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MADRAS INFORMATION
1955

MADRAS

Eighth Year of Useful Existence

THE "Madras Information", the official organ of our State Government, completes the eighth year of its useful existence today; and I greet all those responsible for the publication, on the success that has attended their endeavours, and wish them all every health and happiness.

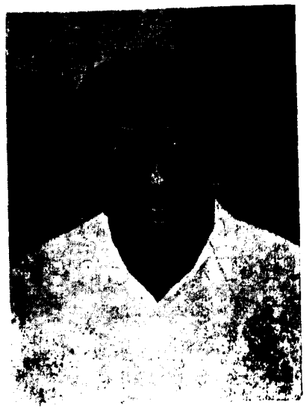
It is indeed a matter of deep regret that though anything—even the barest trifle—that goes wrong, receives great publicity, the good things that are being done under the auspices of Government, are constantly going, more or less, by default. It is therefore necessary that a magazine like the "Madras Information" should sedulously make efforts to make known to the general public what is being done for the well-being of the common man in our search for a Welfare State. I think the "Madras Information" has done good work in this direction, and deserves the support and encouragement of all those who value peace and prosperity, and are anxious for the continued progress of our nation-building activities.

I have myself been a regular reader of the "Madras Information", and I have often been struck at the variety of information and the necessary guidance that it gives about the various departments and activities of the State. I hope it will attract an ever-increasing circle of readers and will be able to induce larger and still larger numbers of men and women to co-operate with Government in their good work.

I wish the journal all success.

Sri Prakasa

Governor of Madras



Work to Promote Public Weal

IN a few days we shall be celebrating Pongal, the great harvest festival of Tamil Nad. Let us be satisfied with the bounty of the harvest, and make plans for the next season.

The farmer does not stop with taking stock on the threshing floors and in the barns ; even as the golden grains are being bundled into the bullock-carts, he arranges for seed supplies, manure and agricultural implements. One crop cannot last a lifetime.

Work is the active principle in the cycle of life. When we cease to toil—for personal betterment, common benefit or the national progress—we forfeit our right even to the fruits of our erstwhile labours. None may rest, for we redeem our obligation to the past by pledging our present service to the future.

Let us then stand awhile to look back upon past achievements. We in Madras State have come a long way on the path of freedom, nearing the goal of economic prosperity, social happiness and spiritual contentment.

The critical food situation which till recently caused us alarm, has eased considerably, enabling the State to lift the irksome control measures, and even build up substantial surplus stocks.

The fight against food shortage has been a long and arduous struggle. Thanks to the mercy of Nature we have had good seasonal rains in the past two years and we may be said to have turned the corner. Projects like Lower Bhavani, Malampucha, Manimuthar and the Mettur Canals promise early benefits : work is under way on other schemes like the Vaigai, Amaravathi and Sathanur. Besides these two important factors, we may look forward to increased production through improved methods of cultivation, and by the use of improved seeds and green manure and through newer techniques and better implements.

A quarter of the State's rural population has been covered by the Community Projects Programme and the National Extension Service. More and more villages will come under the scheme of rural reconstruction which earlier was restricted to selected firkas *and centres. The creation of new development blocks is proceeding on a scale far ahead of schedule.*

With the promised Central aid of three crores of rupees, we will reach the target of electrifying 1,000 villages per year, though now only 250 villages per year receive the benefits of electricity for lift irrigation and cottage industries. Work has begun on the Periyar Project, while the Kundah scheme awaits the approval of the Planning Commission.

Social Welfare campaigns take pride of place in our State's progressive activities. The introduction of the Employees' State Insurance Scheme in Coimbatore District, the relief to handloom weavers, measures for the uplift of Harijans and the Backward Classes, opening of new elementary schools in rural areas, a one-crore rupee scheme for providing drinking water in the villages, the inauguration of the mass B.C.G. vaccination campaign, are only some of the main lines of progress made in the sphere of promoting public weal.

The Welfare State needs a strong framework of service, and the Five-Year Plan provides the blueprint. We are now in the fourth year of the First Five-Year Plan, and already our far-sighted planners are casting up new targets for the second five-year period.

We may look forward to reach the not too distant goal of the true Welfare State : but our backs must be bent to the job of today, and our hands must strive to wrest wealth and welfare for the common good from whatever task we are allotted.

Our glorious past endows us with a noble tradition, but for every generation the past is only the base on which the future is built. With faith in this foundation, hope in the vision and courage in our hearts, let us all march ahead with the work on hand.

Madras Marches On

THE improvement in seasonal conditions, vigorous implementation of the First Five-Year Plan Programmes, and widespread activities in the Community Projects and National Extension Service mark the year 1954 in Madras State.

On the 26th February 1954, Sri C. Subramaniam, Minister for Finance, presented the Budget for 1954-55, the first full Budget of the new Madras State after the separation of Andhra. The Budget Estimate for 1954-55 showed a small deficit of Rs. 18·05 lakhs, with a revenue of Rs. 44,99·83 lakhs and expenditure (inside the Revenue Account) of Rs. 45,17·88 lakhs. The Finance Minister described the Budget as having been framed 'under conditions which are generally tending towards normal, after the long spell of adverse seasons and the post-war fluctuations in trade and industry'.

In April 1954, Sri C. Rajagopalachari, the elder statesman who took over the administration as Chief Minister at a critical period, relinquished office on account of ill-health. Shri Sri Prakasa, Governor of Madras, in his address to the Joint Session of the Madras Legislature on December 1, 1954, paid a glowing tribute to Rajaji, stating: "I am sure you will all join in placing on record our deep debt of gratitude to him for the way he shouldered the burden at a time of acute economic distress and political unrest."

The Madras Secretariat

On April 13, 1954, Sri K. Kamaraj Nadar, the popular leader and head of the Tamil Nad Congress Organization, was called upon to shoulder the responsibility of steering the ship of the State. The people's confidence in the leadership of Sri K. Kamaraj Nadar was amply testified by the phenomenal majority with which Sri Kamaraj was returned to the Madras Legislature in the bye-election, from a Constituency which was not his home.

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The main progressive development was in the vital life-spring, viz., irrigation. A forward and liberal policy of executing schemes, with due regard for the need to augment supplies of food has been followed in the State. The irrigation programme falls broadly under three categories:

(1) A short-term programme consisting of small irrigation schemes called Grow More Food or Intensive Cultivation Schemes and Tank Improvement Schemes; (2) a mid-term programme of medium-sized projects and (3) a long-term programme of large projects.

In the programme for 1954-55 were included 663 schemes estimated to cost about Rs. 143·38 lakhs in the aggregate, to benefit a new extent of 17,600 acres and 107,600 acres of old ayacut. Under the Tank Improvement Scheme about 400 works are under execution, apart from new schemes.

In the programme for medium-sized projects, provisions were made for completing the Malampuzha and Mettur Canals Scheme. The Manimuthar Project is being pushed through vigorously, the Walayar and Mangalam schemes of Malabar are being accelerated, and provision has been made for the Araniar Project in Chingleput District.

Among the main projects inaugurated are Amaravathi, Sathanur and Vaigai. Work on the Krishnagiri Reservoir will be taken up shortly.

In the long-term programme, the Lower Bhavani Project is nearing completion, and water has already been released for irrigating 115,000 acres.

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Madras has been in the vanguard in power development; especially in rural electrification the State has taken tremendous strides. Even after partition, Madras State has the largest number of villages enjoying the benefits of electricity. On date there are about 2,200 villages which have electricity at their command. On an average of about Rs. 150 lakhs are spent yearly for extending power to rural areas, bringing power to 250 villages annually: with the promised Central aid of three crores of rupees, the target of electrifying 1,000 villages a year will be reached.

Extensions to increase power capacity to 70,000 KW at Pykara—the highest head plant in Asia—will be completed by the end of 1955, with the construction of a new dam.

Works under second stage development for a 15,000 KW turbo set are under way at the Madras Thermal Station.

The Planning Commission has sanctioned the Periyar Hydel which will ultimately generate about 140,000 K.W.

The Kundah scheme, the biggest hydro-power project in the State, is awaiting the approval of the Planning Commission.

Plans are being drawn up for establishing a large thermal generation plant with a final capacity of 200,000 KW in the Neiveli area (South Arcot District) using the lignite resources of this place.

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For the second year in succession the State had the good fortune of favourable seasonal conditions which were encouraging. The south-west monsoon was adequate, and the north-east monsoon started in time. The food situation eased considerably and there was all-round improvement in agricultural conditions.

The Agricultural Department is doing its best to intensify food production by increasing the yield from the existing cultivable land. Distribution of improved seeds and the popularisation of the use of chemical fertilisers and green manures have been pursued with unhated vigour.

The new Village Seed Farm Scheme was recently instituted, under which there will be a seed farm in every village, which will produce the complete requirements of improved seeds of the village. So far 5,000 village seed farms have been organised.

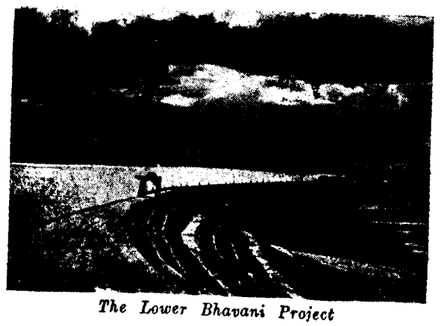
Other lines of work are the distribution of oil engines and electric motor pumpsets on hire or hire-purchase, reclamation of waste lands with tractors; preventive measures against soil erosion; distribution of rural compost, control of pests and ana fungoid diseases; crop competitions; loans for the purchase of seeds and manures, and river pumping schemes.

One of the main activities of the Department has been to induce ryots to raise sesbania speciosa, a cosmopolitan green manure plant, along the borders of paddy fields. If 60 lb. of sesbania are sown in one acre of paddy field, in January, 60,000 lb. of green manure, sufficient to manure 15 acres of paddy, can be raised by June.

Other green manure plants which are being popularised are glyricidia, maculata, ipomea carnea and indigo ferra teysmanii

Numerous filterpoint tubewells have been installed, and these are functioning successfully. A four-inch filter with necessary pipes costs about Rs. 250, and provides a continuous supply of water of 10,000—14,000 gallons per hour when pumped with a 5-7 h.p. engine.

Steps are under way to demonstrate a simple and cheap method of pumping water from tubewells by using hillock power. The Agricultural Department has succeeded in producing a plunger pump



The Lower Bhavani Project

which when operated by a pair of bullocks will supply 2,700 gallons an hour. The mechanism is cheap and can be made by a village blacksmith. Other improved implements evolved by the Agricultural Department are the wet land puddler, the bundformer, the basin-lister and the turmeric polisher.

Encouraging results are being obtained through the increased use of the Japanese Method of Paddy Cultivation as modified to suit conditions in this State.

The Government sanctioned the continuance of the Intensive Manuring Scheme for the period May 1, 1954 to December 31, 1954 in the entire districts of Chingleput, South Arcot, Tanjore, Tiruchirappalli, Madurai, Tirunelveli, South Kanara and Malabar and selected taluks in the districts of Coimbatore, Salem, Ramanathapuram and North Arcot.

The Government sanctioned a sum of Rs. 70 lakhs for allocation among the districts for disbursement as loan to ryots for purchase of chemical fertilizers during 1954–55.

The Madras State Herbarium at Coimbatore, reported to be the second best in India, completed 100 years of useful existence and in August 1954 celebrated its centenary. The Herbarium which began in 1953 as a small collection of plants, now contains over 170,000 specimens representing the flora of South India and about 25,000 specimens from North India. The institution commands a fine reputation in the field of systematic botany, through its authoritative publications.

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The High Court and Light-house

The Government are giving all possible help and assistance to those who want to establish and operate new industrial undertakings. Such State Aid to Industries is limited to Rs. 50,000 for each concern, and is generally confined to new and nascent industries.

Undertakings which require larger accommodation on long-term conditions are advised to obtain help from the Madras Industrial Investment, Corporation, Limited, sponsored by the Madras Government, or the Industrial Finance Corporation of India, sponsored by the Union Government.

The year 1953–54 witnessed considerable industrial activity throughout the State. Two factories for the production of motor cars and trucks, and another for cycles, were established near Madras.

A caustic soda factory with the capacity of five tons a day is being set up in Tirunelveli District.

A factory has been set up on the outskirts of Madras for the fabrication of heavy machinery required for sugar, cement and other industries.

Licences have been obtained for the establishment of two new sugar factories, a factory for manufacturing automobile diesel engines and another for motor cycles.

Licences were also granted to 16 promoters for the establishment of new textile mills and to 13 existing textile mills for substantial expansion of their production capacity.

On the recommendation of the Madras Government, the Union Government accepted in principle the reservation of the manufacture of certain varieties of textiles, to a limited extent, exclusively for handlooms, and decided to restrict the production of dhotis by mills to 60 per cent of the quantity manufactured in 1952.

The Centre also allotted during 1953–54 a sum of Rs. 98,38,677 of the Handloom Cess Fund for the handloom industry in Madras State.

The Government are giving certificates of approval, prospecting licences and mining leases to all those who are interested in prospecting for and exploiting the mineral wealth of the State.

There is a Chemical Testing and Analytical Laboratory at Madras which undertakes also investigations relating to the exploitation of minerals.

The Lignite Investigation Project at Neiveli (South Arcot district) promises to pave the way for the provision of cheap thermal power and the establishment of many new industries in South India which are now hampered by the absence of cheap coal.

One of the schemes undertaken by the Industries Department in 1954 is the investigation of sulphide ore in the Thanniyar Reserve Forest (North Arcot District).

Cinchona is grown on the Nilgiris and Anamalais Hills, and cinchona alkaloids are extracted at the Government Quinine Factory, Naduvattam. On an average 20,000 pounds of quinine sulphate is manufactured at this factory annually. Another quinine factory with a production equal to double that of the existing factory is under construction in the Anamalais in Coimbatore District.

The quinine products manufactured in the Government Factory, Naduvattam, are of the highest standards of purity and they, conform to B.P. and other recognised standards in all respects.

The other commercial concerns operated by the Industries Department are the Kerala Soap Institute, the Government Oil Factory and the Government Hydrogenation Factory, all at Kozhikode, the Industrial Engineering Workshop in Madras, and the Government Silk Filatures at Kollegal.

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The Government have constituted a State Khadi and Village Industries Board to advise them on matters relating to the development of khadi and village industries in the State.

Under the Intensive Khadi Scheme the Madras Government have fixed the wages to workers such as spinners and weavers, and the price of Khadi articles, on the same level as the Sarva Seva Sangh (All-India Spinners Association).

As a result the All-India Khadi and Village Industries Board has decided to extend the benefit of payment of three annas in the rupee as rebate, on the sale of the khadi produced at the Government Intensive Khadi centres, from the funds placed by the Government of India at the Board's disposal.

In the five Intensive Khadi centres of Avanashi, Vellakoil, Chinnasalem, Payyanur and T. Kallupatti, there are 32,200 registered spinners. Under the Extensive Khadi Scheme in the National Extension Service there are 17,364 spinners. In 1953–54 Rs. 3,36,701 was distributed as spinning wages, cotton worth Rs. 2,30,328 distributed to spinners, and 43 lakhs hanks were produced. Khadi produced was 62,293 yards and khadi disposed 898,022 yards (including stocks from previous year). There are 872 registered looms in the five centres and Rs. 3,20,587 was paid as weaving wages.

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Schemes are under way for the establishment of a ceramic centre in Manamathurai, glass bangle and beads training centre in Madurai and a pottery training unit at Alankar village in South Kanara District. A programme for the revival and development of village industries in the Malnad tract of South Kanara and Malabar Districts is under implementation.

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Labour welfare received considerable attention during the year, and industrial relations registered a marked improvement.

The number of factories in Madras State on October 1954 was 6,686 of which 1,339 factories were notified by the Government under Section 85 (1) of the Factories Act, 1948. The total number of trade unions as on 1st November 1954 was 592.

The Industrial Tribunals are functioning in Madras City, Coimbatore and Madurai—to settle disputes by adjudication. There are also two Special Industrial Tribunals set up for *ad hoc* purposes.

Weaver at his loom

From 1st October 1953 to 31st March 1954, 3,050 complaints under the Industrial Disputes Act were investigated by the Labour Department.

The Government referred 64 cases for adjudication and awards were published in 62 cases.

Under the Employees' State Insurance Act, 1948, a regional office has been set up, and the benefit provisions of the Act are being brought into force in Coimbatore and its suburbs, and will be soon extended to other industrial cities.

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In the field of public health, considerable success has been achieved in the prevention and control of epidemic diseases.

Plague has practically disappeared, while small-pox was prevalent only in a sporadic form in 1953. Anti-malarial and anti-filarial work made good progress.

The Maternity and Child Welfare services have recorded satisfactory development.

Community Projects help the villagers

Recently, the first block of the Cancer Institute at Adyar (Madras City), the first of its kind in Madras, was opened. The Institute has a Health Museum, Library and a Pathological Laboratory, and is intended to serve as a Cancer diognostic and direction centre.

In August 1954, Rajkumari Amrit Kaur, Union Minister for Health, inaugurated the Madurai Medical College at Madurai.

The Government have sanctioned the introduction of B.C.G. vaccination on a mass scale in the State by the establishment of a Central Administrative Unit with six field teams for carrying out tuberculin testing and B.C.G. vaccination for non-reactors, covering a population of about 100 lakhs in the first instance in the course of five or six years.

On the eve of the mass B.C.G. Vaccination Campaign in Madras State inaugurated at Coimbatore, the All-India B.C.G. Conference was held. India's B.C.G Vaccine Laboratory in the King Institute at Guindy (Madras City) is one of the biggest B.C.G. production centres in the world. It caters to the needs of India, Malaya, Ceylon, Burma and Thailand.

The Government's programme of producing proper drainage and water-supply to the urban and rural areas is making steady progress. The total outlay programmed for this year for rural water-supply is about rupees one crore. A substantial programme spread over about twenty municipalities is being taken up immediately, and a sum of rupees two crores will be spent on these works in the next 15 months. A sum of Rs. 50 lakhs is being provided as assistance to the Madras City Corporation for urgent items of improvement including mechanical filters.

