. 675-2-0 has been received by the Honorary Treasurer, Madras State Famine Relief Fund, through General K. M. Cariappa, Command-in-Chief. This amount was collected at a dramatic performance held by the Railway staff at Delhi Cantonment Station for famine relief work in Rayalaseema.

Water-Supply for Salem

By SRI S. RAJAGOPALAN, Sanitary Engineer to the Government of Madras

It is a happy augury that a major water-supply system completed by the reorganised Sanitary Engineering Branch should be opened under such august auspices. The chequered progress in the execution of this scheme is but too well known. But for the delay imposed by the War, the festivities of the opening ceremony should have been held some ten years ago. The War conferred a boon on the Visakhapatnam Municipality by completing its Gosthani Water-Supply Scheme as a War measure and later selling it over to the Municipality, thereby advancing the fruition of that scheme perhaps by a decade. In the case of Salem Municipality, however, the War halted the water-supply scheme without mercy almost on the eve of its completion and stood between the scheme and the Municipality for well nigh a decade. It would seem as though the scheme had itself decided to wait and be opened by Rajaji only as the Chief Minister of Madras State.

The history of the Salem (Mettur) Water-Supply Scheme only symbolises the struggle of the Salem citizens though half a century against water scarcity. It was in the late nineties that an attempt was made to pump a supply from the 'Arisipalayam tank as a temporary measure. The Panamarathupatti Water-Supply Scheme was later investigated in 1905, and the scheme installed between 1907 and 1911, at a cost of Rs. 10-00 lakhs. The scheme was intended to serve an ultimate population of 80,000 at ten gallons per head per day. But almost within a decade of its installation, the Panamarathupatti tank source proved itself undependable in years of poor rainfall, and the population of the town had exceeded the limit set for the scheme.

Attempts were made to improve the source and tap the seepage waters, but with every summer the total inadequacy of the scheme to meet the expanded needs of the town was being realised forcibly. Public agitation against water famine became frequent and clamant. Alternative sources were thereupon explored. A scheme to bring water-supply from the Shevroy Hills was contemplated in 1926. But soon the Mettur Dam Project took shape. The people of Salem rightly pitched upon the Mettur Reservoir as the only solution to their water-supply problem.

Sanctioning of the Scheme

Several alternatives for bringing a supply from Mettur to Salem were considered. It was decided to pump a supply from Mettur utilising the tail race water of the turbine sets of the Hydro-Electric Scheme. The details of the scheme were then investigated under the orders of Government in G.O. Ms. No. 705, Public Health, dated 26th March 1930. The investigation of the Salem (Mettur) Water-Supply Scheme was accordingly carried out in 1930-31 and a report thereon submitted to Government. The preparation of plans and estimates for the scheme was then ordered in G.O. Ms. No. 1926, dated 24th April 1935. The Sanitary Engineer to Government submitted in August 1936 plans and estimates for the scheme amounting to Rs. 22-94 lakhs, which was revised by the Chief

Engineer, Public Works Department, to Rs. 24-03 lakhs and sanctioned by the Government in G.O. No. 1489, Public Health, dated 26th June 1937.

The execution of the scheme was entrusted to the Salem Municipal Council under the supervision and control of the Sanitary Engineer. The Municipality made a start on the execution. But soon, in accordance with the revised policy announced in G.O. No. 2186, Public Health, dated 15th June 1938, the execution of the scheme was taken over by the Public Works Department. It was at this stage that certain major features of the design of the scheme were re-examined. The Superintending Engineer, Public Works Department, Coimbatore Circle, suggested that instead of carrying the pumping main from the tail race across the Ellis Saddle, the pump house of the scheme could as well be shifted to the foreshore of the lake beyond the northern end of the Ellis Saddle, and the water from the lake pumped direct, instead of the water from the tail race. The Sanitary Engineer at the time also raised the question of the unsuitability of the tail race water with its high organic content and smell of sulphuretted hydrogen and suggested the desirability of drawing the lake water from near the surface at all times. An Intake Tower for the purpose was eventually decided upon. Yet another major alteration adopted in the scheme was the substitution of C.I. pipes for the pumping and gravity mains in the place of Hume steel pipes, included in the scheme as sanctioned.

Revised Estimate Approved

A revised estimate for the scheme was accordingly sanctioned in July 1939, incorporating the several alterations in design and increasing the amount from Rs. 24-03 lakhs to Rs. 33-00 lakhs. The increased cost of the revised estimate was due to the reasons set forth in the accompanying extract from the Chief Engineer's Note:—

"On a scrutiny of the sanctioned proposals it was noticed that the pumping arrangement proposed was defective. In the originally sanctioned estimate the proposal was to draw water through a hydro-electric pipe located at 640 of the dam with full reservoir level at 760. The very strong smell of sulphuretted hydrogen below the dam from the hydro-electric pipes from April to June showed that the water was holding a considerable quantity of hydrogen sulphide in solution due to decomposing organic matter in water; the point at which the water was originally proposed to be drawn was therefore obviously unsuitable. . . . It has since been decided that an Intake Tower located on the foreshore of the reservoir will be the best arrangement for efficient and cheap working of the scheme. The work of the Intake Tower is now in rapid progress and this work is provided for in the Revised Estimate . . .