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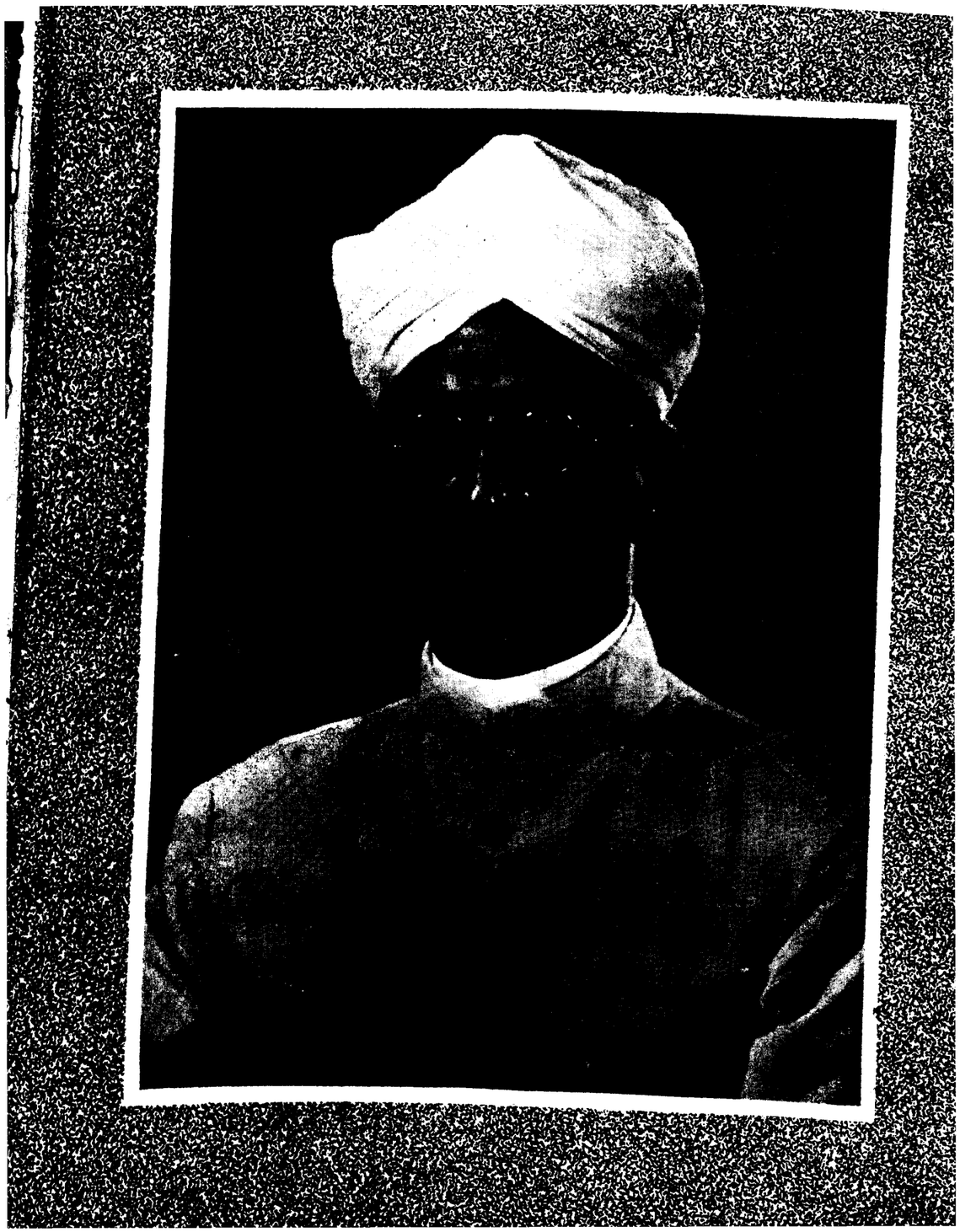
Appreciable advances have been made on the Community Projects and the National Extension Services. Work on 20 new blocks has been started recently; and with this addition, the target of covering 25 per cent of the rural population by the end of the First Five-Year Plan, has been reached, ahead of schedule. It is proposed to take on another 30 blocks shortly, in excess of the target given in the Plan.



N.C.C. Cadets, Boy Scouts and Girl Guides and school students have participated enthusiastically in N.E.S. works. At social service camps, they completed big jobs, like the renovation of tanks, building of roads, medical aid, poor feeding, digging of irrigation channels and other activities, setting a fine example to the villages in the noble spirit of self-help and self-reliance. The people's contribution in cash, kind or labour amounted to Rs. 20 lakhs in respect of works executed under the Community Projects and National Extension Service Programmes, estimated to cost about Rs. 4 lakhs.

The Government have directed that necessary modification be introduced in the Board of Revenue for utilising it as an effective agency for the execution of the various developmental activities including the Community Projects and the National Extension Service Schemes.

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Education has made considerable headway in Madras State. The policy of the Government is to convert all elementary schools into Basic schools.

About 71 per cent of boys of school-going age and 43 per cent of girls of school-going age are being educated in the elementary, Basic and the primary schools. Elementary education is now free in all public elementary schools under public management.

Under a scheme sponsored by the Government of India for providing employment to the educated unemployed, the Madras Government have sanctioned the opening of 1,270 single-teacher schools in school-less villages in the first instance, and another batch of 1,530 schools recently.

Expansion and reorganisation have marked the progress of secondary education in Madras State. In Forms I to III, the curriculum is attuned with basic craft activities: the High schools have a twofold course training pupils for the Universities and vocational institutions. Social studies and citizenship training form an integrated part of secondary education.

Rapid expansion of higher educational facilities has marked development in the University phase. Professional education has made considerable headway.

In October 1954 the Government ordered that the Adult Education Scheme should be confined to the areas covered by the Community Projects and the N.E.S. only. Recently the Government sanctioned a Modified Scheme of Adult Education, according to which 650 schools will be opened in the Community Projects and 1,000 schools in the N.E.S. areas.

As new blocks of N.E.S. are taken up, the Adult Education Scheme will be extended to those areas, so that it will cover the entire State when the N.E.S. becomes a State-wide scheme.

The Government have appointed a Committee to examine the system of Elementary Education in all its aspects. The report of the Secondary Education Commission is now under the consideration of the Government.

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Madras State continues to be in the forefront in the matter of amelioration of the conditions of Harijans and Backward Classes. About one crore of rupees is being earmarked for this purpose each year.

Further schemes costing about Rs. 25 lakhs are now under consideration, in pursuance of the offer of a half-grant on them by the Government of India, and they will be implemented as soon as the necessary approval is obtained.

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Elections to the District Boards have been completed, and the elected representatives of the people are taking over local administration in all districts.

The Government are now considering the question of decentralisation of the functions of the district boards, by constituting smaller bodies, say, for taluks.

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The Golden Jubilee of the Co-operative Movement was celebrated throughout the State with great eclat in April 1954.

In the words of the Governor of Madras, the movement has made greater progress in Madras State than in any other State in India. Every town here has a co-operative bank, and almost every village a co-operative society. Other directions in which the co-operative endeavour

has developed in Madras are in the spheres of milk supply, handloom weavers, consumer stores, land colonisation, transport and many others.

Among the States in India, Madras takes a high rank in co-operative milk supply. The Madras Co-operative Milk Supply Union, a premier institution, recently celebrated its silver jubilee.

More loans are given by the Land Mortgage Banks for land improvement. The Banks are attempting to switch over to productive finance from financing for discharge of prior debts. Plans for accelerating this line of development in the Central Land Mortgage Bank are under consideration, so that co-operatives can play a vital role in the Community Projects and N.E.S. programmes.

A Regional Co-operative Training Centre was set up in July 1954 in Madras City, for the training of "Intermediate" co-operative personnel at all levels.

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The Government Bus Transport in Madras City is being augmented by a fleet of Leyland Royal Tigers of novel design. These new buses have underfloor engine and all-metal body and are being built at the Government Automobile Workshops at Chromepet.

The new bus accommodates 46 sitting and 24 standing passengers. The engine is under the chassis ensuring more space on board. The vehicle gives 14 miles per gallon, turns with ease in a diameter of 50 feet, and costs about Rs. 65,000. Out of 50 such vehicles ordered, 14 have already been put on the road. The Government fleet now consists of 395 vehicles operating on 66 routes. doing a daily average mileage of 37,500 to serve over three lakhs of passengers daily.

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In the field of Art and Culture the Government have played a decisive role in furthering the cause of fine arts.

The Government directed that the exemption granted to dramatic performances other than dance dramas from liability to pay the Entertainments Tax be continued for another year from April 1, 1954.

The exemption from the Entertainments Tax accorded to approved registered sabhas and similar associations, in respect of music and dance performances and variety entertainments, comprising dances and music and other similar items, conducted by them, was directed to be continued for a period of three more years from November 1, 1954.

This exemption is subject to the condition that the sabhas and similar associations benefiting by the exemption should undertake to arrange at least one free entertainment every year to the slum-dwellers in their vicinity.

The Government of Madras have constituted a State Academy of Music, Dance and Drama (including Kathakalakshepams) and films under the name of "The Madras State Sangeetha Nataka Sangam", in order to foster and develop the fine arts of music, dance and drama.

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Public Services in Democratic India

K. SANTHANAM,
Lieut. Governor, Vindhya Pradesh State

Sri K. Santhanam

ONE of the greatest difficulties in the growth of democratic traditions in India arises from the fact that the peaceful transfer of power from British imperialism to Indian national democratic leadership involved the taking over of the bureaucratic machinery of the former Government in its entirety. This had its advantages. The Government machinery functioned smoothly everywhere, but the disadvantages were also serious. During the long struggle for freedom, the people had come to have a rooted distrust of the officials who served the British administration and it was not easy for them to change their attitude suddenly and begin to look upon the officials as trusted servants of the popular Governments.

That most of the officials, if not all, were relieved to find that their security and prospects were not affected, and became loyal to the new regime, cannot be doubted. I am not, however, sure that this confidence has not also made them less keen to realise the revolutionary changes that are taking place and adapt themselves accordingly.

The Bureaucratic Machinery

Those who criticise the new democratic Governments in India as being more bureaucratic than ever forget the fact that a vast extension of bureaucracy is inevitable in the conversion of a Police State into a Welfare State. The Government cannot extend their functions without expanding their bureaucratic machinery. The people should, therefore, learn to discard this conventional criticism of Government and turn their attention to methods and procedures which will turn this bureaucracy into an efficient and honest instrument for the realisation of popular objectives.

Discipline and efficiency will continue to be the main criteria of a successful public servant, but the nature of discipline and the content of efficiency are vitally different in a democratic State. The public servant in a democratic State has not merely to obey the orders of his superior, he is a trustee of the popularity of the Government and should in obeying orders see that they are executed in a manner which adds to this popularity.

He has to be a persuasive interpreter, a patient listener of complaints and a faithful reporter of popular feelings and reactions. While performing these functions, he has to be ever on his guard not to become entangled in any controversial party politics and, when necessary, to resist bravely political pressures and influences.

Test of Efficiency

In a Police State, the main test of efficiency is to keep the Government going and to prevent or suppress opposition. In a democratic State, the efficiency of a public servant consists mainly in getting things done. This requires a great deal of

initiative and a capacity to overcome all kinds of procedural and technical difficulties inherent in the operation of the bureaucratic machinery.

I am convinced that democracy in India cannot function satisfactorily unless the public servant works harder and for longer hours. The work in the offices and outside should become more or less equated to work in factories and farms. Resistance to such increased work is natural, but effort should be made to educate the new entrants into public services to realise that they are participating in the work of the creation of a new society, and they should consider themselves as pioneers and be able and willing to do hard work.

Security of Service

While the general principles of security of service for public servants may be accepted, I do not think it is healthy either for the State or for the public servant that once he enters service he has to be there for life. It should be possible for the State to get rid of persons who have not committed any particular offence on the mere ground of inefficiency or lack of enthusiasm. It should also be made easy for a person who has put in 10 or 12 years of service to change over for some other more interesting work. The nature of security available should depend upon the nature of work and be flexible.

If some system can be evolved by which scientists, technicians and skilled workers can be exchanged periodically and on agreed terms between Government departments and other public and private agencies like universities, port trusts, corporations and private industrial establishments, many of the vital welfare services of the Government can function much better than if persons are forced to do the same monotonous kind of work for a life-time.

Pension and Gratuity

The system of retirement on proportionate pension and gratuity deserves to be extended to all Government servants who have put in ten years' or more service. It should be applicable by both sides, the Government being free to retire anyone and any public servant being free to retire by his own option. This may throw some financial burden on the public treasury, but I feel that it will be more than compensated by the greater flow of fresh blood into the services and the weeding out of the inefficient and the indifferent.

There is great scope for research in this field. Methods of recruitment, conditions of service, the relations between public servants and politicians including the ministers on the one hand and the people on the other, are matters which have to be reviewed from the point of view of the needs of a Welfare State, superseding courageously the traditions and rules which have come down from the past. This is no easy matter, but I am afraid unless this is done the gap between the people and the services may become increasingly difficult to bridge.

The treasures Tanjore offers

Agricultural Policy and Achievements

M. BHAKTAVATSALAM,
Minister for Agriculture

AGRICULTURAL policy in Madras has for its twin objectives improving the lot of the agriculturists who form over 62 per cent of the population of the State by introducing improved methods of agriculture, and increasing the production of foodgrains in order to meet the food deficit of the State. The first objective received fresh impetus and greater emphasis and the second objective became a necessity during the second World War when the cessation of imports of rice from Burma and the Far East created an acute food deficit in the country and particularly in this State made it imperative for the Central and State Governments to take special and energetic steps to step up production.

These objectives are perpetuated in the Five-Year Plan and has found larger expression in the Community Projects and the NES.

Grow More Food Campaign

The Grow More Food campaign was launched in the year 1942–43 in order to increase food production both by extensive cultivation, i.e., by bringing new areas under food crops and increasing double crop cultivation, and off-season cultivation, and by intensive cultivation, i.e., by increasing the yield from the area already under cultivation by the use of improved seeds, better manure, etc.

The campaign was intensified in 1949 consequent on the announcement of the Government of India to stop foreign imports of foodgrains by 1951, and all the Grow More Food schemes were enlarged in scope and integrated into a three-year plan of intensive cultivation scheme.

Food Production Branch

In order to co-ordinate the activities of the several departments dealing with the Grow More Food Schemes such as Agriculture, Co-operation, Industries, Fisheries, Public Works and Irrigation, the control over the schemes was placed under a Member of the Board of Revenue who was designated as the Commissioner for Food Production. With a view to enable the Commissioner for Food Production to obtain quick decisions by the Government he was made Ex-officio Secretary to Government.

Agriculture and the Five-Year Plan

From 1951–52 all the intensive cultivation schemes are being continued under the First National Five-Year Plan. The important items under Agriculture in the Five-Year Plan are the schemes for distribution of improved seeds of paddy, millets and pulses, the schemes for distribution of fertilisers, compost and green manure, the schemes of water-supply through installation of oil engines and electric motors, river pumping units or filterpoints, the schemes for land development utilising tractors and bulldozers or by adopting soil conservation methods and the plant protection scheme for the control of pests and diseases. Definite targets of additional production are fixed for each year and the schemes are being

Puddling by tractor

implemented with the financial assistance made available by the Government of India in the shape of loans and grants.

The total provision in the First Five-Year Plan for agricultural schemes for this State is Rs. 902·2 lakhs. Out of this amount Rs. 527 lakhs had been expended during the period 1951–54. The Budget provision for the current year, i.e., 1954–55, is Rs. 198 lakhs. The balance of Rs. 177·2 lakhs will be available for expenditure during the last year of the Plan, viz., 1955–56.

Food Decontrol and Partition

The decontrol of food in 1953 has not resulted in any reduction in the emphasis on food production. On the other hand, on account of the partition of the State and consequent loss of several major foodgrain producing districts, it is now more than ever necessary to keep up the tempo of the Grow More Food campaign.

However, in view of the easier food situation in the country as a whole, this State is taking its due part in campaigns for the increased production of other deficit crops necessary for the country as a whole such as cotton, sugarcane and oilseeds without detriment to the production of foodgrains.

Fair Deal to Pannaiyals

The other aspects of agricultural policy are to bring about agrarian reforms with a view to give a fair deal to the pannaiyal, to help the agriculturists to organise themselves so that they may make their needs and views known to the Government effectively and to teach the ryot self-help without looking up to the Government for each and everything and to make each village a self-sufficient and prosperous community by extending the Community Projects and National Extension Service Schemes to more and more areas with a view to cover the entire State in the not distant future.

Steel plough in operation

Irrigation Schemes

Turning now to the achievements, the pride of place should be given to the irrigation schemes of the Government. Our experience in recent years has shown that the most serious obstacle that has stood in the way of our agriculturists maximising agricultural production has been their complete dependence on the uncertain incidence of the monsoons. With a view to provide as assured a supply of water for cultivation as possible, the Government have undertaken the execution of major irrigation projects like the Lower Bhavani, the Malampuzha, the Manimuthar and the Amaravathi projects at a total estimated cost of over 31 crores of rupees. The area to be benefited by these projects is of the order of 383,000 acres.

The Lower Bhavani and the Malampuzha Projects have already commenced supply of water, and the others are in various stages of progress. In addition, innumerable minor irrigation works and tank improvement schemes in all areas including the ex-zamindari areas have been progressing and will be continued under the Five-Year Plan.

Sinking of Wells and Tube wells

Side by side with irrigation works steps are also being taken to develop and utilise the underground water resources. With a view to give an incentive to ryots for sinking wells for irrigation purposes, a well subsidy scheme was in operation during the years from 1944 up to 1951–52 under which a subsidy representing about 50 per cent of the cost of construction of a well up to a maximum of five wells per individual was granted by the Government to the agriculturists. The amount was advanced in the first instance as a loan which was later converted into a subsidy in favour of the grantee on the successful completion of the well, or recovered summarily or in instalments on the failure of the grantee to complete the work. The scheme was very popular among the ryots and during the period from 1949–50 to 1951–52, over 45,000 wells were subsidised and a total amount of about Rs. 264 lakhs was disbursed as subsidy loans.

A new scheme known as the Filterpoint Tubewell Scheme was later launched in 1951–52. It provided for the construction of tubewells with filterpoints so as to provide water during summer months to help the expansion of the cultivation of paddy, cotton and other crops during the off-season in the rice fallows. During the last three years about 1,060 such filterpoints have been installed in a number of districts with a capacity for increased production of 5,000 tons of rice every year in addition to short crops of groundnut or cotton in summer. The scheme is becoming increasingly popular and the Government are now considering a proposal for the sinking of 600 filterpoint tubewells in several districts of the present Madras State at an estimated expenditure of Rs. 20 lakhs with the loan assistance made available by the Government of India for the year 1954–55.

Oil Engine Pumpsets and Electric Motors

Another measure for providing increased irrigation facilities for the ryots is the installation of oil engine pumpsets and electric motors. The number of units owned by the Agricultural Department has increased from small beginnings in 1950 to a total of 1,726 oil engines and 411 electric motors capable of irrigating 16,600 acres and yielding an additional production of 8,300 tons of foodgrains every year.

Improved Seeds and Chemical Fertilisers

Next to water the ryots needs improved seeds and manures. The progress made by the Government in supplying these essential requirements of the ryot are brought out by the following figures :—

	Quantity distributed in the Composite Madras State in 1949–50.	Quantity distributed in the present Madras State alone in 1953–54.
	(TONS)	(TONS)
Ammonium Sulphate. ..	52,506	49,898
Improved paddy seeds ..	5,590	3,908
Improved millet seeds ..	72	38

Green Manures

Due attention is also being paid to the development of green manure resources. Green manure besides being relatively far cheaper than chemical fertilisers, supplies organic matter necessary for pushing up the yield of crops and building up soil fertility. Several green manures have already been introduced into the State by the Agricultural Department, such as dhaincha, sunnhemp, wild indigo and pillepesara, but the scope for their extension was limited to certain areas as these required extra land and seed supply was difficult.

To overcome these difficulties a new plant called sesbania speciosa was found more suitable, as with a small quantity of 4 oz. seed costing only one anna, it was possible to secure 2,000 to 3,000 lb. of green leaf by planting as a line crop around paddy borders enough for manuring the next crop. As a pure crop it gave a record of 50,000 to 60,000 lb. per acre of green leaf useful to manure about ten times that area in single crop lands.

While sesbania is used as an annual green manure crop, a perennial plant, gliricidia maculata, was introduced as a permanent supply of green leaf to paddy, garden and dry lands. This plant which can be lopped twice, lasts over 20 years and gives 50 to 60 lb. of green leaf per plant, and about 100 plants per acre planted about six feet apart will give enough leaf to manure an acre. A new plant indigoferra teysmanni, similar in properties and nearly as good a yielder and suitable to the West Coast areas particularly, has also been introduced.

Compost

Another valuable source of manure which has been brought to the notice of agriculturists in this State is compost. Under the Urban Compost Scheme now in operation in charge of a Compost Development Officer working under the Inspector of Municipal Councils and Local Boards, all the municipalities in the State except Cochin, are manufacturing compost. A total quantity of 307,630 tons of compost was prepared during the year 1952–53 which exceeded the target by 7,630 tons.

Japanese Method of Paddy Cultivation

Mechanical Cultivation Aids

The Government are also providing the agriculturists with mechanical aids for cultivation. There are now 159 tractors in this State, out of which 85 are provided with bulldozer attachments. The tractors are used for reclaiming new lands and for ploughing and cultivating lands in the larger estates, while the bulldozers are used in the reclamation of waste lands, levelling, clearing, bunding, terracing and prevention of soil erosion. Tractors and bulldozers are both given on hire. The area covered varies with the season and annually 30,000 acres are now covered through departmental effort, resulting in increased production of 5,000 tons of foodgrains every year.