"Consequent on the above, the alignment of the pumping main and the classification of the pipes in the pipe lines had to be changed to suit the present alignment."

This increased future was further revised to Rs. 36-67 lakhs in G.O. No. 1769, Public Health, dated 28th May 1948. With the completion of the scheme in 1952 as on date, the total outlay on the scheme will have amounted to about Rs. 40-00 lakhs.

War Halts Progress

The progress on the execution of this major scheme took refreshingly quick marches in the early stages. In fact, a major portion of the scheme—including the Intake Tower, the pumping main and the gravity main, the Nangavalli Filter Works and the Hasthampatti Service Reservoir—had been completed within the space of two years, between 1938 and 1940, and as much as Rs. 30 lakhs had been spent.

The War then intervened and halted all further progress effectively. The balance of the work remaining at the time was the raising of the Intake Tower above the full lake level, the supply and erection of the pump sets, the construction of the Booster Station, closing up gaps in the conveying mains, and construction of the Service Reservoir at Ammapatti. Our complete dependence on foreign manufacture for pumping plants of the type required for the scheme, and the non-essentiality attached to such water-supply schemes under the stress of War, spelt a long and tragic delay in the fruition of the scheme. The Department was directed to cease further activities on the execution, and resume it after the war.

Unsettled Conditions after the War

When the War ended, the supply position in regard to machinery, C.I. pipes and specials had deteriorated beyond imagination. Deliveries of articles on indent extended over years. The special pumping plants and machinery required for the scheme were ordered in 1947. They began arriving in 1950 and continued to do so right into 1951. The programme of erection of the plants had to remain indefinite until all the items of equipment—major and minor—should have been received. The execution of the scheme, which was resumed by the Public Works Department soon after the War, was taken over by the reorganised Sanitary Engineering Branch in February 1950. The discontinuity not only in the execution of the scheme because of the War, but also in the agency in charge of the execution, added to the difficulties of the situation. But above all, the long interruption of over ten years, between the stoppage and resumption of the execution, threw a heavy burden on the Department in having to re-examine, repair and rectify all the works executed a decade back and kept idle, and to place the entire scheme in working trim.

The supply, delivery, procurement and transport to site of the several items of plant, machinery and equipment required for this scheme, in the unsettled conditions after the War, require special mention, to appreciate the delay and difficulties they caused on the completion of the scheme. Meanwhile, understandably enough, the patience of the Municipality was being sorely tried. The Public Health Division which had newly taken over the execution, was in sore straits, as great expectations were placed on it. The Municipal Council began making frantic representations for expediting the scheme. A suggestion was even thrown out to transport from Scotland by air a sluice valve of 18 inches size weighing about a ton.

Bright Side of Scheme

A Railway waggon carrying from the Kulti Iron Works, C.I. specials very badly needed for the scheme, failed to arrive at Salem for months, and after frantic enquiries and search, was eventually located holidaying at a wayside station! Even after the receipt of all the articles at site, the actual erection of the plants in the Intake Tower presented unforeseeable difficulties which had to be overcome by special measures devised on the spot. It is indeed a matter for supreme satisfaction that the successful completion of the scheme after so much of stress and strain, should receive blessings at the hands of Rajaji.

The scheme has taken up as much as 12,500 tons of C.I. pipes and specials, and includes special structures like the Intake Tower within the lake, apart from the Filter Plant at Nangavalli, elevated R.C.C. Reservoirs and special pumping plants of high horsepower, with the biggest lift in our water supply schemes so far undertaken in the State. If the entire scheme had been sanctioned for execution in the postwar era, the cost would easily have exceeded Rs. 1 crore, and the completion of the scheme would have extended over a number of years. To the pessimist who would point out the delay brought about by the War and the idle capital of Rs. 30 lakhs sunk on the scheme ten years ago, the optimist might reply by pointing out the large saving in cost and time resulting from the completion of the major part of the scheme before the War.

Salient Features Explained

I may here explain the salient features of this interesting water supply scheme:—

(i) *The Scope of the Scheme.*—The scope of the scheme as originally sanctioned was to serve an ultimate population of 1,30,000 (expected to be reached in 1961) at 15 gallons per head per day. The idea was to design the Mettur Scheme for a supply of 15 lakhs of gallons with the scheme worked for 16 hours in the day, and utilise an additional seven lakhs of gallons per day expected to be supplied from the Panamarathupatti source. The figure of 15 lakhs of gallons thus assumed includes a reserve provision of 2½ lakhs of gallons per day to meet the industrial and others needs of Salem and to give a supply to wayside villages between Nangavalli and Salem.