Increased Rice Yield

The Government's efforts to increase rice production have yielded spectacular results. The total achievements range actually from 2 to 2½ lakh tons of rice in recent years. The extra production due to the direct intensive cultivation schemes of the Agricultural Department in 1953–54 is 231,420 tons of rice and foodgrains as shown below :—

Means.	Increased production in terms of rice in 1953-54. (TONS)
Ammonium Sulphate and Superphosphate.	137,476
Green manures	80,818
Improved seeds	6,455
Tractors and bulldozers ..	3,455
Filterpoint tubewells	2,915
Oil engines and electric motors.	318
Total ..	231,420

Provision of Finance

Another important, if not the most important, requirement of the agriculturists is adequate finance. Credit is provided to the agriculturists by the Government both indirectly through the co-operative organisation and directly as takkavi loans. The total amount of finance provided by the co-operatives for agriculture during the year 1953–54 was Rs. 422 lakhs, while the corresponding figure for the year 1954–55 is estimated at Rs. 632 lakhs. As regards direct financial assistance by the Government to the agriculturists, loans are issued by the Revenue Department under the Land Improvements Loans Act, the Agricultural Loans Act and special rules for pumping installations and agricultural implements.

Medium and long term loans are advanced for installation of oil engines and pumpsets, for purchase of bulls, etc., while short term loans are provided for the purchase of seeds and manures and implements and special loans for cultivation of turmeric, sugarcane, etc., which are repayable on harvest. The total amount of loans disbursed by the Revenue Department in 1953–54 was Rs. 81 lakhs. The officers of the Agricultural Department are also empowered to grant certain kinds of loans for the purchase of seeds and manures and agricultural implements. These loans are granted as far as possible in kind, and the total amount of loan disbursed by the officers of the Agricultural Department during 1953–54 was Rs. 14·28 lakhs.

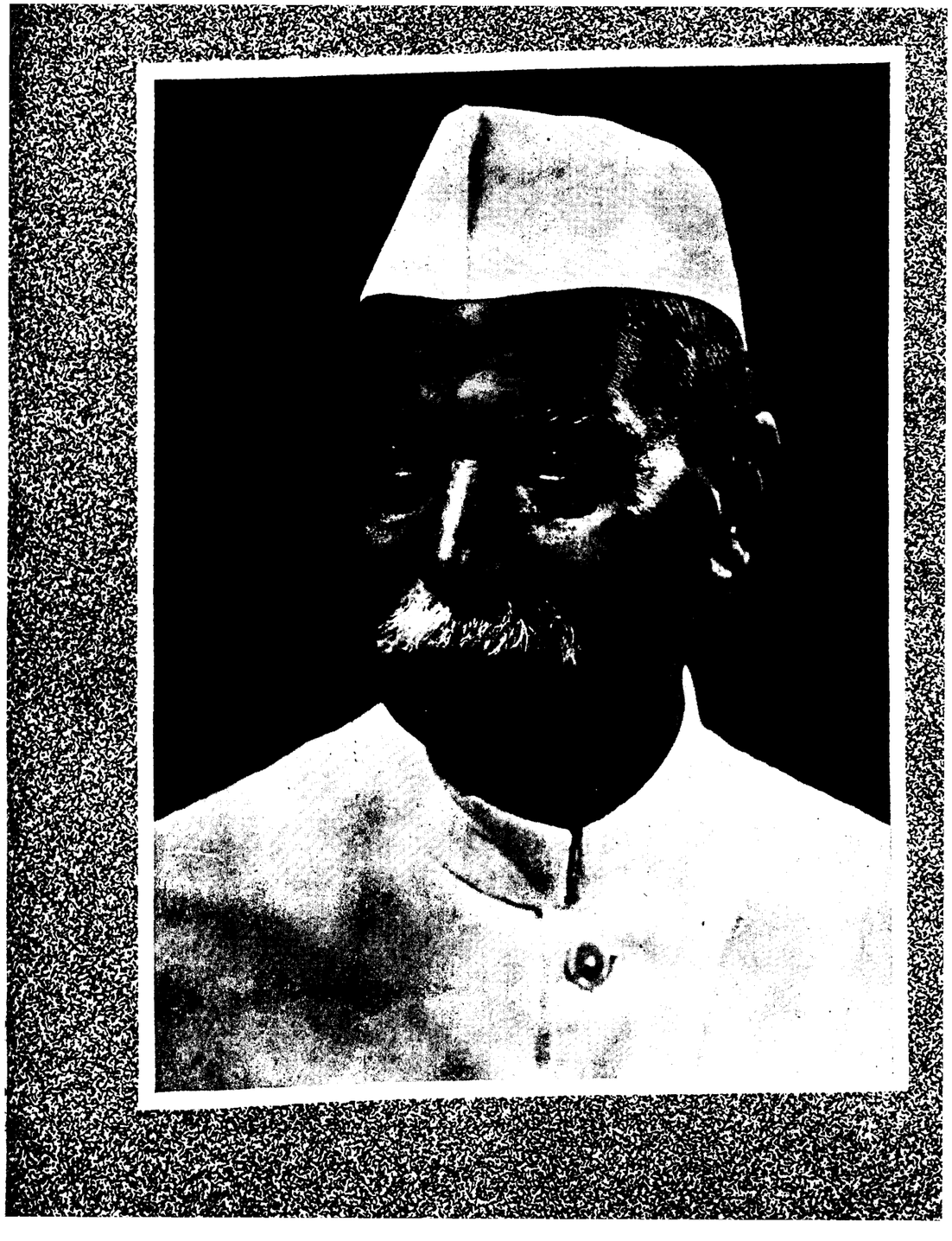
Intensive Manure Scheme

An important development during recent years in connection with the intensive cultivation schemes is the flood of advances given to ryots for purchase of ammonium sulphate under what is called the Intensive Manure Scheme. Loans are granted at Rs. 35 per acre up to a limit of Rs. 500 and are repayable on harvest. Loans are also granted for the hire purchase of oil engine sets, electrical motors, filterpoint tubewells and tractors.

For 1953–54 Rs. 100 lakhs were provided for the manure loans and about Rs. 10 lakhs for pumpsets and tubewells. For the current year Rs. 70 lakhs have been provided for manures, Rs. 4·67 lakhs for tractors and Rs. 14 lakhs for oil engines, etc. The total finance provided in the State by the co-operative agencies to the agriculturists during the last *fasli* was Rs. 627 lakhs of which Rs. 422 lakhs were provided by the co-operatives.

Soil Conservation

Soil conservation in Madras State is becoming more and more important and in large tracts eroded lands are becoming commonly visible in the areas that have been left uncultivated. With a



AGRICULTURAL AIDS

1. Improved implements. 2. Tractor. 3. Filterpoint with pumpset. 4. Bullock-operated filterpoint. 5. Sesbania speciosa. 6. Paddy research. 7. Grading seeds.

view to empower the State Government to initiate and undertake soil conservation works in private lands the Madras Land Improvement Schemes (Contour Bunding and Contour Trenching) Act, 1949, was enacted. The Act empowers the State Government to carry out soil conservation measures in a notified area and recover the cost thereof in full or part in easy instalments from the beneficiaries. The Act has now been made applicable to the Nilgiris District and portions of the Coimbatore and Malabar Districts.

A State Soil Conservation Board was constituted in 1951 with a view to initiate and co-ordinate schemes for soil conservation in the State with the Minister for Agriculture as its Chairman. In order to organise large-scale extension work on soil conservation methods, a few selected personnel were specially trained in soil conservation at the Soil Conservation Training Institute at Sholapur in Bombay State. A pilot scheme covering an area of about 300 acres forming a sub-catchment of the Ketty Valley in Coonoor Taluk, Nilgiris District, was selected for intensive work. Suitable soil conservation works like bench terracing, contour trenching, afforestation, constructing diversion channels, stream protection, gulley plugging, establishment of grasses, etc., were carried out on over 89 acres out of the 300 acres. The work in the remaining areas is in progress.

Demonstration Plots

Further schemes are on hand to set up demonstration plots on a representative basis in Ootacamund and Cuddalore sub-circles and Gudalur Taluk of the Nilgiris District so as to bring home to the farmers of these areas the necessity and advantages of such protective measures. Sanction has also been accorded for the granting of long-term loans at the rate of Rs. 300 per acre, subject to the maximum of Rs.1,500 per head, for carrying out protective works as per directions of the soil conservation staff in the Nilgiris District to stimulate cultivators' enthusiasm and interest in this direction.

Famine Relief Work

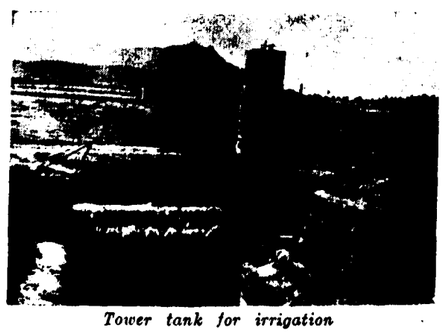
Soil conservation as a famine relief work has been taken up in Coimbatore District. So far 6,752 acres have been contour bunded in this district. Construction of waste weirs, gulley plugging, raising of wind belts, etc., are in progress. The Forest Department is also under taking soil conservation work. As village forests managed by panchayats were indiscriminately over-exploited with the result that they have become degenerated and vulnerable to erosion, panchayat forests over an extent of 3,390 square miles have been taken over under the control of the Forest Department.

Under the Five-Year Plan, a soil conservation branch under the State Silviculturist was opened with the object of dealing with soil erosion in the Nilgiris District and the adjoining Attapady Valley of Malabar and Coimbatore Districts. Afforestation work has been undertaken over an area of 10,000 acres of barren reserved forest lands in dry districts, as this will, in addition to restoring these fuel forests, effectively arrest the development of sheet and gulley erosion in these exposed sites.

Tree Planting Campaign

A planned and vigorous tree planting programme is being followed in this State and the Vanamahotsava is being celebrated all over the State with great enthusiasm every year. The results achieved are shown below :—

	Trees planted. (Lakhs.)	Trees survived. (Lakhs.)
Composite State—		
1950	82	40
1951	79	36
1952	90	40
Present Madras State alone—		
1953	52	Not yet reported.
1954 (target) ..	55	..



Tower tank for irrigation

South Kanara District in this State won the All-India Rajendra Shield and the State Shield in the year 1950, the first year in which the awards were made. This district won the State Shield again in the year 1951 also. The Periyaram village in Chirakkal Taluk in Malabar District won the All-India Jawahar Shield in 1951. The Madras Government have also instituted a prize scheme under which a rolling cup worth Rs. 100 will be given to the best district in each of the four Divisions in which the State has been divided.

Plant Protection

Plant protection is receiving due attention. The Plant Protection Scheme was started in 1949. There are now two Plant Protection Officers at State level solely attending to this work—one for Mycology and the other for Entomology. Similarly, in each district there is a Plant Protection Assistant for Mycology and another for Entomology who work in close co-ordination with the regular field staff of the Agricultural Department. Pesticides and insecticides in sufficient quantities and sprayers and dusters required for their application are all stocked in every agricultural depot and the remedial measures are demonstrated to the ryots in their own fields.

The introduction of effective insecticides like B.H.C. and D.D.T. has given an impetus to the work which has been expanded considerably for tackling the pests and diseases not only of paddy but also of other foodgrain crops, vegetables, chillies, etc. The Government are also selling pesticides and fungicides at 50 per cent of the cost price in areas which are declared as pest-affected emergency areas by the Collector of the district concerned with the approval of the Director of Agriculture. This concession has been extended to the areas where betel vine crops have been largely affected by the wilt disease.

The area covered by pest control measures rose from 2·9 lakhs acres in 1951–52 to 9·4 lakhs acres in 1953–54 and the quantity of foodgrains saved by these measures during 1953–54 has been estimated at about 48,000 tons valued at Rs. 1·3 crores. The demand for pesticides has increased from 500 tons in 1951–52 to 3,117 tons in 1953–54. These figures indicate the rapid strides that have been taken by the State in pest control work. A weekly forecast is issued giving the ryot advance information on the outbreak and likely spread of pests and diseases and recommending the remedial measures which should be adopted.

Agricultural Research

The aim of Agricultural Research is to discover the ways and means of increasing the yield from land and to make such methods available to the agriculturists in order that they may utilise them in their day-to-day agricultural practices and obtain better results. Greater attention than before is being paid to agricultural research in this State ever since the country attained its Independence. Research in agriculture is carried on in this State at the Agricultural Research Institute at Coimbatore and at the various research stations throughout the State. The Research Institute has the following Research Sections, viz., paddy, millets and pulses, cotton, oilseeds, fruits, Entomology, Mycology, Chemistry, Botany and Agricultural Engineering.

In these Research sections, new and improved methods of cultivation and scientific agricultural practices are evolved for the whole State. There are 49 Agricultural Stations and Government Farms in this State which are located in different parts of the State. They are intended to tackle local problems, demonstrate improved methods of scientific agricultural practices evolved in the Research sections and advocated by the Agricultural Department, and test their suitability to the tracts concerned and also the suitability of new crop strains released by the Agricultural Department.

Paddy and Millet

Paddy is the most important crop and there is at present at the Paddy Section at Coimbatore a collection of over 1,500 strains. The improved paddy strains have covered an area which is about 60 per cent of the total area under paddy in this State, i.e., about 6½ million acres, and taking the increased yield by these to be 10 per cent at a modest rate, seven lakhs additional tons of rice valued at Rs. 17·5 crores would have been obtained. If to this is added, the value of other improvements effected by the Agricultural Department, like introduction of several blast-resistant strains, the total monetary value effected by the Paddy Section of the Research Institute would work out to about Rs. 31 crores.

Millet which is usually regarded as a poor man's crop, is the staple food next only in importance

to rice. Over 44 strains of millets have so far been released both for dry and rainfed areas, of which special mention should be made of the hybrid cumbu which is giving over 10 to 30 per cent increase in yields in many districts. The area so far covered by improved seeds of millets is eight lakhs of acres estimated to yield 67,700 tons of improved strain valued at Rs. 2 crores. The achievements of the other Research Sections of the Agricultural Department cannot be referred to here in detail for want of space.

Demonstration and Propaganda

It is the aim of the Government to have one demonstration or trial plot in each village to bring home to the cultivator the results achieved at the Research Stations and Farms. The Director of Agriculture has been requested to see that this target is realised within the next two years. At present there are 13,278 demonstration plots as against the total of 20,000 villages in the State. The Grow More Food journals, published by the Government in Tamil, Malayalam and Kannada, which are disseminating popular agricultural information to ryots, have now a circulation of 24,000 in Tamil, 3,900 in Malayalam and 1,600 in Kannada. In addition, popular leaflets and small priced booklets on improved methods of cultivation on important crops are being issued.

Crop Competitions

The holding of crop competitions has helped in giving good publicity to the intensive methods of cultivation and about 12,830 competitors have been enlisted this year. The usefulness of demonstration and propaganda was very evident in the case of the Japanese Method of Cultivation. In our State this method has been modified to suit local conditions. When propaganda for this method was started, there were sceptics who regarded that there was nothing new in this or that it was an unnecessary elaboration of practices already in vogue in some form or other.

But the experience of progressive ryots who have adopted this method on the advice of the Agricultural Department has shown that they have achieved gratifying results: 13,785 acres have been brought under this method this year and a target of one lakh acres has been fixed for the year 1954–55. This improved method has recently been extended to cotton, millets and sugarcane also.

Agricultural Associations

Propaganda is carried on also through the associations which the agriculturists have been encouraged to form among themselves under Government auspices at village and taluk levels. There are 16,309 village associations and 97 taluk associations. These associations help in the propagation of the Japanese Method of Cultivation, organisation of village seed farms, arranging fertiliser demonstrations, mass planting of sesbania speciosa and gliricidia and such other beneficient activities.

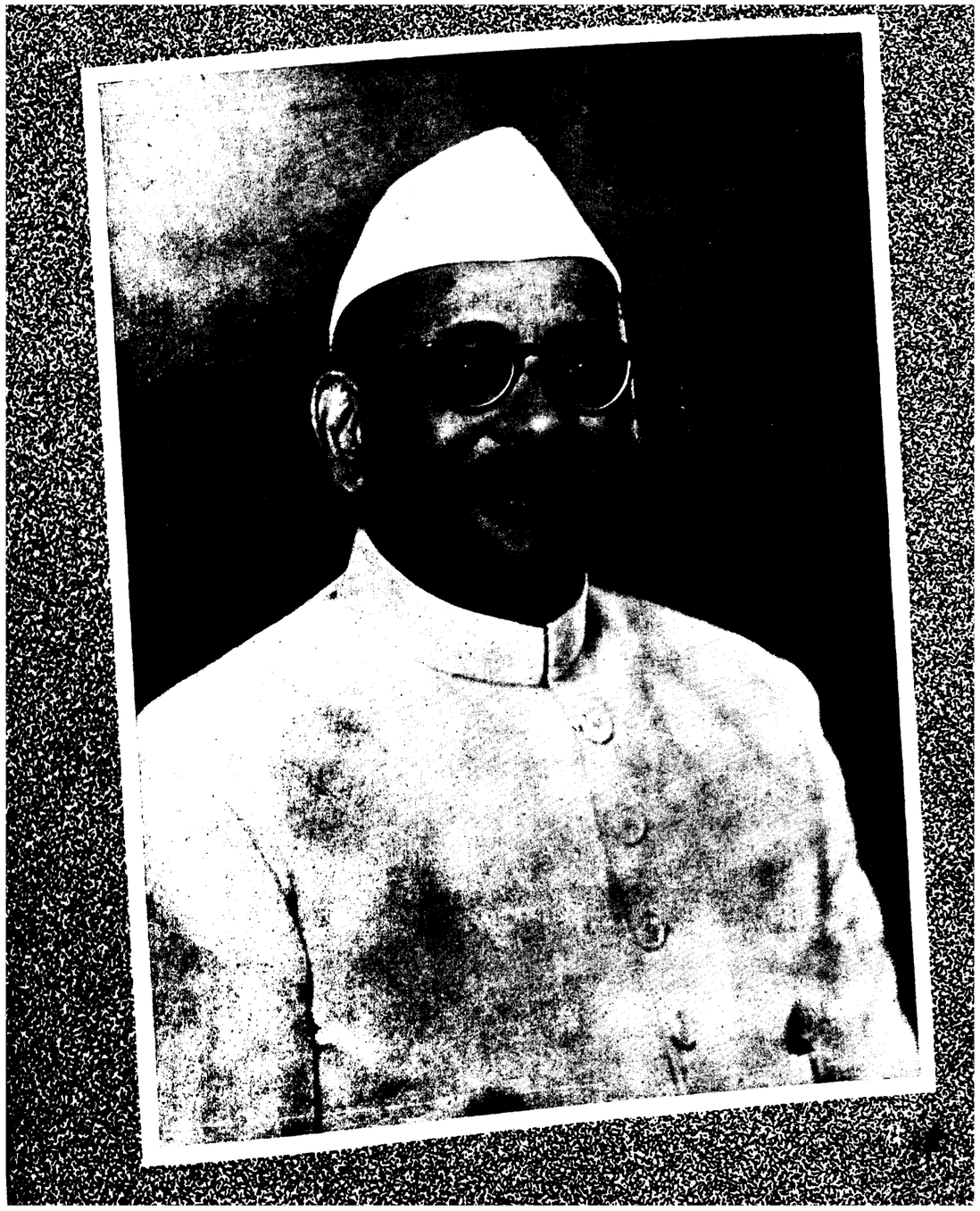
National Extension Service Scheme

With the launching of the National Extension Service Scheme in this State in October 1953, the Department of Agriculture has had to assume greater responsibilities than ever before, because agricultural development is the dominant activity in its programme. Besides the Community Projects and National Extension Service Blocks functioning in different districts, a special National Extension Service Scheme has been drawn up for the Tanjore District which is the only surplus rice producing district in the State with the object of increasing rice production in that district by 75,000 tons of rice permanently in the course of three years. This scheme was introduced in May 1954 in the two divisions of Mayuram and Kumbakonam in that district to begin with. It will be extended later to the other divisions as soon as circumstances permit.