Subsequently, however, in 1939 the Municipal Council expressed a desire that the entire town of Salem should be supplied with Cauvery water. This is proposed to be done by increasing the hours of working of the Mettur Scheme.

The population of the town has now far exceeded the ultimate figure of 1,30,000 assumed in the sanctioned design. In fact, for the Redistribution System which is to be taken up as the next stage, it has been decided to provide for an ultimate population of 3-3 lakhs expected to be reached in 1986. The expansion of the Mettur Filter Works and Nangavalli Filter Works may have to be thought of very soon in this context. It would appear as if the scheme is in need of expansion even at the time of its inauguration.

It is to be noted, however, that the old distribution system laid some four decades ago for the Panamarathupatti Scheme will have to be remodelled to suit the new scheme for the ultimate population assumed in 1986.

NEWS AND NOTES

(ii) *Raw Water Intake.*—The Intake Tower as completed is 20 feet diameter at its bottom increasing to 24 feet diameter at the top. The height from foundation to the top of the tower is 150 feet. Designed as a dry well and located within the 100 feet deep watershed of the lake, the tower can draw off the lake water from near the surface at all times. There are as many as seven inlet pipes fixed into the wall of the tower connecting to a vertical shaft serving as the suction for the pump. The pumps and motors are located at the bottom of the tower.

The pumping plant is designed for a duty of 1,570 gallons per minute against a head of 147 feet normally. The pumping set is designed to deal with the widely varying range in the suction head. The discharge is taken up through another vertical pipeline emerging out of the tower above the lake water level and taken along the foot bridge on to the shore.

Although the provision of the Intake Tower has overcome the handicaps of an unsatisfactory quality of the raw water drawn from the lake, the 100 feet deep tower has itself brought about certain practical difficulties in the maintenance of the scheme. The pumping plants have had to be specially designed not only for the special duty but also for their location in a damp chamber necessitating automatic thermostat controlled heating equipment. In addition, special ventilating equipment for the inside of the tower has also been provided, to blow fresh air through two airducts down to the level of the meters. Ancillary equipment such as travelling crane, seepage pump sets, mechanical hoist and access ladders have had to be accommodated in the limited space available in the tower, inasmuch as it has not been possible to include an electrical lift within the tower, a facility highly desirable in such cases.

(iii) *Booster Station.*—The water from the Intake Tower is picked up by a booster set located in the pumping main some 6,450 feet distant from the Intake Tower. The supply is boosted to the Nangavalli Filter Works through a pumping main 18 inches diameter, 34,570 feet long. As originally sanctioned, the scheme contemplated a single lift of the water from the tail race waters at the dam direct to Nangavalli Filter Works, which necessitated the use of pipes up to 'G' Class. But with the interposition of the booster, there is no need for pipes of a higher class than 'E' Class in the pumping main.

The booster pump sets are in duplicate, each 310 H.P. with a duty of 1,570 gallons per minute against a head of 430 feet. The Booster Station is located opposite to the Mettur Industries.

(iv) *Nangavalli Filter Works.*—The raw water received at Nangavalli is treated with alum and lime and passed through coagulation and settling tanks on to Paterson's rapid gravity filters. The filters are capable of an output of 94,000 gallons per hour. The filtrate is drawn into a clear water reservoir of one lakh of gallons capacity. A gravity main of 20 inches diameter takes off supply to Salem. After a distance of 74,813 feet, the size gets reduced to 18 inches diameter for the remaining distance of 34,118 feet up to the discharge point at the Service Reservoir at Hasthampatti. There is also an eight-inch main 14,500 feet long carrying a supply

MADRAS INFORMATION

direct from the 18 inch gravity main to another Service reservoir at Ammapet.

(v) *Service Reservoir and Distribution.*—The Elevated Service Reservoir at Hasthampatti comprises two separate tanks each of 2½ lakhs of gallons capacity. Another elevated service reservoir of two lakhs of gallons capacity has been provided at the eastern end of the town at Ammapet.

The sanctioned scheme does not provide for the linking up of the two new reservoirs with the existing distribution system. It was expected that such linking up could be included as part of the comprehensive remodelling of the distribution system at a subsequent stage.

However, to enable the Municipality to enjoy the benefits of the Mettur supply as an immediate measure, the laying of a ten-inch C.I. link-up main between Hasthampatti and the Bazaar Road Junction is being taken up. In addition, an emergency arrangement has also been completed whereby the eight-inch connecting main between Hasthampatti and Ammapet has itself been linked up with the town distribution system at a suitable point by a short eight-inch connection.