An intensive programme of seed distribution in every village and large-scale application of fertilisers and green manure was launched in the two divisions of Mayuram and Kumbakonam with the help of a large agricultural staff of one District Agricultural Officer for each division, one Agricultural Demonstrator for each firka and one Demonstration Maistri for every 5,000 acres. Within four months of the launching of this scheme, village seed-farms have been opened in all the 625 villages. The area under sesbania for use as green manure for the *thaladi* crop increased from 40,000 acres last year to 108,000 acres in 1954–55.

Reorganisation of Field Staff

The Government have withdrawn the normal staff of the Agricultural Department now employed in or having jurisdiction over the areas covered by the Community Projects and National Extension



Women's Welfare in Madras State

SANTHA RUNGACHARY

IN a little room about ten feet by six in a colony of mud huts off Otteri a dozen women sat busily spinning. The time was mid-afternoon. Outside in the shade of a tree, an old woman sat with a bundle of thin sticks beside her. It was her livelihood.

Inside the hot little room, mine were the only hands idle. I was the stranger, the visitor.

" We went to Adyar last week," said the woman nearest to me, a woman past middle age in a green khadi blouse and printed cotton saree. It came apropos of nothing. It was merely the thought or memory uppermost in her mind. " We went through the city," she continued, " in a van. Yes, we went right through this big city in a van. And we saw thousands of people. And do you know what else we saw ? "

A sudden hush fell over the room. The wheels of the charkhas stopped whirring. The poised hands holding the threads tensely over the spindles slackened. It was as if everyone in the room was holding her breath.

" We saw the sea," she said. On her face was the awe and wonder of a child.

I waited.

" We want to go to Mahabalipuram," she said. " We want to see other places. *We want to see the world.*"

She was a tribal woman. She belonged to one of what, under the British, used to be called the Ex-criminal Tribes. For forty years all that she saw were the four walls of her mud hut and the high barrier which divided her from the rest of the world. Last week she had seen the sea. Now she wanted to see the rest of the world.

Looking at her, you would not think she was a tribal woman. She was clean, cheerful and full of curiosity. Her nimble fingers had learnt a variety of household trades. She could spin, she could do intricate lacework. She played carroms and could produce stuffed dolls. She combed her hair straight back. She wore a bodice.

It had taken the Women's Welfare Department nearly a year to work this change in her.

A Social Problem

It is now being slowly recognised that women represent a kind of social problem in India. This realisation has been forced more or less simultaneously upon most of the Asian and Middle Eastern countries. The majority of women here are little educated, economically insecure and inclined to be dependent throughout their lives. Women once upon a time were a communal responsibility. When the old, rigid, closely-knit, caste-ridden society crumbled under the impact of foreign influences, new religions, civil wars and experiments in Government, and the idea of private property broke up its economic unity, the flotsam and jetsam of the old civilization were suddenly thrown up into the open and became moral and spiritual driftwood blocking the very fountainhead of social progress.

No longer can we dismiss with a shrug of sympathy or a pious raising of our eyes to heaven, the deserted wife, the destitute widow or the desperate unmarried mother. The anchorless women in our society must not be left defenceless on the periphery of our communal life to drift in the tides of their own despair. Women's welfare work is not mere social service or humanitarianism. It is the recognition of a duty we owe ourselves. It is the practical translation into work of a deep community consciousness. More than hydro-electric schemes, rural development projects and Five-Year Plans we want a healthy nation of free, educated, self-respecting, uninhibited women.

Compulsory spinning at the Service Home

In Protective Custody

When women talk of freedom and self-respect, we may observe, men at once tend to fall back on their second line of defence and quote the example of an old and hoary past when women knew their place and life was happier. Be that as it may, in the last few decades it seems to have been for some reason found necessary to keep women economically dependent, uneducated, knowing only as much of life as she could modestly contemplate from her door-step. Who was it who said of these old days—

> *Close, close he bound her, that she should leave him never,*
>
> *Weak still he kept her, lest she be strong to flee ;*
> *And the fainting flame of passion he kept alive for ever,*
>
> *With all the arts and forces of earth and sky and sea.*

It was ordained that she was to be in protective custody from the cradle to the grave, first of the father, then of the husband and lastly of the son. It is pointed out even now by the kind of people who never dare complete their thoughts that before all these new-fangled notions of independence came into force, the women got on well enough in the old system. All that we care to say is that well enough is not good enough these days. Granting the women's franchise and equal political rights will cease to have any meaning if they are to be held back by social conventions and mouldy taboos and traditional prejudices. This will mean that some of our laws—laws of inheritance, property and marriage—will in course of time have to change, that a new interpretation of marriage and sexual morality will emerge, that women will cease to be identified with angels or children. There is a time for indignation and a time for acceptance. This is the time for acceptance. Some of these changes will be for the better, some might not. It is a gamble which we will have to take.

Mills' Petition

A hundred years ago the British woman had few rights, no vote—and marriage was the only career open to her. Her position was no more secure than that of a lower middle-class housewife in India today. In 1866 John Stuart Mill presented a suffrage petition bearing 1,499 signatures in the House of Commons. That started the ball rolling. It hasn't stopped yet. Slowly, under intense, constant, repetitive demand came the laws giving them the vote, removing sex disqualifications, granting them rights to divorce, guardianship of children, inheritance, nationality, family allowance.

Now the British woman enjoys the same privileges and commits herself to the same responsibilities as the man. The bottom of her life cannot be violently ripped away by domestic calamity, for she is equipped, to some degree, to meet the onslaughts of an ungenerous Fate.

Dedicated Service in Madras

The subject of women's welfare has perhaps received greater attention and attracted more selfless and dedicated service in Madras than in any other State in India. The Madras Government were the first Government, moreover, to tackle it on an official level. In the country, the All-India Women's Conference has already laid the foundations for women's welfare work. The Central Government have included it in their social service

Dinner hour in the Service Home

TOWARDS HAPPIER HOMES

1. Class for the Organisers. 2. House-to-house visits. 3. Nursing a sick mother. 4. Adult literacy class. 5. Needle-work. 6. Care of the Kiddies. 7. Tailoring class.

programme in the First Five-Year Plan. The Central Social Welfare Board has made handsome, though still inadequate, grants to private welfare agencies.

In Madras State there are established voluntary private organisations devoted to the cause of the welfare of women like the Avvai Home which has been functioning for nearly a quarter century; the Guild of Service, the Andhra Mahila Sabha which is fast becoming the central foundation of a variety of institutions catering to the multifarious needs of women; the Seva Sadan, the Ramakrishna Mission Sarada Vidyalaya, the Homes run by various Christian missions, Girls' Hostels run by the Harijan Sevak Sangh and Harijan Welfare Organisation, to mention only a few. The Madras Corporation runs the Ashok Vihar Health and Recreation Centre and 34 Child Welfare Clinics and three creches and four Family Planning Clinics.

In addition to the Women's Welfare Department, which is under the Director of Rural Welfare, the Government maintain the Vigilance Home and the Stri Sadhana which are in the care of the Inspector of Certified Schools. There is thus no dearth of private and official recognition of Women's Welfare as a social obligation.

Genesis in World War II

The Women's Welfare Department had its genesis in the last war. When Singapore fell at the end of 1941, India was overwhelmed by a tidal wave of fear which emptied her cities and towns almost overnight. During the summer of 1942, Madras had more soldiers than civilians and more men than women. The A.R.P. took over. Helmets became a part of the equipment one carried about everywhere. The blackout was a daily nightmare. Every irresponsible whisper became magnified in the course of reiterated quotation into a reported certainty. Madras lay in hourly expectation of death from the sky.

It then occurred to somebody that the women in the slums and the cheries and the women who lived on the pavements should be taught the rudiments of air raid safety measures. The Women's Air Raid Precautions Corps thus came into being. The first band of trainees, who were mostly teachers and social workers, went around the city, especially to the slums, warning the women of the danger they were exposed to and equipping them with all that was necessary in the emergency of an air raid.

Regular visits to the slums and growing familiarity with the conditions in which the poor women dragged on their existence inspired this band of workers to throw into their lectures a few admonitions about sanitation, health, child welfare and ante-natal care.

"Benign Octopus"

Then the war was over. The Corps cut out its A.R.P. lectures but continued its visits to the slums. It began to concentrate its attention on the problems of the women of the poorer classes. Branches were opened. Paid field workers were appointed. The scope and reach of the work extended across the city into the suburbs. More branches were opened.

In 1947 the Government took over the organisation and it became the Department of Women's Welfare. It embraced every aspect of women's needs and problems. Like a benign octopus the Department sprawled across the whole province. In the composite State of Madras it had almost a 100 branches and 200 community centres. Since the Andhra Province was formed, the Madras Government has 56 branches of the Department in the city and in the mofussil and 211 community centres distributed throughout the State. In Madras City itself there is a community centre at Pudupet, a slum centre at Chetput and a special centre in Brislee Nagar, a tribal settlement off Otteri.

Under the Deputy Director of Women's Welfare work nine Assistant Welfare Officers in the mofussil and one in the city. These Assistant Officers are in charge of all the branches of the Department. The field work, which brings the Department in contact with the people, is done by 54 Women's Welfare Organisers who on enrolment are given a year's intensive and specialised instruction not only in psychology but in various handicrafts and games as also Basic teacher's training. A third section, the Public Relations Section, serves as liaison between the Government and the general public in the matter of dissemination of information.

Field Work

The field work is the practical part of the service. The organiser pays family visits, contacts those in need of help, offers them advice and suggestions, answers their questions, smiles away their suspicions and tries to bring some order into the confusion of their lives. More than everything, she *listens* to the women. Some centres have maternity assistants who take over the ante-natal care and confinements of expectant mothers and teach them about child welfare and hygiene and nutrition.

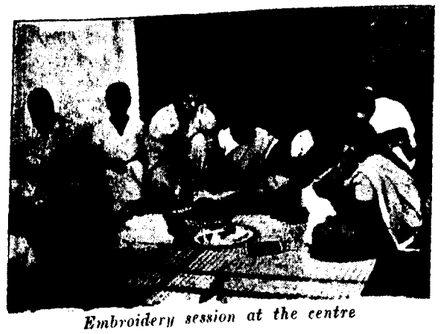
The Organiser collects the little children in the area and conducts pre-Basic classes at the centre.

She admits the grown-up children into schools. She patches up family quarrels and takes on her own shoulders the overflow of domestic work.

Busy Hands at the Centres

In the Centre, the women are taught spinning, embroidery, knitting, the making of toys, weaving, leather work, lace-making, coir work, soap making and the other cottage industries with which they can supplement their income. Some of the community centres are carrying on a thriving pickle-making and preserves industry. More than 18,000 families have benefited by these contacts. More than 2,000 women are being taught the three R's, and a thousand babies have been delivered.

The Organiser does more. She investigates suspicious cases of leprosy and tuberculosis and makes arrangements for proper hospitalisation or segregation. She treats bruises, swabs throats and dries tears. In short, she touches the life of poor and underprivileged women at a dozen points and acts as just that outside agency which inspires



Embroidery session at the centre

Happy ending at the Vigilance Home

the women to efforts at self-improvement and strengthens their will and determination to raise themselves above the mud and mire of their ignorance and poverty.

Rehabilitation

The work of the Welfare Department has also a rehabilitation side to it. The Department runs what are called Service Homes in which women who have found themselves stranded in unfortunate circumstances are helped to reorganise their lives and retrieve their lost hope and faith and confidence.

The woman deserted by her husband, the widow left penniless, the grown-up marriageable daughter at a moral dead-end—these find refuge in the Service Homes and leave after three years of work and study and training ready and equipped to take up again the challenge of life. The Women's Welfare Department has brought to these women that most honourable gift of all—the gift of work.

The Department has recently turned its attention to women belonging to the ex-criminal tribes who are now considered as Scheduled Castes. There are in Madras State about a lakh and a quarter of these tribes. There are 15 tribes in Tamil Nad, 25 in Malabar and four in South Kanara. In December 1949, the Madras Government drew up a ten-year plan for the development of the Agency areas and hill tribes, involving a total expenditure of the stupendous sum of Rs. 9 crores and 99 lakhs. The Central Government have provided a sum of Rs. 20 crores. So far no comprehensive tribal welfare scheme has been put into operation, but the Women's Welfare Department runs two

settlements, one in Madras City and another in the mofussil, as also four separate Toda community centres. The speed and pace at which these half-civilised races are reaching out towards knowledge and health and the prospect of a better life are truly amazing.

The New Emancipation

But is all this enough ? No. Not by any means. If this was multiplied five-fold it still would be woefully inadequate. The lapses and mistakes of ages cannot be wiped out in one generation. But if welfare work and the education of women progress abreast, our children might grow up to see a less dismal state of affairs than at present. We talk now of redeeming women from the wretchedness which they themselves or others have brought into their lives.

But we must also be vigilant that other women should profit by these experiences and equip themselves to face adversity with a certain degree of independence of means and of spirit. I suppose that would be called emancipation. Emancipation unfortunately has come to imply paint and lipstick, aggressiveness, a difficult and unfeminine temperament, pride and lack of morals. Emancipation merely means independence. It means liberation. Liberation from the thraldom of the accumulated inhibitions laid on the souls of women for ages. Once the women of India are emancipated, there would be no need for women's welfare work.

That, as I said, will take at the *least* a generation more. It might take longer. In our country, even the men are not emancipated as yet.

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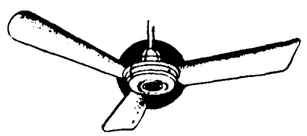
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the graceful gopuram

Namaste to Tourists

PAUL CAMERON SHERBERT

THERE is much to attract the foreign tourist to South India. Yet compared to the other attractions on the Bombay-Delhi-Calcutta axis and its lateral extensions into Kashmir, Ajanta and Darjeeling, the charms of South India are unknown. Imagine the pleasure and surprise of many foreign visitors when they come southward to find new pearls in their travel oysters, even though some of the pearls are inaccessible and hard to come by !

Tourists are generally of two minds about their discoveries here. One is the desire to keep an untarnished and inaccessible jewel to oneself away from the predatory hands of less understanding tourists. The other is the far more natural enthusiasm to share one's discovery with others. It's this latter enthusiasm which, if encouraged properly by all those interested in developing South India's tourist resources, will make for the ultimate financial success of those who will depend on the various aspects of tourist traffic for their livelihood.

Precisely, the foreign traveller, if he is at all sensitive to his environment, finds in South India several unique aspects of India's past and present. For example, if he merely skims the surface during a very short stay, he cannot help but feel strongly the influence of the temple gopurams which dot and dominate the landscape wherever he chances to look. They are as characteristic of South India as the Gothic cathedral is of Europe, and reveal equally the passionate acclaim people gave to God in the past centuries. In fact, the period of the greatest Gothic cathedral roughly approximates the period of the best South Indian temple architecture.

The casual tourist cannot escape the impress of this architecture. It is a pervasive and easily identifiable factor in the charm of the region, whether it is found in the quintuple silent haughtiness of the Meenakshi temple in Madurai, the geometric completeness of the Tanjore temple, the soaring aristocratic magnificence of Srivilliputtur which the writer of this article covets particularly, or the earthy squatty homeliness of thousands of village shrines. In travelling through the South one cannot help breathing the writhing sculptural diversity of the countryside life which, in Madras State particularly, clings so tenaciously to the gopuram-like unity of Hindu culture.

In fact it is Tamilnad and its sophisticated cosmopolitanism that first impress the foreign traveller. This cosmopolitanism is everywhere, inherent in both town and country, and wells up from the past when Tamil culture was known over the whole of South-East Asia. It supplements the natural harmony between man and nature which is also everywhere evident, and which bewitches the visitor into a wish to tear up his return home ticket and to transform himself into a bullock-cart

he misses the crucial turn at the entrance to the city. So is Coimbatore if he misses the turn for Palghat, which he does more often than not. Train accommodations are improving with the addition of airconditioned coaches on lines moving south of Madras. But the main improvement must inevitably be, whether by train or by road, the solution to the problem of where to eat along the way.

Motels May Make Money

While excellent overnight accommodations are available in South Indian cities and resorts, they are all too few and are concentrated in few places. There is widespread need for European-type accommodation in several of the leading South Indian cities and in many of the towns near points of scenic or cultural interest. This accommodation will be most welcome if it is of the simplest type—there is no need for neon lights, overstuffed furniture and bulky almirahs—and if it is decorated in a manner that is genuinely Indian and not pseudo-modern.

In South India there are literally hundreds of travellers' bungalows which with little effort and expense could be made into delightful accommodations for foreign visitors. It is true that the travel patterns of previous ages determined their present location, and in the automobile age many of them are badly situated to attract tourist trade. Nevertheless, at least twenty-five of the strategically situated ones could easily be converted into a profit-making type of accommodation that in America has come to be known as the motel—or the motorists' hotel.

Most of these Indian travellers' bungalows are well-built, and most have lovely compounds. The interiors could be redesigned inexpensively, furnished with charpoys and the delightful textiles of South India for bedcovers and window curtains. In fact these travellers' bungalows could actually be showrooms for all the cottage industries of South India—the best advertisement possible, for they would demonstrate the uses to which cottage industry products could be put in foreign countries.

Simple Food—but Clean

Two things are absolutely and basically essential before foreign visitors will accept these travel arrangements: essential plumbing facilities and the immaculate preparation of food. Neither has to be elaborate or expensive. Simply constructed shower baths in the Indian manner are infinitely preferred to enamalled tubs. Food should be simple and tasty. Five or six dinner courses, surrounded by crockery and infinite cutlery and served with formal ritual is absurd in the context of present-day India, and is furthermore contrary to the delightful naturalness of the Indian way of doing things.

Indian food should be served for those who wish it, and should be served in Indian style, from banana leaves, perferably with the diner sitting on the floor. Spoons or the simplest utensils should be available for those whose inexpertness with the use of hands causes embarrassment. Simple European-type food should be available for those who prefer to adhere to food they know. The elementary 'must' of all food arrangements must be cleanliness, not only in the preparing of food, but in its serving. Foreign visitors are as appalled as I have been to see water glasses brought to table with four fingers of the waiter embedded in the liquid. A short period of foreign training in food management would be very useful to the person in charge of such arrangements.

Ceylon Sets an Example

A remarkable example of what can be done to attract the tourist exists in Ceylon, where the Tea Board has taken over the management of several travellers' bungalows. Foreign visitors rave about them, and how they permit a leisurely trip around the island without worry about the everyday mechanics of living. More than that, the bungalows are designed to lift the spirit at the end of the day by providing thoughtfully conceived refreshment for both body and spirit. Certainly it is not beyond the competence or the means of the Coffee Board in India to do much the same sort of thing.

In conclusion, South India has immense resources to exploit for the tourist. But most visitors curiously enough are persuaded more by word-of-mouth enthusiasm and information than by the blandishments of pamphlet literature.

And this kind of enthusiasm can only be built on proper accommodations, travel conveniences, and personal considerations by tourist advisors who love their jobs. All of these factors must be thoroughly in keeping with the genuine Indian culture they represent. South India's greeting to visitors must be a dignified and sincere gesture, without any hint either of obsequiousness or of imitation.

Journalism in Madras

V. K. NARASIMHAN,
Assistant Editor, THE HINDU

SOME years ago, during a visit to Madras, Mr. Norman Cousins, Editor of the *Saturday Review of Literature*, spoke at the Press Club on his impressions of the Indian Press. Citing as an illustration the reports of a speech of his that had appeared in the Madras papers that morning, Mr. Cousins said there were very few papers in the United States that would have published such a fair, balanced and accurate report of his speech as had appeared in the Madras papers.