(vi) *Supply to Wayside Villages.*—An important feature of this scheme is that it includes provision for supply of drinking water to wayside villages as an essential part of the scheme. The Government Order sanctioning the preparation of plans and estimates directed that such provisions should be made in the scheme. In the scheme as actually completed, necessary C.I. tees have been provided in the gravity main to enable supplies being taken off by branch mains to the villages concerned.

One six-inch branch will supply to Jalakantapuram, Vanavasi and Nangavalli villages.

Three-inch branches will supply to each of the villages Pillakarichiyur, Tharamangalam, Pavalathanur and Sooramangalam.

In addition, a four-inch branch will take off supply to the Railway Colony at Salem Junction.

A double-tap public fountain was erected at the villages through which the gravity main passes, in order to enable the villagers to participate in the festival of the opening ceremony.

Rural Electrification

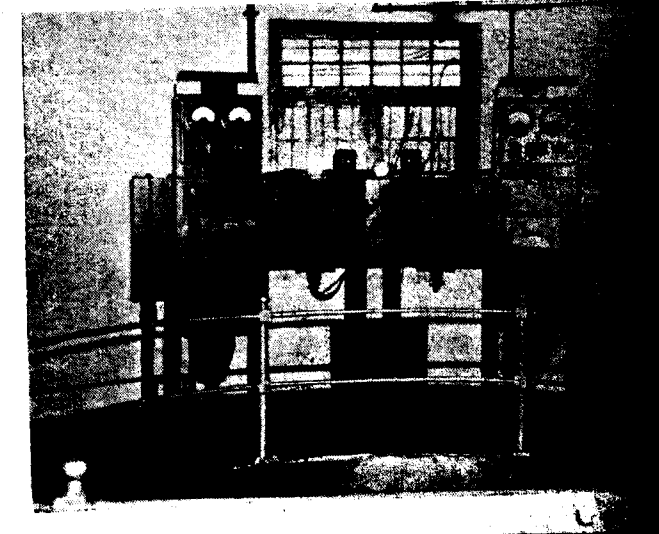
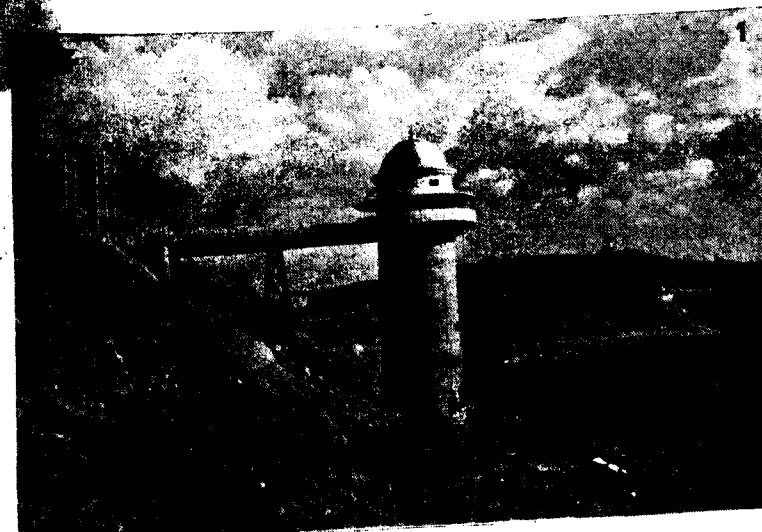
The Government have sanctioned the following electricity extension schemes :

Mettur Electricity System.—(1) Extension of supply of electricity to 33 agricultural pumpsets and five industrial services at Tiruvettipuram village in Cheyyar Taluk, North Arcot District, at an estimated cost of Rs. 1,29,200. (2) Extension of supply of electricity to 40 agricultural pumpsets and one industrial load at Panapakkam, Manakuppam and T. Edayar villages in Tirukkoilur Taluk, South Arcot District, at an estimated cost of Rs. 1,08,000.

Madras Electricity System.—Extension of supply of electricity to 122 agricultural pumpsets and one industrial service at Palur, Govindavadi, Padunalli and Pullalur villages in Kancheepuram Taluk, Chingleput District, at an estimated cost of Rs. 2,71,000.

The Hon'ble Sri C. Rajagopalachari, Chief Minister, recently inaugurated the Salem Water-Supply System. The following photographs illustrate its working.

1. The tank tower is 150 feet high and 20 feet in diameter. 2. The pumps in the Booster Station handle 1,570 gallons of water per minute. 3. The filters at Nangavalli. 4. The pumps of the Intake Tower. 5. The automatic thermostat controlled heating equipment in the Intake Tower. 6. View of the Nangavalli Filter Works. 7. The Service Reservoir at Hasthampatti comprises two separate tanks.

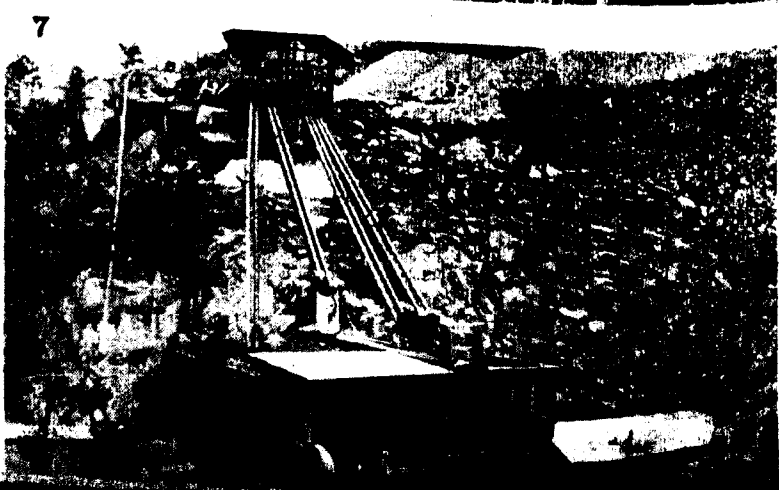
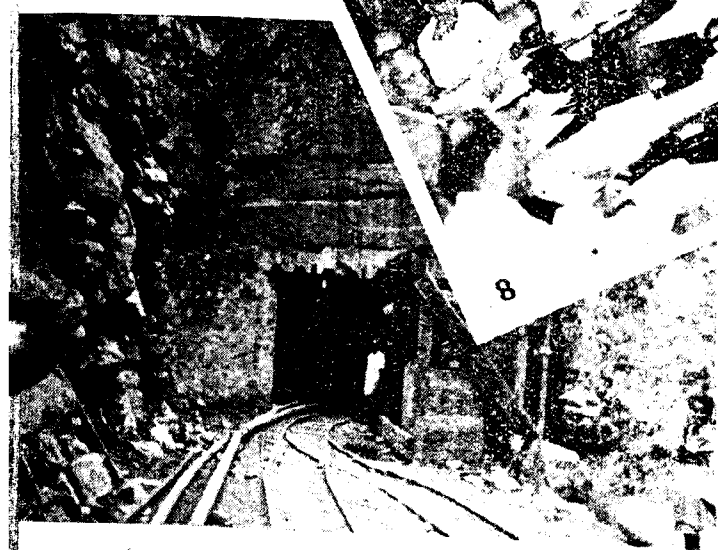
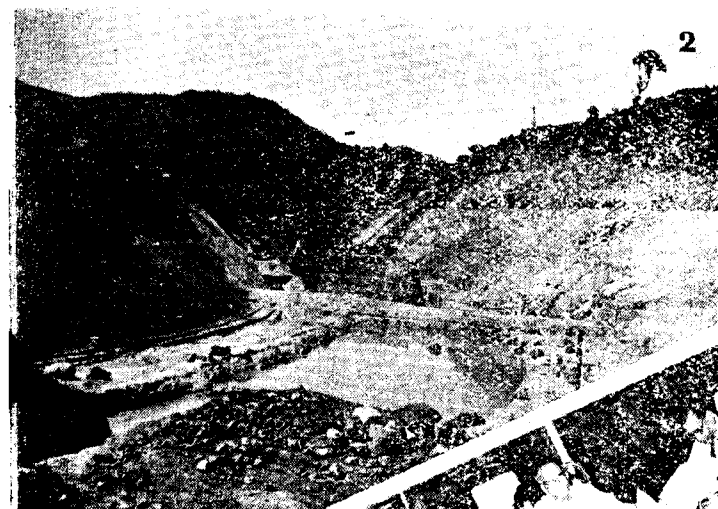


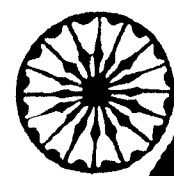


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**THE MACHKUND HYDRO-ELECTRIC
 SCHEME**

A meeting of the Machkund Board was recently held in the Madras Secretariat, when representatives of the Madras and Orissa Governments discussed the progress on the Machkund Project, a joint enterprise.

The photos are: 1. Approach to the Burdya Valley. 2. View from right bank. 3. Excavation between drains. 4. Open cut exit of the Flume Tunnel. 5. Shuttering for concrete at Pressure Tunnel. 6. View of Batching Plant and entrance of Pressure Tunnel. 7. Close up of Batching Plant. 8. The meeting of the Board.





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VANAMAHOTSAVA

Vanamahotsava, the National Tree-Planting Festival, entered its third year, with the holding of a Tree-Planting Week.

Top left: Brigadier M. S. Dhillon of the Madras Area Headquarters fulfils the Army's role by inaugurating the Week with a tree-planting ceremony.