Most American reporters would have fastened on some stray remark or other of his and written up a report which, whatever other merits might be claimed for it, could not be regarded as a fair and balanced report. The tendency to play up some stray statement, even to the point of distorting the main drift of the speaker's argument, was so common that there was rarely anything like a fair and satisfactory report. He was glad that in Madras they still adhered to the tradition of fair and balanced reporting.

Good Reporting

Mr. Cousins had really noted what should be regarded as a distinctive characteristic of the Madras Press. Whatever the causes, it is a remarkable fact that good reporting has always been an essential feature of the Madras papers. For one thing, Madras dailies have always had a larger corps of reporters on their staff than daily papers in even bigger centres like Bombay, Calcutta and Delhi. This has had curious results. For instance, events in Madras City are reported with a thoroughness and scrupulousness which cannot be claimed for reporting in the other metropolitan centres. No public function of any importance goes unreported. And few readers can complain about the quantum of news given.

Those who have watched the relays of reporters at work in covering the proceedings of the Madras Legislature will marvel at the almost religious zeal with which each paper seeks to serve the cause of democracy. It is a unique feature of the Madras Press that each paper relies entirely on its own corps of reporters to cover the local legislature's proceedings, while papers in the other State capitals and in the national capital are quite content to rely on agency reports alone.

Mofussil Coverage

What applies to city reports applies also in a large measure to news from the districts. Each of the established Madras dailies can boast of a net work of mofussil correspondents in the districts and over a considerable part of South India, whose reports, before World War II, used to occupy nearly a half of the editorial space in an average issue of 12 to 16 pages. The intensive cultivation of regional news and circulation possibilities has been a notable characteristic of the Madras Press, and judged by the comparative circulations achieved by the Madras dailies—both English and Indian language papers—as against the record of dailies in other centres, it must be said that they have been remarkably successful.

For most Madras papers, their metropolitan circulation accounts for ten to twenty per cent of the total, while mofussil readership accounts for the bulk of the circulation. During the war, the newsprint shortage necessitated drastic cuts in the sizes of the newspapers, and mofussil news was the principal sufferer in the process of cutting the news budget to the severely limited space available.

But it must be said to the credit of the Madras papers that they continued to retain the services of all their mofussil men, and at least one paper, to my knowledge, took special steps to see that the emoluments of its mofussil correspondents were not adversely affected by the inability of

driver inching his way through the dust-spangled sunlight of the roadside banyans and neems which lean against the tide of clean green paddy.

Marina at Madras

For a visitor who has time there are innumerable sights and sounds and experiences he shouldn't miss. The Marina of Madras City is one of the most refreshing, particularly after the claustrophobia one feels in the large cities of the north. Yet he often wonders why there aren't more lovely homes, hotels and flats to take advantage of the wide-angled vision and brisk breeze, and to humanize an otherwise impersonal landscape.

Then too the shade of Madras streets, particularly the cool dignity of Mount Road in Teynampet, or the rows of newly-adult rain trees in Thyagarayanagar, are very inviting. But also saddening to those visitors whose sharp eyes see the vandalism of trees and the march of unrelieved and unhappy masonry up our main streets.

Thrills for the Tourist

To attempt to catalogue the many thrills in store for a foreign visitor of catholic tastes would be ultimately to deny place to many worthy experiences, but how can a visitor forget any of the following: the sight of the wonderful stretch of Elliott's Beach, the precipitous descent from Ootacamund into the tidy house-keeping of the Wynaad tea estates, the measured timing of the Tanjore Vidwans, the esoteric delight in the improvisations of a great artiste's flute, the throbbing sculptural weight of Mahabalipuram and the Pallavan sculptural suggestions that accompany one up through the living rock in Tiruchirappalli, the brooding Valhalla of the Kodai lake, woods, hills, and sky as against the Arab dhows rocking peacefully off the beach at Kozhikode, the nightly prayers at Gandhigram and the electric grid from Mettur Dam, and the Dam itself; and people—yes, from an important personage taking a holiday at Courtallam to a retired schoolmaster of a village in nowhere; or a lone fisherman in his hand-hewn catamaran and thousands more.

All this and much more makes up the South India that foreign visitors find for themselves. Much of it is unique. The memories that remain are as hot and sharp and heady as the peppers that go into making South Indian curries or the colours that go into Kancheepuram sarees.

Glory and the Guide

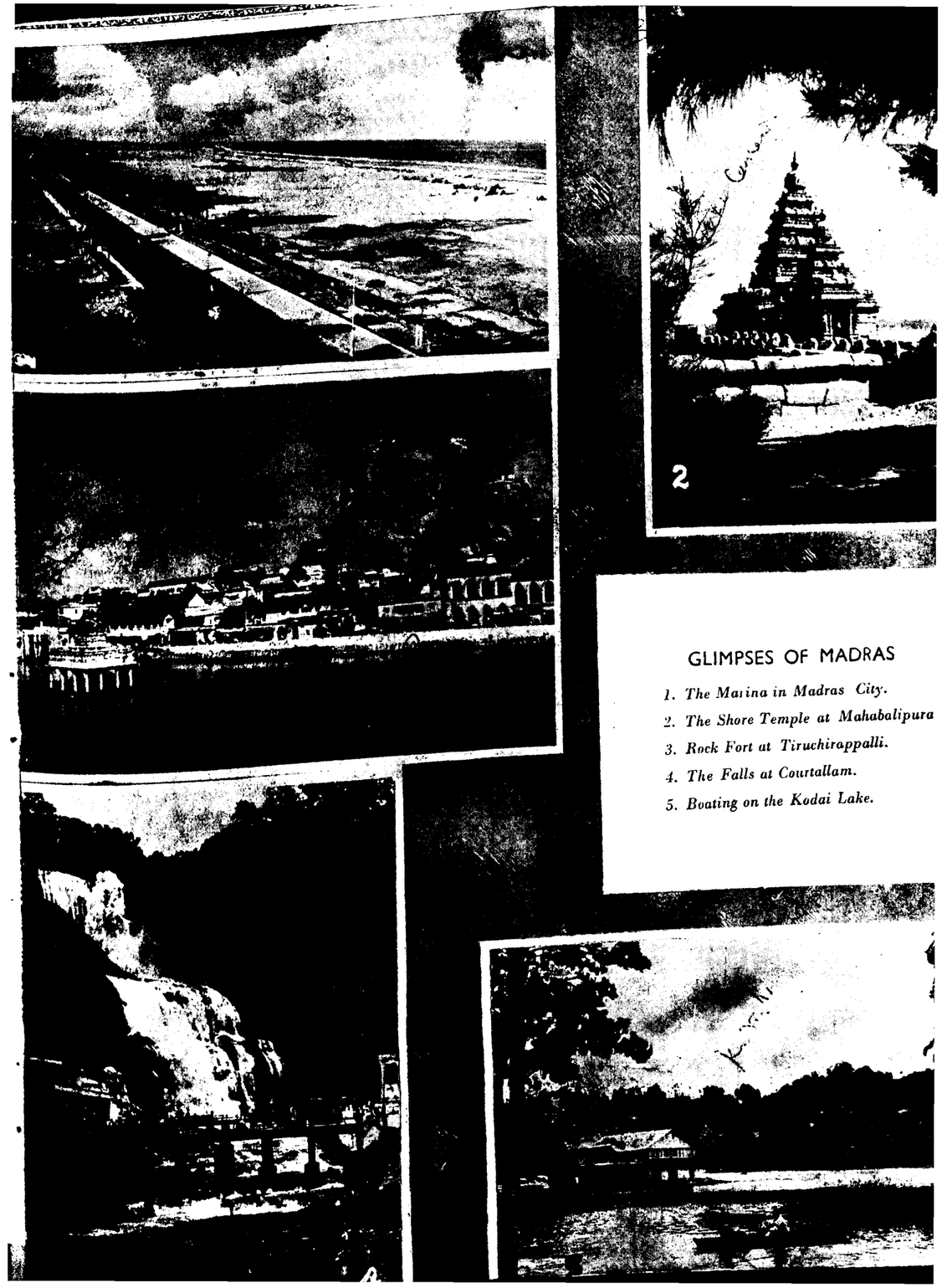
The foreign visitor is frequently quite ignorant of South Indian attractions, and unfortunately when interested and eager, under factors which govern the control of tourist advice in other countries, he does not allow time enough to do anything but the barest essentials. Unfortunately, too, local advice seems to believe all visitors must pay homage to Mahabalipuram whether or not they enjoy sculpture or the relics of India's past. Newspaper reports that Government are paying increasing attention to making trained travel advisers available is a step in the right direction, but they must be people who can do more for the variegated tastes of different classes of tourists than recite by rote the glories of India's past and the statistics of nearby community projects.

In public relations work of this kind, the character, intuitiveness and personality of the tourist advisers should be measured ahead of academic qualifications, and only those persons accepted who have real enthusiasm for the job. The most interesting and informative morning I ever spent in South India was a chance meeting with a boatman in the backwaters and canals of the West Coast. His natural love of his homeland plus a fascination with the people and legends of his neighbourhood projected a great vision through a haze of faulty English. South India could have had no better advertisement at my price.

Dust and Signpost

There is no better way of travelling in South India than by automobile or by train. Generally speaking, the roads are quite good throughout. They are not so handsomely built or metalled as those in European or American countries, but there are plenty of them, and frequently it is a relief to get off the main roads into quiet country roads. The dust does not matter much if traffic is not heavy, and there is a charm in getting away from manufactured arteries of travel. In most cases the roads are well posted with markers at every furlong.

Some improvement, however, is necessary in directional signs at crucial points on main and side roads, and particular attention should be paid to clear directional signs in through-traffic in cities and towns of any considerable size. Tiruchirappalli for instance is a nightmare for the newcomer if



GLIMPSES OF MADRAS

1. *The Marina in Madras City.*
2. *The Shore Temple at Mahabalipura*
3. *Rock Fort at Tiruchirappalli.*
4. *The Falls at Courtallam.*
5. *Boating on the Kodai Lake.*

the paper to make use of their reports. Now that more newsprint has been freely available since 1952, the Madras papers have been printing more pages, and mofussil news has been coming into its own.

Pattern of News Gathering

It must be confessed, however, that despite their large number of staff reporters and network of correspondents, the Madras papers are not doing on the reporting side as good and satisfying a job as they undoubtedly could. While the basic fabric of living of the people has been greatly changed by the advent of Independence, the pattern of news gathering and presentation largely follows the pre-war tradition.

Politics and crime still dominate the news columns, while other aspects of life—the social, cultural, educational, scientific, etc.—hardly receive adequate attention. There is much of waiting on news instead of going out to get it. Personal publicity—particularly of officials and politicians—figures too much, to the detriment of genuine news and a rounded picture of what is happening around us.

Need for Guidance

I have no doubt that given proper direction and guidance, the reporting staffs and correspondents can do a much better job. They are all quite experienced men and have a fine sense of proportion and judgment. If they are told that a new piece of research at an agricultural research farm is better news than a political meeting, they will go out for such news and get it. It is up to the editors to develop the initiative and enterprise of their reporters.

Take, for instance, the defunct zamindaries. It is some years since the zamindaries were abolished. Their abolition was hailed as a great piece of agrarian reform, which it doubtless was. But the public would like to know what is happening in the erstwhile zamindaries. Are the tenants there feeling better now? How are the general conditions in these ex-zamindari areas? What have been the consequences of the reform? How far has agricultural production benefited from the change?

Pressmen interview the Agriculture Minister at the Aduthurai Research Farm

Independent Investigation

Now, these are questions to which the papers should try to get answers through their correspondents. The information would be highly illuminating and would be very helpful in determining the further course of agrarian reform. In due course the Government will no doubt get reports from their revenue officials, and an official handout may be issued in its own time. But by then public interest in the issue will have dwindled and the report itself may be dismissed in a few lines by the newspapers. It is where the matter is still fresh in the public mind that the fullest information should be provided.

Zamindari abolition is only one of the numerous instances that can be cited. There is the Moratorium Act. There are the Community Projects. There is the much-talked of Japanese Method of Rice Cultivation. These and other similar issues provide occasions for the Press to make its own independent investigation and to present facts in a way which would compel the public as well as the Government to take notice.

Facilities to Pressmen

And that brings me to an aspect of the relations between the Press and the Government in which I should like to see an improvement in the future in the interests as much of the Government as of the public, whom the Press seeks to serve. The Government should offer the fullest facilities to the Press for gathering information. As the State Government's responsibilities are limited almost entirely to nation-building departments, there are few things in respect of which the Government need to observe secrecy in the interests of the "State".

A policy of being completely aboveboard and freely communicative will certainly pay rich dividends. The Government should be co-operative towards the Press not only at the headquarters, but must see that their officials in the districts as well as their subordinate organs like the local bodies extend to the Press the co-operation and help to which it is entitled.

Official Co-operation

As Secretary of the Southern India Journalists' Federation, I have received in recent years complaints from mofussil correspondents against municipal councils and panchayat boards which are quick to bang their doors against press correspondents as unwanted intruders. Such press-fearing local bosses must be told that such an attitude towards the Press is incompatible with the governance of a democracy. It has been well said that a government can learn more from the criticisms of its enemies than from the flatteries of its friends.

The Press in Madras has done a great job in the past. But it has a grander job to do in the days ahead. In its experienced and competent band of reporters and correspondents—not to speak of the editorial staffs, who are among the most well-equipped and reliable journalistic staffs anywhere in the country—the Press has the primary requisite for doing that job well. They need leadership from their editors and the co-operation of officialdom at all levels.

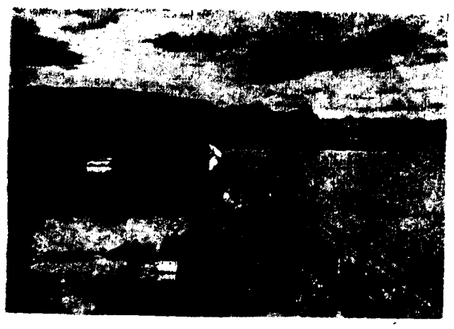
Projects for Prosperity

N. PADMANABHA AYYAR,
Special Chief Engineer, Public Works Department

THE development of Irrigation in Madras (Residual) State may be considered in two phases—the first relating to the State before 1st October 1953, the date of formation of Andhra State; and the second the State after 1st October 1953.

The Composite Madras State had an area of 126,166 square miles or about 80·75 million acres. Its population in 1951 was 57·02 millions. The area growing rice in the State was estimated at 10·7 million acres in 1944–45 and the yield of rice was about five million tons. The average import of rice was reckoned to be of the order of five lakhs of tons in the year 1940–41. The quantity required to feed the population subsisting on rice at 24 ounces per adult was of the order of seven million tons in 1946 and eight millions in 1951, giving a deficit of two to three million tons of rice.

Whatever quantity was found short had to be made up by imports, until additional production in the State either by increase of production per acre by intensive cultivation methods, or increase in area irrigated was able to bridge this gap. Increase in the area irrigated was to be achieved in two ways, (*a*) by giving irrigation facilities to grow an additional crop, for example second or third crop, on land already growing first crop, and (*b*) by extension of irrigation to new areas by flow or lift irrigation, the latter by pumps from open wells or tubewells.



The Mettur Dam

After Partition

The formation of the Andhra State has left the Residual Madras State with about half the area of the old Composite State, the exact areas being 38·5 million acres for the Madras State and 40·6 million acres for the Andhra State, 2·5 million acres (in seven taluks of Bellary district) going to the Mysore State. In terms of population, the division is less equal. The population of the Residual Madras State in terms of the last census is 35·7 millions (of which 27·9 millions in rural), Andhra 20·59 millions and Mysore 0·8 million. The State after division has 19,491 villages.

In regard to areas sown under all crops, the areas are 15·6 million acres in Madras State as per latest season and crop report, 15·6 million acres in the Andhra State and 1·4 million acres in the Mysore State. The net areas irrigated under all crops is 4·8 million acres in Madras, 4·6 million acres in Andhra and 0·3 million acres in Mysore. These figures are approximate but serve to give an idea of the manner in which the land, population and food assets of the old Madras State were divided consequent on the partition.

Greater Deficit

It will be noticed that even while the Composite State was short of rice by about three million tons on a 24-ounce ration, the Residual State with an area of cultivation only just equal to that of Andhra State and producing nearly the same quantity of food has to support a population greater than Andhra's by about 15 millions. The result has been generally to turn the Andhra State into a surplus area and the Madras State into a still more deficit area than before.

In 1952–53, the deficit was of the order of 1·7 million tons under rice and 0·9 million tons under millets. These figures are given mainly to emphasise the nature of the food problem that Madras State has to face and the need for intensification in all possible efforts to plan and carry out all practicable irrigation schemes and intensive cultivation schemes.

Irrigation Potential

The possibilities of expansion of irrigation are limited by the utilisable water resources in the several districts. It is not possible to make every district of the State self-sufficient in the matter of food. In some districts the scope for expansion is considerable, in others very little. Generally speaking, the volume of unused water in the Residual State is comparatively small because of the smaller width of the peninsula and the short lengths of the rivers.

Besides, thousands of tanks built over centuries have helped to store waters over large tracts both in Madras and in the adjoining State of Mysore through which many rivers flow into Madras. Standing examples of these tanks are to be found in the districts of North Arcot, South Arcot and Chingleput. Thus in any scheme of irrigation development, while attempts should as far as possible be made to make it cover all districts, the need for increasing the production in a large way and in as short a period as possible has also to be kept in view.

Vigorous Drive

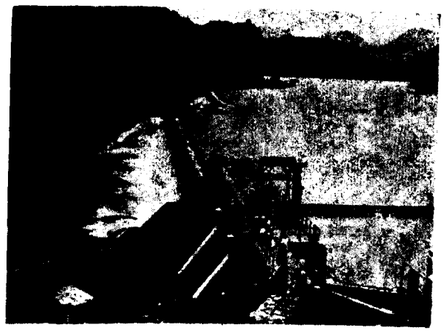
The food deficits being very large, a vigorous drive for irrigation development has been in active progress ever since 1943, when due to war, imports of foodgrains became difficult and rationing of food was introduced on a countrywide scale. A brief survey of this drive is made below:

1. *Period before* 1943.—During the war period when all rice imports ceased altogether after the Japanese occupation of Burma in 1942, considerable shortage in food developed in Madras State. The position till 1943 was one of quiet but steady activity. Extension of irrigation was encouraged by (i) removing restrictions on increase of the ayacut under major irrigation sources, chiefly in the Cauvery Delta; (ii) giving additional second crop wherever feasible; (iii) removing prohibitions against cultivation of some classes of Government waste lands, and (iv) executing a few minor irrigation schemes. These measures helped to increase irrigated areas in the deltas and helped food production in some measure.

2. *Period between April* 1943 *and March* 1946.—This is the interim period when the policy of Government was decided with reference to the post-war reconstruction programme. About 30 Minor Irrigation Schemes in the whole State as it was then were sanctioned and put on hand. A drive to bring undeveloped areas of some thousands of acres under irrigation in the Cauvery-Mettur Project area in the Tanjore District where water was available and development was slow was also instituted. In the conditions then obtaining, the Madras State had financial reserves to the extent of about Rs. 40 crores for financing new irrigation projects.

So this period was a period of intensive activity by way of planning and execution of development schemes in all departments of Government. The Irrigation Projects and Grow More Food schemes were also given a high place in the development plans.

3. *Period between April* 1946 *and March* 1951.—In this period there was a change in the political set-up, the old Advisory System of Government with British personnel was replaced by a Government of elected representatives in the dominant party with ministers responsible to the Legislature and to the people. With this change in the political set-up and with a favourable financial background,



General view at Papanasam

Sathanur Project site

development in July 1951 for the five-year period 1951–56. This Plan included all the projects sanctioned and then under execution and also new projects. After an examination of the suggestions received, the First Five-Year Plan was prepared and presented to Parliament on December 8, 1952.