Top right: Sri C. Rajagopalachari, Chief Minister, inspects the tree motif in the Silver Shield presented to South Kanara District for planting the most number of trees in 1951-52.

Above: Dr. R. Naganna Gowd, Minister for Agriculture, plants a sapling at the Robinson Park in Madras City.

Madras Information

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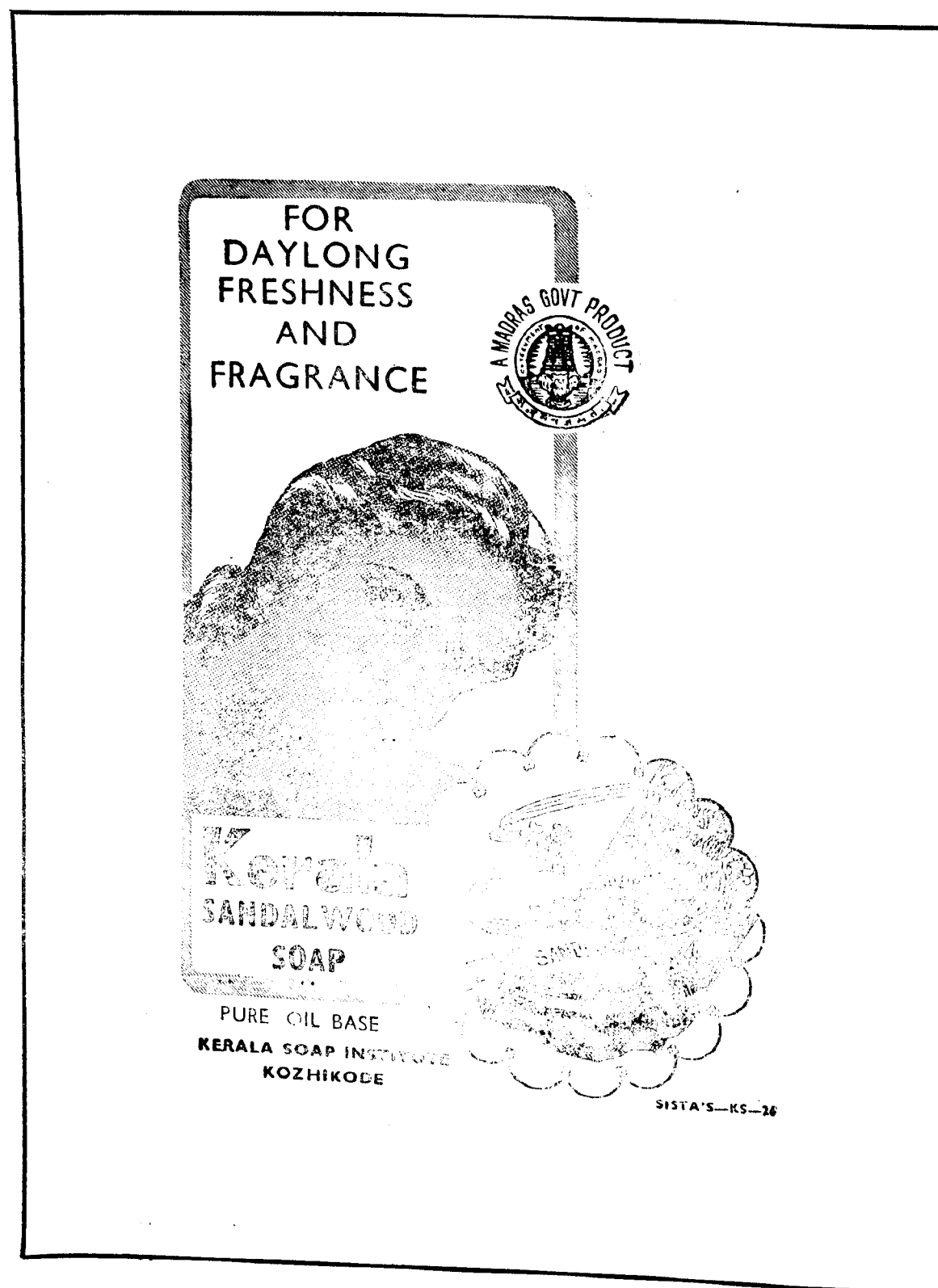
Vol. VI, No. 8

"WE SEEK TO SERVE AND NOT TO COMPETE"

August 1952

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A Message from the Governor

Raj Bhavan
Guindy

All hearts must rejoice as the fifth anniversary of the attainment of our Freedom, comes round reminding us of the high aspiration with which we embarked on the great adventure and of the great Leader that showed us the way and led us to victory. These years had been years of great trial in which we have had to pass through the ordeal of fire, for the world is a hard place and has its own cruel method of putting everyone to test.

Though five years of persistent effort lie behind us, no one can say how many more years we have to traverse before we reach our destined goal. If there are dark clouds around, there is also the silver lining; and if there is much that might make us fear, there is also much that must give us hope.



I cannot help feeling that we have now successfully turned the corner and that the main travails are over even though many small aches and pains remain. If we will now make ourselves Swaraj-minded; if we will really love Freedom for its own sake and feel happy that we are our own masters in our own country; if we will not think only of ourselves but also of our brothers and sisters as we go about the concerns of our daily lives; if we will be prepared to do our bit, great or small—whether we be high or we be humble—for the well-being of our society and our country; then nothing can stand in our way in attaining the other great Freedoms—Freedoms from want and Freedom from fear—that are so essential in order to consummate the political liberty that we have won.

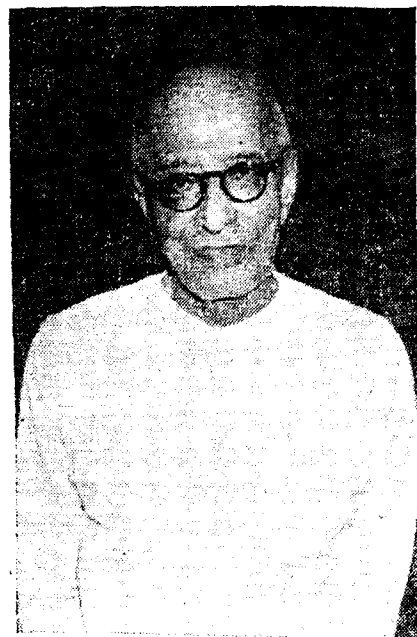
Let us pledge ourselves today to prove increasingly worthy, as the years go by, of our country, our traditions, our Leader and ourselves.

Sri Prakasa

Chief Minister's Message



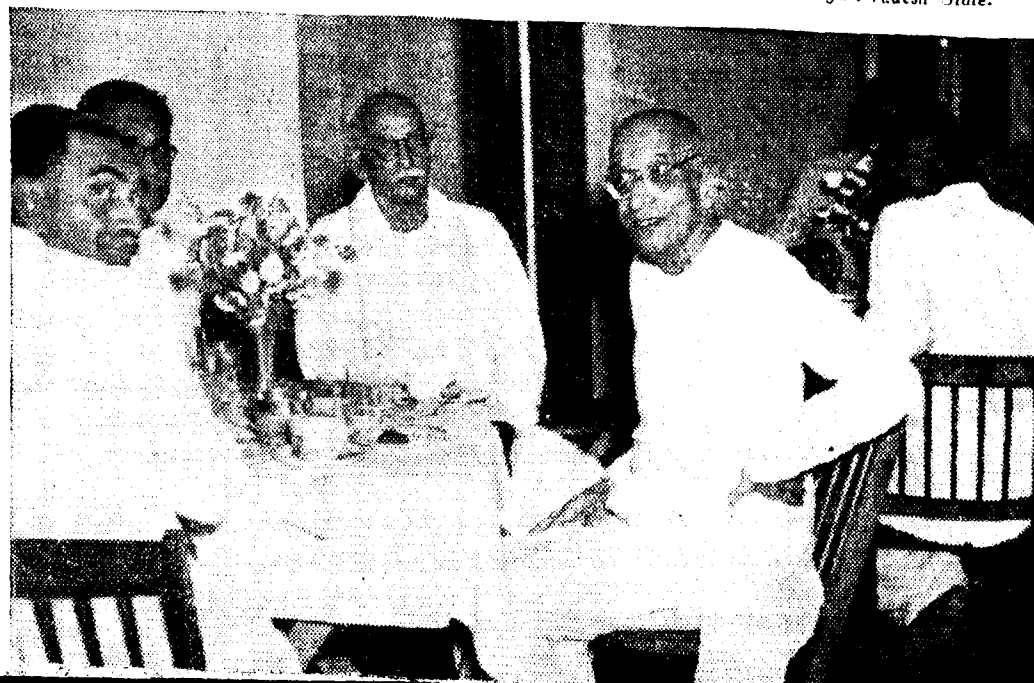
Fort St. George,
MADRAS.



I know that the publications of the Department of Information are "taken for granted" and hardly overtake anti-Government propaganda which has the intrinsic advantage of sensationalism. I know also that "messages" have become far too common to make any impression. The joy of Independence appears almost lost. One wishes we lost Independence for a week, provided we could get it back after the week of pain is over! It is only when we lose a thing that we realise its value.

C. Rajagopalachari

PARTY TO DR. PATTABHI SITARAMAYYA: Sri C. Rajagopalachari, Dr. Pattabhi Sitaramayya, Sri N. Ranga Reddi and Sri V. C. Palaniswami Gounder share a table at the party given to Dr. Pattabhi Sitaramayya on the eve of his departure to Nagpur to accept office as Governor of Madhya Pradesh State.