According to this Plan, a sum of Rs. 112·34 crores for all Part A States was provided for the period 1951–56 for continuing all irrigation projects under execution and for others to be planned and initiated within the five-year period. Against this total provision for the whole of India, the provision for combined Madras State alone was Rs. 34·08 crores including Rs. 3·35 crores for Grow More Food Works. The provision for the Residuary State works out to approximately to Rs. 18·17 crores.

New Minor Irrigation Works

From April 1952, the financial position of Central and State Governments became very acute. As a result all new works were stopped and subsidies also discontinued except for sanctioned works already commenced and under execution. New works sanctioned but not taken up were deferred. This position continued till about August 1952 when the Government of India modified their previous orders and stated that they would be willing to grant loans for the execution of new Minor Irrigation works and wanted a programme.

A programme was prepared including the works sanctioned before April 1952 and not commenced, and fresh works were also included pending sanction. From this time onwards more new works sanctioned, but no works were put on hand till about April 1953.

Large and Small Projects

The important large and small projects sanctioned by Government before their financial stringency developed were the Araniar Project in Chingleput District, Walayar and Mangalam Projects in Malabar District. The Special Minor Irrigation works sanctioned before and after abolition of the subsidy scheme but not started, were stopped. Considerable amount of work was carried out under this programme in the period from 1950 to March 1952 and thereafter on continuing works in progress till the end of September 1953.

Between August 1952 and September 1953 the position improved somewhat. A fresh programme of Special Minor Irrigation works consisting of works previously sanctioned but not commenced and of other new works was prepared and a small beginning made once again from June 1953 onwards on the execution of some of the works included in this programme. A number of small local works for relief of distress in affected areas were sanctioned chiefly under repairs and carried out independently of this general programme.

In the Residuary State

5. *Period from 1st October 1953 to March 1956.*—The lull in the planning and execution of new schemes in regard to major projects and the Grow More Food Schemes which began in 1952 continued till August 1952. About this time the Government of India felt the need to take a hand in relieving distress conditions and food shortages in some of the States, particularly Madras, having regard to the acute famine conditions which had developed in the State in 1952–53. They ordered the preparation of a programme of new Minor Irrigation works for execution from loan funds and from June 1953 allowed a start on this programme to be made, pending approval to the programme.

The position improved further by about October 1953 in view of certain changes in Governmental policy, namely, a realisation of the need to relieve unemployment and make up shortfalls in the planned expenditure in the period of the First Five-Year Plan which made the Planning Commission to adopt a more liberal policy in regard to new schemes. They offered help to State Governments by way of loans to speed up

the tempo of activity on irrigation development schemes was further increased. Some of the large projects started during this period were (1) Lower Bhavani Project in Coimbatore District, (2) Malampuzha Project in Malabar District, (3) Manimuthar Project in Tirunelveli District, and (4) the Mettur Canals Scheme in Coimbatore and Salem Districts. The Narasinga Cauvery Scheme for Rs. 25·3 lakhs was also sanctioned as a Minor Project for extending the Grand Anicut Canal of the Cauvery-Mettur Project to irrigate an additional 15,000 acres including ayacut under rainfed tanks.

Among the minor irrigation works (Grow More Food Schemes) as many as 136 schemes for the combined State were sanctioned and started. The execution of the scheme sanctioned in the first and second periods was continued during this period and the smaller schemes completed. During this period, the Government of India offered to pay a subsidy to Madras State to the extent of half the unproductive portion of the outlay on Grow More Food Schemes. Along with these Grow More Food Schemes a well subsidy scheme and a tank improvement scheme were also started.

Grow More Food Schemes

Later in the period, the scope of assistance by subsidy to Grow More Food Schemes was limited to schemes called 'Intensive Cultivation Schemes'. These schemes were of the same category as the Grow More Food Schemes but were confined to certain areas in the State where the schemes are relatively cheap and where the possibilities of growing food were greater and certain of results than in the other areas subject to drought conditions.

The Malampuzha Project

In pursuance of this policy, it was considered that the scheme should be located in regions where monsoon and seasonal conditions were favourable, namely, heavy rainfall areas requiring only small assistance by way of irrigation water to grow a satisfactory crop and regions covered by the large river projects where irrigation water was available in plenty and which could be turned on to new lands without large and expensive works and in which development would also follow quickly. The schemes in the more difficult and less responsive areas were, however, also taken up as unsubsidised works but at State expense, mainly with a view to help the backward areas in the State.

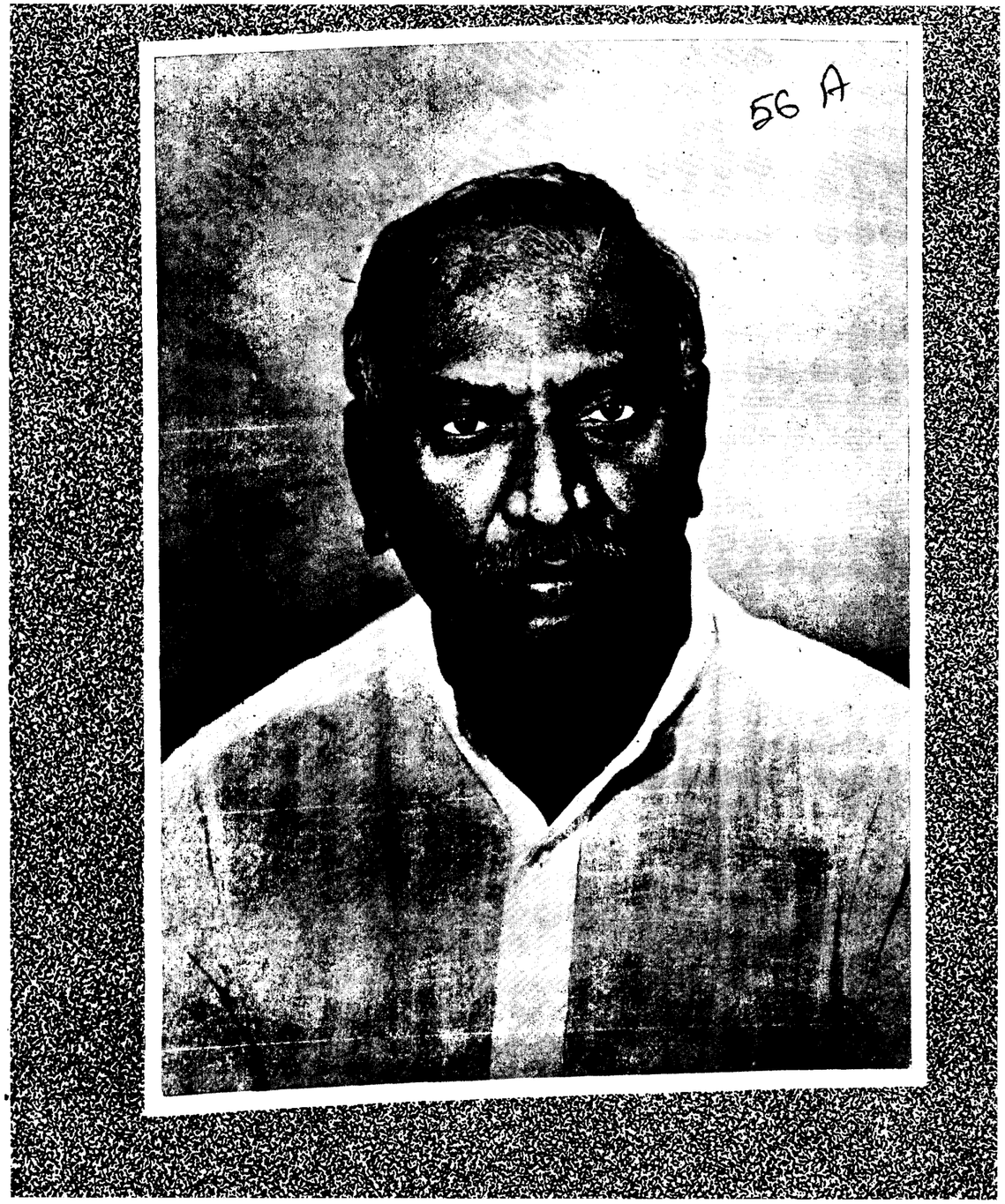
Tank Improvement

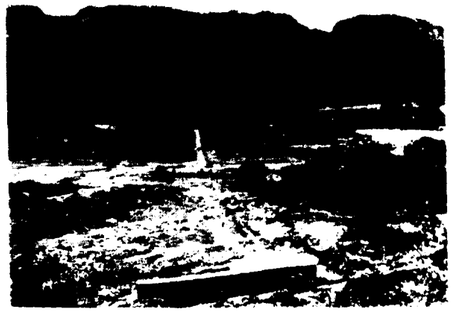
Besides this class of works, a new scheme of improvement to Public Works Department and Revenue tanks and river and spring channels was started in September 1949 on a State-wide scale. A subsidy of one half of the expenditure was granted by the Government of India on these schemes. This tank improvement scheme with a central subsidy was continued in the whole of this period besides the Grow More Food and Intensive Cultivation Schemes which were also subsidised as already explained.

With the initiation of large projects and steep rise in prices which occurred in the years following 1946, and the inflationary conditions prevailing over the whole of India, the cost of all the projects and Minor Irrigation works went up. The result was that the financial reserves of the Madras State was rapidly used up.

By about 1950 Madras State had to seek financial accommodation and assistance from the Centre for all the large projects in the State. The Central gave a willing hand in keeping projects going but work on projects like Malampuzha and Mettur Canals had to be slowed down because of the difficult conditions of State finances. The Manimuthar Project was also affected but to a smaller extent. A loan had been raised by Madras State in this Project area which helped to maintain a slightly better pace on this work.

4. *April 1951 up to 30th September 1953.*—The Planning Commission constituted in March 1950 had been actively engaged in studying and formulating plans for national development including the multipurpose river valley and irrigation projects. They presented a Draft Plan for





Site of the Amaravathi Dam

the projects under execution and to start new projects, and expressed a willingness to start once again a new programme of Special Minor Irrigation works all intended to develop the water resources and increase food production.

Aid under the Plan

This policy took a tangible shape in providing funds to speed up execution of the Mettur Canals Scheme already under execution and in including, to begin with, some new projects in the Plan. The new projects included by the Commission were the Amaravathi and Vaigai Reservoir Projects which had been originally proposed to the Second Five-Year Plan. Still later they expressed their willingness to consider and include also in the First Five-Year Plan for 1954–56 the Sathanur and Krishnagiri Reservoir Projects.

These four projects are therefore to be included in the First Five-Year Plan. Work on Amaravathi, Vaigai and Sathanur Reservoir Projects are just started and it is expected that the other project Krishnagiri will be commenced shortly. A liberalisation of policy in regard to Minor Irrigation works also synchronised with the above.

Second Five-Year Plan

We now come to the period commencing from April 1956, which may be termed the period of the Second Five-Year Plan. The Government propose to take up several schemes during this period and have forwarded certain proposals to the planning Commission. According to those proposals schemes costing in the aggregate about Rs. 10 crores and irrigating a total extent of 90,000 acres would be included in the Plan. The matter has, however, not been finalised, and is under correspondence with the Government of India. It may also be noted that the part of the First Five-Year Plan approved and on which execution has been started but not completed before the end of March 1956 will be carried over automatically to the Second Five-Year Plan and remain there till completed, for example, Amaravathi, Vaigai, Sathanur and Krishnagiri Projects and others.

The Lower Bhavani Project which is the biggest of the schemes included in the Five-Year Plan has been practically completed (except for fitting in crest gates in the spillway of dam and excavation of a few distributaries and field channels). The new area under the head reaches (about 5,000 acres) was thrown open for irrigation even in 1952–53. In 1953–54, an area of 30,000 acres was given benefit of irrigation. In 1953–54 an area of 1,15,000 acres has been permitted to have the benefit of the new reservoir.

The Malampuzha Project also is nearing completion and an area of 6,000 acres (approximate) was permitted to have irrigation in 1953–54. In 1954–55 this will be about three times. Another scheme in which considerable progress has been made and which has come into beneficial use is the Mettur Canals Scheme. Water has been let in the West Bank canal from 1st August 1954 for the irrigation of about 7,200 acres.

It is expected that most of the schemes included in the First Five-Year Plan will either be completed or reach such a stage as to be of beneficial use for the whole or part of the area before the close of the First Five-Year Plan period.

Manimuthar is nearing completion

I

WORKS CARRIED OUT OR PROGRAMMED BY THE FOOD PRODUCTION CIRCLE.

(Board of Revenue.)

State.	Year.	Number of works sanctioned.	Total cost. RS.	Additional ayacut. Old and New. ACS.	Additional yield in tons of foodgrains.
	Tank Improvement Works.				
Residual Madras State	1950–51	1,194	85,07,593	71,904	43,606
	1951–52	504	31,57,250	19,011	9,611
	1952–53	138	9,65,869	3,845	1,733
	Special Minor Irrigation Programme Works.				
Residual Madras State	1953–54	230	21,53,075	11,649	5,691

II

PART PERIOD—FIRST FIVE-YEAR PLAN OCTOBER 1953 TO MARCH 1956.

Residual Madras State.

Name of district.	Name of the Project.	Total cost of the Project in lakhs. RS.	Area. New. ACS.	Area. Existing. ACS.
	(i) Continuation Projects.			
	A. Large Projects.			
Coimbatore and Tiruchirappalli.	Lower Bhavani Reservoir Project.	996	207,000	....
Malabar	Malampuzha Reservoir Project ..	440	40,000	....
Salem and Coimbatore.	Mettur Canals Scheme ..	267	45,000	....
Tirunelveli	Manimuthar Reservoir Project ..	498	20,000	....
	B. Small Projects.			
Chingleput	Araniar Reservoir Project ..	95	3,000	(Technically sanctioned for Rs 104 lakhs.)
Malabar	Walayar Reservoir Project ..	100	7,000	....
Malabar	Mangalam Reservoir Project ..	85	4,000	....
	(ii) New Schemes included in the First Five-Year Plan till 28th February 1954.			
	A. Large Projects.			
Coimbatore	Amaravathi Reservoir Project ..	297	15,000	....
Madurai	Vaigai Reservoir Project ..	310	20,000	....
North Arcot and South Arcot.	Sathanur Reservoir Project ..	289	20,000	....
Salem	Krishnagiri Reservoir Project ..	184	7,500	....

Electricity under the Plan

V. P. APPADURAI,
Chief Engineer (Electricity)

THIS article is intended to give an idea of the progress, since April 1951, the commencement of the Five-Year Plan, in the field of Electricity Development in the Madras State.

The capital invested and in operation increased from Rs. 18·44 crores to Rs. 29·09 crores, i.e., by 58 per cent, while the annual gross revenue increased from Rs. 337 lakhs to Rs. 481 lakhs, i.e., by 43 per cent. Outlay on construction of new projects touched record figures each year during this period and outlay on construction works yet to come into operation is Rs. 8·19 crores.

The installed generating capacity increased by nearly 60 per cent, from 156,000 KW to 247,300 KW. The principal additions to power generating capacity comprise :

	KW
1 A new power station under the Moyar Hydro-electric Scheme.	36,000
2 Additions to existing power stations, viz.—	
(*a*) Papanasam II Stage (hydro)	7,000
(*b*) Madurai Thermal Station (thermal).	10,000
(*c*) Madras Thermal Station (thermal) I Stage.	15,000
(*d*) Pykara III Stage Extensions (Hydro).	27,200
Total ..	95,200

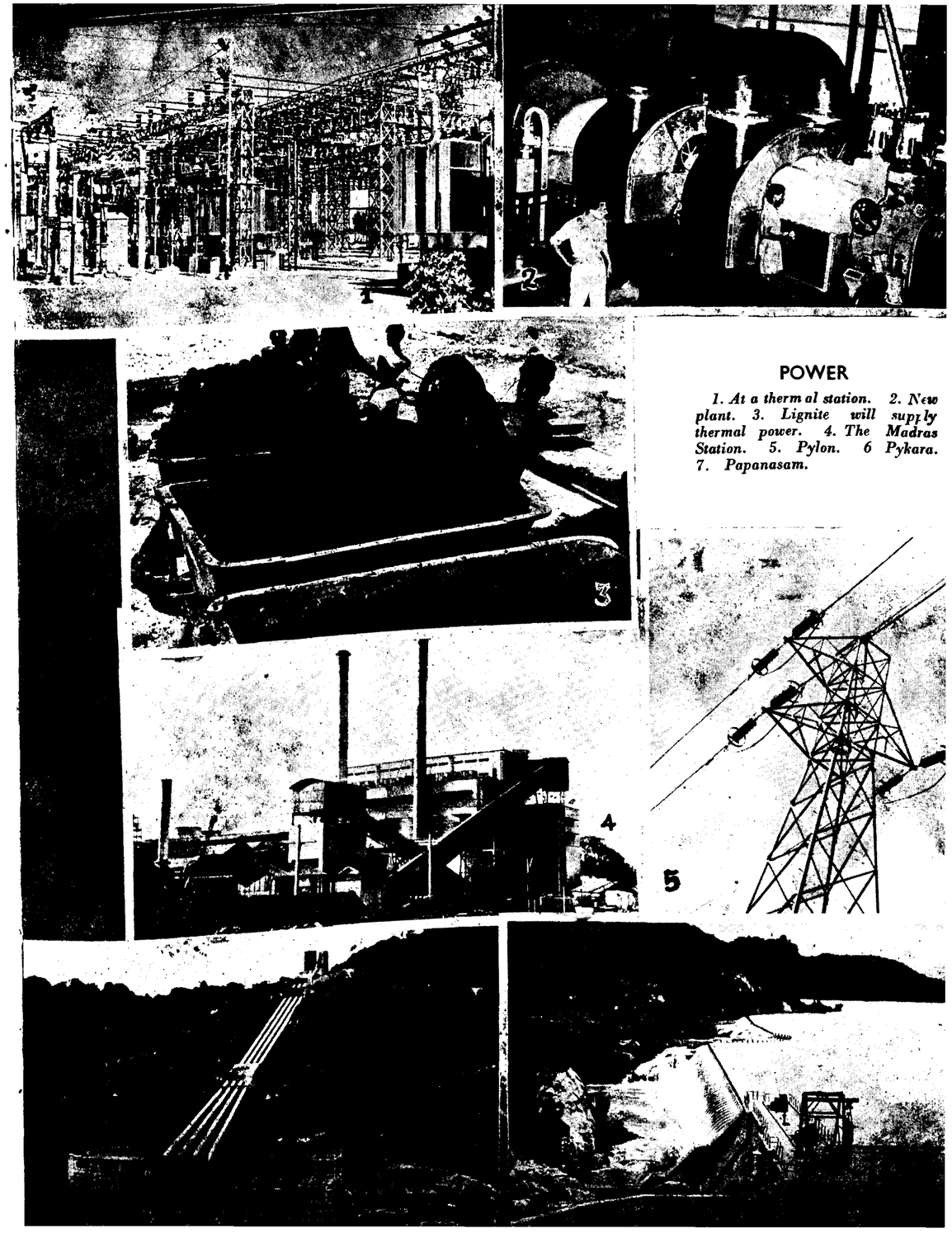
The Plan target in generation for the first three years has been achieved and in fact the full Five-Year Plan target itself will be realised by the end of 1954 when the II Stage of the Madras Thermal Station is expected to be commissioned, bringing an additional 15,000 KW generating plant capacity.

Power demand met and energy generated in 1950–51, the year preceding the Plan, and in 1953–54 are as below :—

	1950–51.	1953–54.
Aggregate power demand in KW.	130,850	169,000 (Sep. 1954).
Total number of units generated in Government Power Stations in millions.	630·97	758·7
Total number of units generated for the whole State.	634·63	762·6

The expansion of the Madras Grid during the three years of the Plan can be gauged from the following figures of sub-stations and lengths of lines in service as at the end of 1950–51 and as at the end of 1953–54.

	As at end of 1950–51.	As at end of 1953–54.
(i) Number of E.H.T. Sub-stations (66 & 110 KV).	31	41
(ii) Capacity (installed) in KVA of above.	183,600	252,000
(iii) Number of H.T. Sub-stations 33 (KV and below).	29	30
(iv) Capacity (installed) in KVA of above.	43,075	61,850
(v) Number of distribution transformers in service.	1,591	2,197
(vi) Capacity of above in KVA.	100,328	145,836
(vii) Length of E.H.T. and H.T. lines in miles.	4,355	5,420
(viii) Length of L.T. lines in miles.	3,580	5,140
(ix) Total number of consumers served.	250,301	341,854



POWER

1. At a thermal station. 2. New plant. 3. Lignite will supply thermal power. 4. The Madras Station. 5. Pylon. 6 Pykara. 7. Papanasam.

Rural Electrification

Madras State leads all other States of India in rural electrification even after the partition of the State. The number of electrified villages in the State as at the end of the past four years is given below :—

1950–1951	..	1,613
1951–1952	..	1,820
1952–1953	..	1,981
1953–1954	..	2,187

The number of villages electrified in the departmental area alone during the three years in 1951–54 is 348, while the corresponding figure for the licensees' area is 226, making a total of 574.

Considering that the target as per the Plan was 250 villages to be electrified annually for the Composite State, the achievement in the three years for the Residuary State may be considered not unsatisfactory in spite of the acute financial stringency in 1952–53 and the first half of 1953–54.

The most popular use of electricity in the villages is for agriculture by means of electrical driven pumpsets for lifting water. The number of agricultural consumers in the areas served by the Government directly and by the distributing licensees taking power from the Government is given below for the years 1950–51 and 1953–54 :—

	1950–51.	1953–54.
1 Number of agricultural pumpsets served directly by Government.	11,859	17,171
2 Number of agricultural pumpsets in licensees' area.	2,767	4,562
3 Total number of agricultural pumpsets.	14,626	24,735

More than 7,000 pumpsets have been added in the three years averaging 2,400 pumpsets added each year. The target for the Five-Year Plan for the Composite State was 3,000 pumpsets each year and the achievement of 2,400 for the Residuary State may be considered quite satisfactory.

Next to the use of electricity in agriculture in villages is its use for rural industries. The expansion of rural industries may be seen from the following figures :—

	1950–51.	1953–54.
1 Number of rural industries.	1,556	2,241
2 Connected load in KW.	19,180	24,539

The rural industries comprise mostly industries for processing the village produce like tea-curing, rice-hulling, cotton-ginning, sugarcane-crushing, groundnut-decorticating, flour milling and oil *chekkus* and a few industries like fountain pen making, silk throwing, tape-weaving and woollen carpet drugget industry, etc.

Industrial Expansion

The greatest percentage of electricity utilised among the various uses to which power is put to, is in industry, viz., 58 per cent, while this figure for other uses is as below :—

	Percentage.
Irrigation	15
Domestic	14
Commercial	6
Public-lighting	2·5
Traction	2
Miscellaneous	2·5

It is a recognised fact that electricity is indispensable for development of modern industry. The advance made in industrial expansion in the State can be assessed from the connected load in industries in the area supplied directly by the Department, which was 106,000 KW at the end of 1950–51 and is 133,000 KW at the end of 1953–54.

Important among the major industries added in the three-year period of the Plan are the extensions to existing cement factories at Madukkarai and Dalmiapuram and over twenty textile mills. The number of medium and small-scale industries taking electricity has also shown rapid increase, from 3,859 with a connected load of 30,982 KW in 1950–51 to 5,915 number with a connected load of 46,480 KW in 1953–54.

Progress of Schemes in the Five-Year Plan

1. *Moyar Hydro-Electric Scheme.*—This scheme envisages the utilisation of the tail waters of the Pykara Powerhouse in the Moyar Valley over a drop of 1,250 feet, nine miles lower down.

The main features of the scheme are as follows :

Construction of a masonry diversion weir 283 feet long and 50 feet high across the Glenmorgan stream to divert the tail waters of the Pykara Power Station, construction of a channel 7,600 feet long to carry the diverted water to an adjacent

stream, and formation of a regulating reservoir of 28 million cubic feet capacity at Maravakandy by the construction of a masonry dam 1,360 feet long with earthen bunds on either side. Water from the reservoir is taken by a flume channel to the forebay and from there to the power-station by means of a 7-foot diameter low pressure pipeline to the surge tank at the head of the gorge and three penstocks 45″/42″ diameter running down the hill slope to the power-station. The power station is equipped with three 18,000 H.P. impulse turbines coupled to 12,000 KW 11 KV alternators. The power generated is stepped up to 110 KV and transmitted to Pykara and Erode through 110 KV double circuit transmission lines.

The main civil works have all been completed. The first generating unit came into operation in April 1952, the second in September 1952 and the third in January 1953.

The transmission lines connected with the scheme, viz., a double circuit 110 KV line from Moyar to Erode and another 110 KV double-circuit line interconnecting Pykara and Moyar power-stations were completed even before the first unit came into operation.

The major works have come to a close.

2. *Pykara Third Stage Extensions.*—The scheme comprises a second dam across the Pykara river to provide a storage of 2,000 million cubic feet, a new penstock line (laid along the existing three penstocks) and two generating units of 13,600 K.W. each at the Pykara powerhouse extended suitably.

Building masonry for the main dam structure, earth bund at right flank upstream and downstream, retaining walls for earth bund and concreting for RCC core wall on the left flank were in advanced progress during 1953–54 also. The dam is expected to be completed early in 1955.

Construction of superstructure masonry for the powerhouse extensions and for machine foundations were completed during 1953–54. The erection of the fourth penstock line with its valves has also been completed.

The erection of the 6th and 7th generating units, as also the necessary step-up transformers and switchgear, have also been completed and the generating sets have been commissioned recently (June 1954).

The construction of the Pykara-Coimbatore third circuit 110 KV line for transmitting the additional power that will become available under this scheme, is in an advanced stage of progress and is expected to be completed by the end of 1954 while the Coimbatore-Madurai 110 KV line has been completed.

3. *Papanasam Second Stage Extensions (including Madurai Thermal Station).*—The scheme includes provision of spillway gates at the Papanasam Dam enabling additional storage in the reservoir and extension to Papanasam powerhouse by an additional generating unit of 7,000 KW.

This work has been completed with the commissioning of the further 7,000 KW set in July 1951.

The scheme also includes the installation of an auxiliary steam station with a total installed capacity of 14,000 KW near Madurai. A 4,000 KW turbo set with two coal fired boilers was commissioned in February 1951 under the first stage of the scheme. The third boiler associated with the unit was commissioned in 1951–52.

A second turbo set of 10,000 KW was commissioned at the Madurai Thermal Station in April 1953. The two 55,000 lb./hour boiler associated with the above turbo set have been also commissioned : one on 13th March 1954 and the other on 20th March 1954, thus completing all the works.

The following transmission lines included in the above scheme were also completed during 1953–54 :—

(i) Papanasam-Kayathar 66 KV line.

(ii) Madurai-Sivaganga 66 KV line.

(iii) Madurai-Tirumangalam-Rajapalayam-Tenkasi 66 KV lines.

4. *Madras Plant Extensions.*—This scheme is to augment power-supply in the Madras City by extending the Basin Bridge powerhouse to receive 60,000 KW additional power plant in three stages.

The civil works for the first stage, viz., piling and foundation slab for the power-station main building office and control block, coal conveyors 1 to 5 and ash conveyors, steel work for the main building RC ash bunker, RC ash conveyor tunnel and crusher house have all been completed. The natural draught cooling tower of 15,000 gallons per minute capacity has also been completed. All

the three 80,000 lb./hour boilers under the first stage have been commissioned, the first in May 1952, the second in November 1952 and the third in May 1953. The 15 MW turbo set under the first stage was commissioned in 14th March 1953 but it broke down during trial runs on 29th March 1953. The set was recommissioned after repairs on 14th August 1953. The first stage of the above scheme is therefore complete, except for some minor works.

Under the second stage of the above scheme, erection of one of the two 80,000 lb./hour boilers is nearing completion. Work on the erection of the foundation for the second boiler is in progress. Erection of the 15 MW turbo alternator under the second stage is also in progress. This set is expected to be commissioned along with the boiler No. 1 under erection soon.

Works on the third stage which involves an addition of 30 MW to the generating capacity, is yet to be taken up. This is covered by the Indo-U.S. agreement for Technical Aid by U.S. for which an agreement has been signed by the Government of India. This work is expected to be completed by 1957–58.

5. *Madras-Mettur Interconnection Scheme.*—The scheme provides for the interconnection of the Mettur Hydro Station with the Madras Thermal Station by a 110 KV transmission line tie, for interchange of power between the two stations. The scheme comprises a 110 KV single-circuit line of 124 miles from Singarappet to Villivakkam and a 33 KV double-circuit line from Villivakkam to Basin Bridge, with a 110/33 KV sub-station and two 5,000 KVA synchronous condensers at Villivakkam and additional equipment at Mettur, Erode, Singarappet, etc.

The main 110 KV transmission line was completed in 1950 itself and was operating at 66 KV instead, permitting limited interchange of power between the Madras Thermal Station and the Mettur Hydro system.

After completing the arrangements required at various sub-stations for changing over the operation of the line to 110 KV, the circuits were changed over to 110 KV operation. The Mettur-Erode double-circuit lines were also changed over to 110 KV operation.

The erection of one 7,500 KVA and 5,000 KVA transformers at Villivakkam and two 5,000 KVA synchronous condensers, were completed during 1953–54; as also the staff quarters, water-supply, etc., in the sub-stations.

The scheme is expected to be completed in all respects by the end of 1954.

6. *Transmission Lines and Distribution.*—Apart from the trunk transmission lines included in the hydro electric or thermal projects to transmit power to the main receiving stations, a number of secondary E.H.T. and H.T. transmission lines are required for the transfer of power to the load centres scattered all over the State. In addition, distribution lines have to be built, mostly to expand the rural electrification of this State.

The following major transmission lines were completed during the year 1953–54 :—

1. Erode-Tiruchirappalli 110 KV line.
2. Negamam-Pollachi 66 KV line.
3. Kancheepuram-Chingleput-Arkonam 33 KV extensions.

Acquisition of Electrical Undertakings

The total number of undertakings involved in the Residuary Madras State is 27 private undertakings and 27 local authorities undertakings.

Up to the end of 1951–52, three company undertakings and 20 local authorities undertakings were acquired by Government under the Madras Electricity Supply Undertakings (Acquisition) Act.

No undertakings were acquired during 1952–53 and 1953–54, due to the financial stringency and also in view of the cases filed by certain licensees in the Madras High Court questioning the validity of the Acquisition Act and the Madras High Court's decision in favour of the licensees.

The subsequent decision of the Supreme Court in favour of the licensees when the Madras Government appealed to the Supreme Court, has necessitated the revalidation of the Acquisition Act, which has been done recently.

The future programme for acquisition depends on various factors, like the condition of working of the undertaking concerned, finance available with the State Government, etc.

Community Development Programmes

N. E. S. RAGHAVACHARI, I.C.S.,
Director of Community Development

OUR country is a land of villages—there are 550,000 of them in which about 85 per cent of the population live. Any programme for the development of the country as a whole should therefore necessarily aim at the development of these villages and the improvement of the conditions of the people living therein. This is the objective of the Community Development programmes. These are essentially programmes of the people, by the people, for the people. The role of the Government is essentially to assist the people in carrying out these programmes.

The first step in the fulfilment of the objective is the extermination of the greatest evil in rural life—poverty, which is mainly due to under-production in agriculture and unemployment or under-employment. Secondly, disease and ignorance should be eradicated by providing health, education and social welfare services. The various aspects of the rural life are inter-related and one or a few of them cannot be pushed up while others remain behind and untouched. The Community Development programmes, therefore, aim at a co-ordinated approach to rural life as a whole.

Thus there are two vitally important but distinct features of the Community Development programme, viz., its multipurpose character and the initiative and active participation of the people in the formation and the execution of the programme.

Community Projects and NES

The term "Community Development Programme" includes the National Extension Service as well as the Community Projects programme. The aim of the National Extension Service is the same as that of the Community Project. A higher standard of development has been planned for the Community Project areas and therefore a higher scale of expenditure has been allocated to these areas. National Extension Service areas will gradually be taken up for more intensive development as Community Development areas.

The intensive development activities in both the Community Projects and National Extension Service Blocks will last for a period of three years. It is intended that after the completion of this programme, each Development Block of either type will continue to retain on a permanent basis the personnel of the National Extension Service Development Block. This permanent organisation will be necessary, as improvement of rural life is a continuous process.

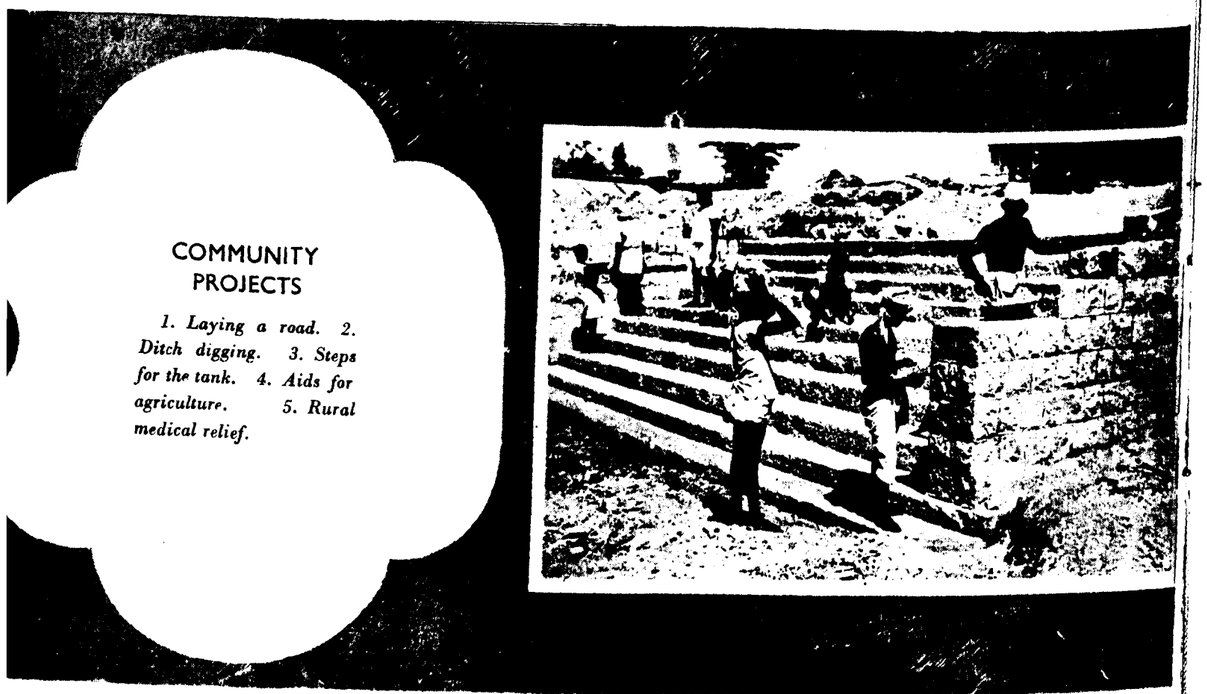
Target Achieved

In Madras State there are at present four major Community Projects, four Community Development Blocks and 48 National Extension Service Blocks. In terms of population 25 lakhs are covered by the Community Projects and over 51 lakhs by the National Extension Service, i.e., a population of 76 lakhs in all out of the total rural population of 290 lakhs in the State.

The First Five-Year Plan envisaged the covering of one-fourth of the population by the end of the First Five-Year Plan, i.e., by 31st March 1956. This target has already been achieved in this State. Additional areas will be taken up every year so as to cover the entire population by the end of the Second Five-Year Plan, i.e., by 31st March 1962.

Increasing Production

I have stated earlier that the first step to be taken is the extermination of poverty by increased production. How is this to be achieved? In the first instance, agricultural production can be



COMMUNITY PROJECTS

1. Laying a road. 2. Ditch digging. 3. Steps for the tank. 4. Aids for agriculture. 5. Rural medical relief.

increased by the adoption of improved agricultural practices. The experiments conducted by the Agricultural Department have shown that production can be increased by improved seeds, by fertilisers (viz., chemical fertilisers, green manure, compost, etc.) and by adopting improved methods of cultivation.

Several ryots who followed the advice of the Agricultural Department have had the benefit of increased production. There is therefore no reason why these methods should not be adopted by everybody. Improvement of agriculture also involves improvement of irrigation facilities and the bringing under cultivation of all cultivable waste land. Livestock on which agriculture depends should be improved. Credit facilities should be given to the cultivator for his expenses. Similarly marketing facilities should be provided and communications between the villages and marketing centres should be improved.

Increased production in agriculture will directly result in fuller employment. In addition, encouragement of cottage industries and crafts as main or subsidiary occupation and improvement in the skill of the existing artisans will help exterminate the evil of unemployment and under-employment.

Organisation

What is the organisation for carrying out these programmes ? At the head of each Project or Block is an officer called the Project Executive Officer or Block Development Officer. He has a number of technical officers of the Agriculture, Veterinary, Co-operative and Engineering Departments to assist him. He acts as the co-ordinator of the activities of the various departments within his area.

Eager students at a night school

The Grama Sevak

These Community Development schemes have given rise to a new official known as the Village Level Worker or Grama Sevak. He is a multi-purpose worker with an elementary knowledge of the working of the various development departments. He is the friend, philosopher and guide of the villager and acts as a link between the villager and the various technical departments. If the villager has any particular problem in regard to agriculture or animal husbandry, the Village Level Worker is expected to solve it to the extent that it is within his capacity.

If it is beyond his capacity he should get in touch immediately with the officer of the technical department concerned and bring him to the village. Special training centres have been organised to train these Village Level Workers. In the Community Project areas there is a Village Level Worker for approximately every five villages, and in the National Extension Service there is one for about ten villages.

The Social Education Organiser

Another key official is the Social Education Organiser. The term 'Social Education' implies a programme of Community Uplift through Community Action. The Social Education Organiser has to arrange programmes of participation by the rural population in the various aspects of the Community Development programme, such as agriculture, cottage industries, sanitation, health and general village improvement.

He arranges educational programmes aimed at removal of illiteracy, promotion of health and education in citizenship and as far as possible to carry out these programmes through demonstration and actual life experiences. He arranges for recreational activities such as folk dances, folk dramas, kathas, bhajans, exhibitions, etc. He also organises youth welfare, women's welfare and child welfare activities. It is proposed to have one man and one woman Social Education Organiser for each block.

Local Works

The villager is not merely satisfied if his agriculture is improved. He is anxious that communications between his village and the rest

NES AND RURAL WELFARE

1. *A renovated tank.*

2. *Night school for adults.*

3. *Cleaning a well.*

4. *Scouts and villagers help to build a road.*

5. *Repairing an irrigation channel.*

of the world, especially the nearest marketing centre, should be improved so that he can obtain a higher price for his produce and purchase his necessities at a lesser price. He is also particular that there should be an adequate drinking water-supply in his village. He wants also a good school in the village.

For these purposes both the Community Project and National Extension Service contemplate a local works programme. Under this programme Government meet half the cost of local works such as roads, bridges, wells, school buildings, etc., the remaining half being found by the villager in the shape of cash or labour or materials.

People's Co-operation

The schemes cannot be a success unless there is good co-operation from the people. To secure this co-operation village committees have been formed in every village covered by these schemes. These committees are expected to draw up the production programme for the village and to decide on the nature of the works to be taken up in the village. They also arrange for the collection of people's contribution.

All that I have mentioned so far is common to both Community Projects and National Extension Service. But under the Community Project programme there is also specific provision for health services, for assistance to local arts and crafts and for improvement of education.

Outside Areas

What about areas outside the National Extension Service and the Community Projects? Are they to be left out completely until their turn comes? There is so much of awakening among the people that these areas cannot be completely ignored. There is therefore a programme for local development works in areas outside the National Extension Service and Community Projects schemes.