FOOD

Food Position in Madras State

By SRI C. SUBRAMANIAM, Minister for Food.

It was on the 6th of June that the Chief Minister announced the new Food policy of the Government of Madras, decontrolling all the foodgrains including rice. This measure has received the spontaneous approval of almost all sections of the people. There are some who oppose this measure on political grounds. For them I have nothing to say. There are some others, who genuinely doubt the wisdom of this step. This talk is mainly intended for them. Food controls came into existence during war time, consequent upon the stoppage of imports from Burma and the conditions of scarcity created thereby. These controls were intensified year after year, and were extended to other commodities like textiles, iron, steel and other consumer goods. These controls came into existence, so that the poor people may not be hard hit by conditions of scarcity in essential articles. But in actual working, we found that these controls had become irksome and engendered many evils like black-marketing, corruption, harassment, etc.

When the National Government came into existence at Delhi, in deference to the wishes of Mahatma Gandhi the experiment of gradual decontrol was first tried at the end of 1947. Unfortunately the year 1948 turned out to be a particularly bad year on account of adverse seasonal conditions, and the circumstances were not favourable for the success of that experiment, with the result the Government were forced to introduce controls again in 1948. Since then up to the end of 1950, the scheme of rationing was in force in the State. At the end of 1950, it was recognised that a policy of progressive decontrol should be adopted, and a major change in the Food policy was effected in 1951.

Procurement and Rationing

Intensive procurement was restricted to the surplus delta districts and in the highly deficit districts of Malabar and Nilgiris, and a system of levy procurement was in force in the self-sufficient districts. Compulsory procurement of foodgrains was given up in all other districts. Statutory rationing was confined to the urban areas of deficit districts and informal rationing in rural areas was given up in all districts, except in the highly deficit districts. But, in order to keep prices down, fair price shops were opened in the derationed rural areas. There were many people who predicted disaster when rural rationing was given up, but we found that no great strain was put on the people in obtaining their food requirements, and as a matter of fact, people in rural areas were feeling happy that they were no longer subjected to the rigours of control.

Soon after the present Ministry took over office, they gave their anxious and careful consideration to the Food policy and the desirability of relaxing the controls further.

Growing Dissatisfaction

It was felt that there was a growing volume of discontent and opposition to these controls and the urge for complete decontrol was increasing among all sections of the people, including the consumers. The producers, on their part,

were bitterly complaining about the harassment inflicted upon them under the Intensive Procurement Scheme and about the uneconomical prices paid to them. These conditions had created a feeling of complete frustration amongst agriculturists, and there was a consequent lack of enthusiasm for growing more food. It was almost a vicious circle that scarcity conditions necessitated control, and control in its turn produced scarcity by killing the enthusiasm amongst the growers to produce more food. It was necessary to put an end to this state of affairs.

The consumers also were criticising the Government for their failure to supply adequate rations, and also about the bad quality of foodgrains supplied. There were complaints and bitterness all round, and it looked as though nobody wanted these controls. In addition to this, these controls had certainly resulted in numerous forms of evasion of laws, and even honest ryots had been tempted to dishonesty and black market transactions. The consumer also was forced to transgress the law at some point or other in order to get his food requirements.

Decision to Decontrol

It was under these conditions that the Government decided that the time had come to take a bold step and abolish all controls. In taking this decision, we thought the time was quite opportune in view of the favourable stock position of rice and other foodgrains with the Government. As a first step, we removed all controls on the movement by motor or other mechanical transport from one district to another. I shall now briefly explain the main features of the new scheme of decontrol launched upon by this Government.

With a view to regulating movement of rice from surplus areas to deficit areas, the State will be divided into six zones with one or two surplus districts supplying in the free market the needs of a few deficit districts included in each zone. Thus, (1) the surplus district of East Godavari has been clubbed into a zone with the deficit districts of Srikakulam and Visakhapatnam, (2) West Godavari, Krishna and Nellore with Madras City, Chingleput, Chittoor and North Arcot, (3) Guntur with Anantapur, Bellary, Cuddapah and Kurnool, (4) Tanjore and South Arcot with Tirunelveli, Ramanathapuram, Madurai, Coimbatore, Salem and Tiruchirappalli, (5) South Kanara will form a zone by itself, and (6) the highly deficit districts of Malabar and the Nilgiris will form a separate unit.

Malabar and the Nilgiris

The requirements of Malabar and the Nilgiris Districts and Hosdurg Sub-taluk of South Kanara District will be supplied from imports arranged through the Government of India. Within the zone a free market will be allowed to function. There will be no control as regards price or the quantity of rice to be distributed except through fair price shops. Movement within each zone will be free. Inter-zonal movement by railways or motor vehicles will not be allowed except under permits issued by the Collector