Under this programme works for the improvement of water-supply, communications, agriculture, sanitation, etc., can be taken up. As in the case of works in the Community Projects and National Extension Service areas, the beneficiaries are expected to contribute half the cost of the works by cash or labour or materials.

I am often asked why the villagers should contribute towards the cost of local works and why the Government should not meet the entire cost of these works. Community Development programmes are essentially the people's programmes. They are intended to assist the people to help themselves. When people in a village join together and form a road or sink a well, they know that it is their work. They can say proudly: "It is our work: we contributed our labour or materials for this work; we must look after it properly." When a slight repair is needed, they will attend to it because the road or the well belongs to them, even if the Government met a portion of the cost.

Review of Work Done

I shall now give a brief review of the work done so far.

In the field of agriculture large areas have been brought under improved seeds as a result of the activities of the agricultural staff. The use of green manure has increased and people have learnt to make and use compost. The demand for chemical fertilisers has increased considerably. The total amount of fertilisers distributed in these areas amounted to 8·6 lakhs of maunds. The Japanese Method of Cultivation is being adopted by several villagers successfully. About 6,500 acres have been brought under fruit and vegetable cultivation.

Livestock improvement has received special attention. In several areas comprehensive programmes for opening breeding centres and artificial insemination centres, poultry development units and centres for sheep and goat rearing have been sanctioned: 218 pedigree bulls have so far been supplied in these areas.

Basket-weaving in rural areas

With a view to provide credit facilities to the agriculturist, the Government sanction loans to cultivators for the purchase of seeds, fertilisers, bulls, digging of irrigation wells, installation of pumpsets, etc. A sum of Rs. 25,39,000 has so far been disbursed on this account. In addition, co-operative societies are being developed. The ultimate objective is one multipurpose co-operative society for every village.

In the field of rural water-supply, 1,052 wells have been either newly constructed or renovated. It is proposed that every village should be provided with adequate drinking water-supply.

Villagers are encouraged to form katcha roads themselves, and culverts and bridges are provided on these at Government cost. Some of the katcha roads are also taken up for metalling.

In the field of village and cottage industries, spinning centres have been organised. Special schemes for the improvement of the village oil pressing industry and the palm gur industry have been sanctioned. In addition, it is proposed to form cottage industries co-operative societies and to provide easy credit to members of these societies as well as to individual artisans.

A scheme for the grant of loans to villagers for the construction of houses has also been recently approved by the Government. Under this scheme, loans can be granted for thatched houses as well as tiled or terraced houses up to Rs. 750.

Assistance has been given to villagers for putting up new school buildings. Adult schools have been started in several centres. Community recreation centres have been opened at several places.

Progress of Achievements under Various Heads in the State up to 30th September 1954.

Number.	Details of heads.	Community Projects.	C. D. Blocks.	N.E.S. Blocks.	Total.
1	Population	2,175,551	368,356	3,479,993	6,023,900
2	People's contribution (in 000 of Rupees).	986·7	109·5	1,273·8	2,370·0
	Agriculture.				
3	Seeds distributed (maunds)	14,358	3,386	12,516	30,260
4	Fertilisers distributed (maunds) ..	678,731	23,860	160,748	863,339
5	Demonstrations held	2,574	310	1,212	4,096
6	Area brought under fruits and vegetables (in acres).	3,363	144	3,165	6,672
	Animal Husbandry.				
7	Pedigree bulls supplied	27	4	187	218
8	Pedigree birds supplied	101	33	2,163	2,297
	Irrigation.				
9	Area commanded (in acres)	20,345	3	1,205	21,553
	Public Health.				
10	Drinking water wells constructed ..	141	11	238	390
11	Drinking water wells renovated ..	467	10	185	662
	Education.				
12	New schools opened	69	6	253	328
13	Ordinary schools converted	31	..	21	52
	Social Education.				
14	Community Recreation Centres started.	125	10	301	436
	Communications.				
15	Pucca roads constructed (miles) ..	11	3	142	156
16	Katcha roads constructed (miles) ..	522	56	239	817

The Pageant of Tamil Literature

T. P. MEENAKSHISUNDARAM

HISTORY is better understood when one proceeds backwards from modern times tracing its various strands to their beginnings. This method becomes significant and interesting when applied to the history of Tamil literature.

Looking around the Tamil world today, one finds the Tamil journals appear as the greatest force; for many perhaps they form the only literature. Some of them go back to the 19th Century and a few have a circulation of 70 to 100 thousand copies. Political and international interests have been kindled in the mind of the ordinary man in the street; having kindled that thirst for knowledge they come to quench and satisfy. These contain short stories, serial stories, popular essays on literature and science, history and politics. These journals are but a miniature of the literary world of Tamil land. There has been also a mushroom growth of children's journals, but a few of sterling merit have come to stay.

Among the Great . . .

Books are being published in Tamil at the rate of a thousand for year. Though everywhere it is the picture on the jacket cover that attracts our eyes, many a time hurting them, all is not chaff. There is steadily growing a market for writing of permanent interest and deeper significance. Language is becoming easier but more dignified, more pleasing but more powerful, ceasing to be vulgar and flippant, colloquial and commonplace. The platform like the Press along with the radio is shaping modern Tamil, revealing thereby its hidden powers.

Vein of Patriotism

Ours is the age of Mahatma Gandhi and the Era of Indian Independence, taking therefore pride in its rich heritage. It was the good fortune of Tamil that a scholar like Tiru Vi. Ka. full of the milk of human kindness, a disciple of the Mahatma, steeped in ancient lore and modern wisdom, presided over the destinies of the Press and the platform, at an important period of their existence and popularity, bridging the gulf between the past and the present.

Modern Tamil is still in the making; but a language which has produced Tiru. Vi. Ka.'s *Vazhkkai kurippu*, a new species of literature in Tamil; a language which has through Bharathi introduced in this century, a new vein of patriotism, so new to the East, a language which has modernised, again through Subramania Bharathi,

COTTAGE AND VILLAGE INDUSTRIES

1. Making junnadi cloth. 2. Pottery. 3. Ornaments from conches and shells 4. Fabricating hurricane lamps. 5. Creating the Tanjore plate. 6. Handloom weaving. 7. Coir products. 8. Pattamadai mats. 9. Brass vessels.

the mystic poetry, singing now as of old in the language of symbolism, but in a way so crystal clear even to the common man, a language which has through Kavimani Tamilised foreign poets and enriched the literature of the children, has already gathered sufficient speed and power, to be assured of its victorious march in the future.

In the Age of Science

Modern age is the age of science; and popular science even in the West was born only in the 19th Century with Huxley and Tyndal. The 20th Century has seen popular Tamil expositions of the Theory of Relativity, the Quantum Theory, the wonders of electricity, radio and atom. This movement of popular exposition in Tamil goes back to the 19th Century in journals like *Janavinothini* and *Maharani*, not to speak of the serious attempts of the Vattukottai Seminary in Jaffna at translating scientific works like Grays' *Anatomy*. Nor can we forget the text-books of the children in all the subjects.

The novel became the greatest literary form of modern times in the West only in the 19th Century and the contact with the West through its best exponent, the English language, gave birth here in Tamil in the very same century to novels like *Prathapa Mudaliar Sarithiram* and *Kamalambal*. Dramas, apart from the therukkuthus which are indigenous, started as translations of Shakesperean plays, developed into original Tamil plays after passing through a stage of adaptation. *Manonmaniam* by Prof. Sundaram Pillai though a drama to be read rather than to be acted, soon became a classic, continuing to retain this prominence even now.

Ours is the age of Prose and Tamil Prose had been, all through the 19th Century, experimenting in various forms and styles in the hands of Thandavaraya Mudaliar, Vedanayakam Pillai, Veerasami Chettiar and Tiruchitrambalam Pillai. Arumuga Navalar was in a sense the father of modern prose, though in his hands, in spite of its simplicity, it did not reveal its power or its depth. If in the 20th Century Tamil Prose has to be simple because of the shallow attainments of the ordinary adult reader, in the 19th Century it had to be simple because of the prose works being prescribed as text-books for children.

Experiments in Poetry

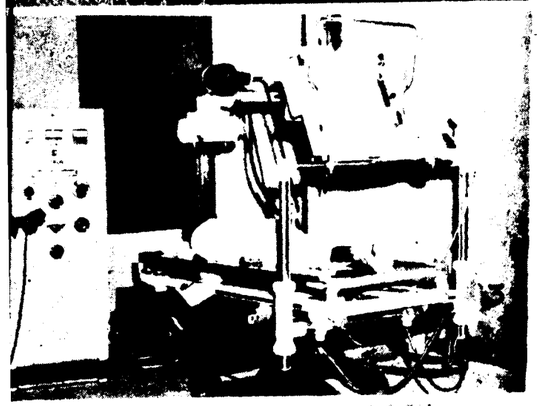
Classical poetry continued to be for the learned, but the common man had his own feast of poems in the therukkuthus and occasional poems of the incidents of the day, poems which then served the purpose of newspapers. These were experimenting in the speech rhythms of the common man, creating a verse form of life and light for the Tamil poetry of the modern democracy. Music guided the rhythm rather than the mechanical rules of versification.

In these experiments, always bold and free, fruitful and significant, even foreign rhythms for instance of Telugu and Marathi Devipada, Seesapatya Taru and Tohra were attempted. This age could be proud of Ramalinga's *Kirthanais*, Annamalai Reddiar's *Kavadi chinthus* and Gopalakrishna Bharathiar's *Nanthan kirthanai*.

Religion and Universalism

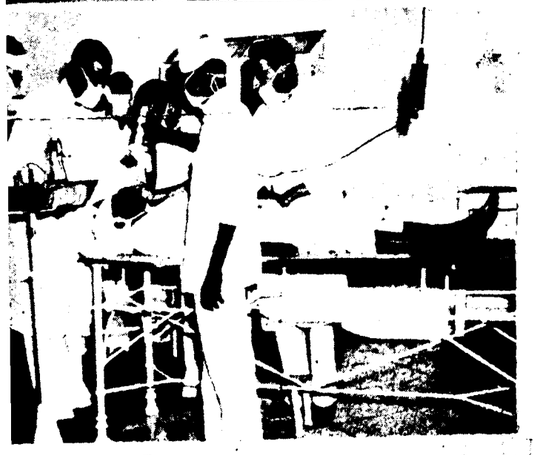
Dr. Caldwell's *Comparative Grammar* was a landmark in the study of Tamil language. Tamil had the whole world opened before it, thanks to the translation of Dr. Pope and others. Even as political controversy gives life to modern Tamil Prose, religious controversy gave life to the prose writings of the last. It was therefore a blessing in disguise that 67 per cent of the Tamil publications of the 19th Century, according to Murdoch, was religious. The poetry of universalism had its prophet in Ramalinga though his verses can be fully understood only in the future. In all these ways the 19th Century had been the dawn of Modern Tamil.

The 18th Century was a period of Kirthanais or music compositions. Arunachala Kavirayar uses this lyric form for his musical and dramatic epic *Rama Nadakam*, which has become a classic in its own way, standing as a guide to many others who followed it in the 19th Century. This was the century of the folk dramas, Pallu Kuravanchi and Nondi natakam. Prose, which appealed to the common man who was the special concern of proselytising missionaries thrived in their hands. Beschi's (Viramamunivar) *Paramartha Gurukathai*, though its allegorical significance had been forgotten, remains even today as the great exposition of the varied possibilities of humour in Tamil, a humour which thrives so very well in the 20th Century.



HEALTH OF OUR PEOPLE

1. *B.C.G. Vaccination.*
2. *Rural Medical Relief organised by medical students.*
3. *X-ray plant.*
4. *Eye operation in progress.*
5. *Sulphone Therapy for leprosy patients.*
6. *At the Blood Bank.*



His work on Kodum Tamil or dialectic Tamil, is preoccupied with the Tamil speech which was trying to snatch the place of classical poems. Anantharangam Pillai, the dubash of Dupleix, has given us an original form of Tamil literature—his *Diaries*.

Classical Tamil

Classical Tamil received a new impetus at the very hands of Beschi. The great Christian epic in Tamil *Thembavani* was his gift. It was also the age of Sivagnana Swami, the poet of classical Tamil, the great grammarian with an original outlook and independent thought, the great philosopher giving us the best philosophical treatises in Tamil, the one on Sivagnana Botham, and the great controversialist, literary and philosophical, making prose itself interesting because of his scathing criticisms.

His disciples carried on the tradition down to the 19th Century. The poetry of universalism and harmony had its apostles, Santhalingar, Kannudaiya Vallal and Chidambara Swamigal.

Modern Prose

The 17th Century saw the beginnings of modern prose which becomes by its various quantitative bulk, a great force to be reckoned with, because of the help it received from the printing press, which in its turn though as old as the 16th Century in Tamil, became a power to be counted only in this century, in the hands of the Christian Missionaries. The history of modern Tamil Prose is in a sense the history of the various translations of the Bible issued from time to time all through these four centuries.

Robert De Nobili may be considered as the father of the Christian Prose in Tamil. Medieval scholastic philosophy assumed a Tamil garb in his work. It was also the period of grammarians and classic writers like Sankaranamachivayar in whose hands the plastic Tamil became an eloquent medium, even for grammatical discussions. The preoccupation of this age with grammar brought to light the mysteries of sentence construction and encouraged the development of prose.

Philosophy

Philosophy and religion had to be popularised through easy hand-books like *Pooppulai Attavanai*. Classical poetry had to seek a suitable subject matter of popular appeal and it reached its height in the age in *Pillai Tamil*, singing the beauty of divine childhood. Allegory and punning enlivened poetry; Kumarakurubarar is great this way. Sivaprakasar is great because of his *Prabhulinga Leelai* of an allegorical significance, though interesting in other ways, full of dramatic irony and humour which, however, do not affect its philosophical seriousness.

The Muslim epic *Seerappuranam* belonged to this age, thus making Tamil receiving its tributaries from the various heights of varying religious and conflicting philosophies. Thayumanavar, the greatest exponent of the universalism of the Middle Ages belonged to this century. Philosophical commentaries like those of Velliyambalithambiran were really encyclopaedic, great for their mastery of Tamil and Sanskrit.

Towards Inward Peace

The 16th Century is the age of Krishnadevaraya who had composed an epic on the life of Andal, thereby showing his admiration of the Tamil saint and poetess and coming also to patronise them. Tamil land which had lost its political independence and outward glory had only to seek inward peace. Mutts came to be established where their heads and their disciples continued the tradition of Tamil poetry with greater and greater emphasis on philosophy. These ascetics taking the place of the ancient Tamil kings worked for the people and the language of their poems followed the prose rhythm of the common man.

This was also the glorious period of Tenkasi Pandiya Athiveeraramapandiya. Sanskrit puranas came to be translated along with *Bhagavatham* and *Naishatham*. The Saivite and Vaishanavite Saints had given earlier their own version of these puranic stories with their own interpretations and it was their inspiration which in this age of Sanskrit revival, inspired these translations.

This was also the age of sthalapuranas instilling hope and self-confidence in the hearts of the crestfallen people, of the locality, who as a result became proud of their villages as something sacred and divine. *Harischandrapurana*, so great for its pathos even in modern times, was composed in this century.

The Cynical Mood

After the devastation caused by Malik Kaffur, Vijayanagar, in the 14th and 15th Centuries, assumed supremacy over the Tamil country. There were also the chieftains sometimes independent or sometimes dependent on this empire. The down-trodden people had to be cheered up through impromptu verses like those of *Kalamegam* full of wit and humour, a kind of satire on the pretensions of the age, perhaps all in the cynical mood befitting that age. The words however revealed their plasticity and power, beauty and music.

Villiputturar belonged to this age and offered to Tamil his quintessence of *Bharatam* in his famous *Chanta Viruthams*; Arunagirinathar whose *Thirupugazh* cannot be forgotten is the contemporary of Devaraya. Poetry was then under the influence of music, its ever varying longer rhythms following the elaborations of tala to form a unique contribution which paved the way for the kirthanais of the later age, though it was but a development of *Thevaram* rhythm.

The Great Commentators

The 13th and 14th Centuries were the centuries of the great commentators writing in prose and reviving the ancient Sangam tradition. It was the period of Saiva Siddantha philosophy and Srivaishnavism taking the form and shape in Tamil in the mould of *Thevaram* and *Nalayaraprabantham*.

The hidden beauties of Sangam poems and *Nalayaraprabantham* as well as the philosophical significance of *Thevaram* and *Thiruvachakam* came to be revealed in this age. As early as the 13th Century a musical composition came to be known as *Cintu*. Perhaps with the fall of the Cholas began the new era of democratic Tamil poetry.

The 12th Century was the century of Ottakkuttar, the emperor of hyperbole: perhaps this hyperbole was an attempt at giving expression to the grandeur of the emperors and their temples, who found at last his proper theme, in the destruction dance of Veerabadra, where all exaggerations became poetic truths of that great story. The court poems on kings and chieftains created a revolution of feeling and Chekkizhar renouncing his ministership under the Cholas, produced his great national epic of the Tamilians, portraying, the life of service to God and man, a poem of spiritual democracy.

Chola War Poems

The 11th Century was the age of Chola expansion, where the incessant wars produced a series of war poems known as Paranis glorifying the slaughter of the enemies. The 11th and the 12th Centuries saw the growth of the grammatical works and commentaries like Yapperungalam and Neminatham, Veeracholiam, Tamil Darali and Nannool. The seeds for this growth were probably laid earlier by Avinayar, Maheswara Aiyanar and Iraiyanar.

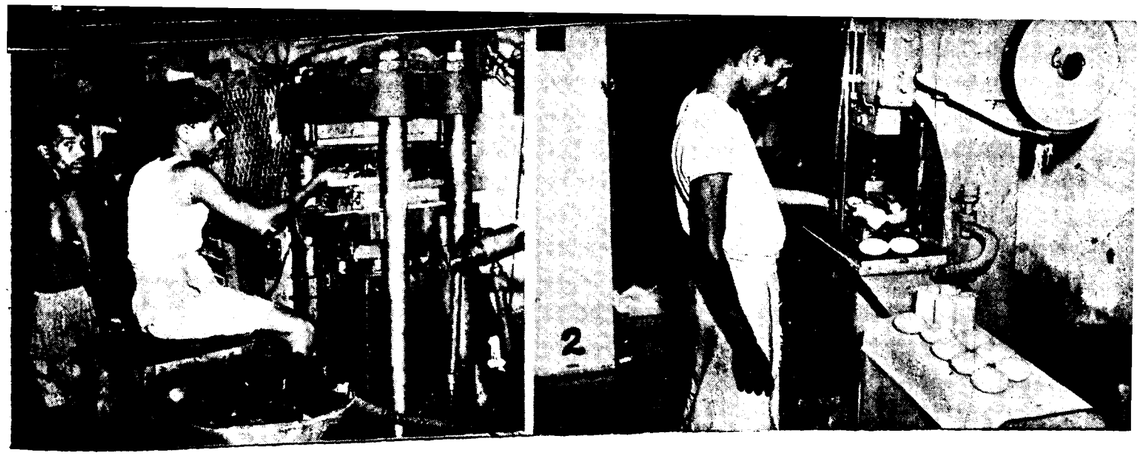
The 9th and 10th Centuries saw the growth of the Chola Empire. The vision of the ideal king inspired the poets who gave us the *Jeevaka Chintamani* and *Choodamani* and the *Kambaramayana*. This was the period when the verses of *Nalayaraprabantham* and *Thevaram* were collected, to be sung systematically in the temples which were growing up all over the country.

Nayanmars and Alwars

The 7th and 8th Centuries were the periods of Saiva Nayanmars and Vaishnava Alwars of the glorious age of the Pallavas. Their songs were musical compositions, Tamilising and popularising the Indian heritage. They stand unique in the hymnal literature of the world with their popular appeal emphasising love and service to man in their light of the blessful divine vision of truth. *Brihadgatha* of Guradge was probably adopted into Tamil poetry in this age.

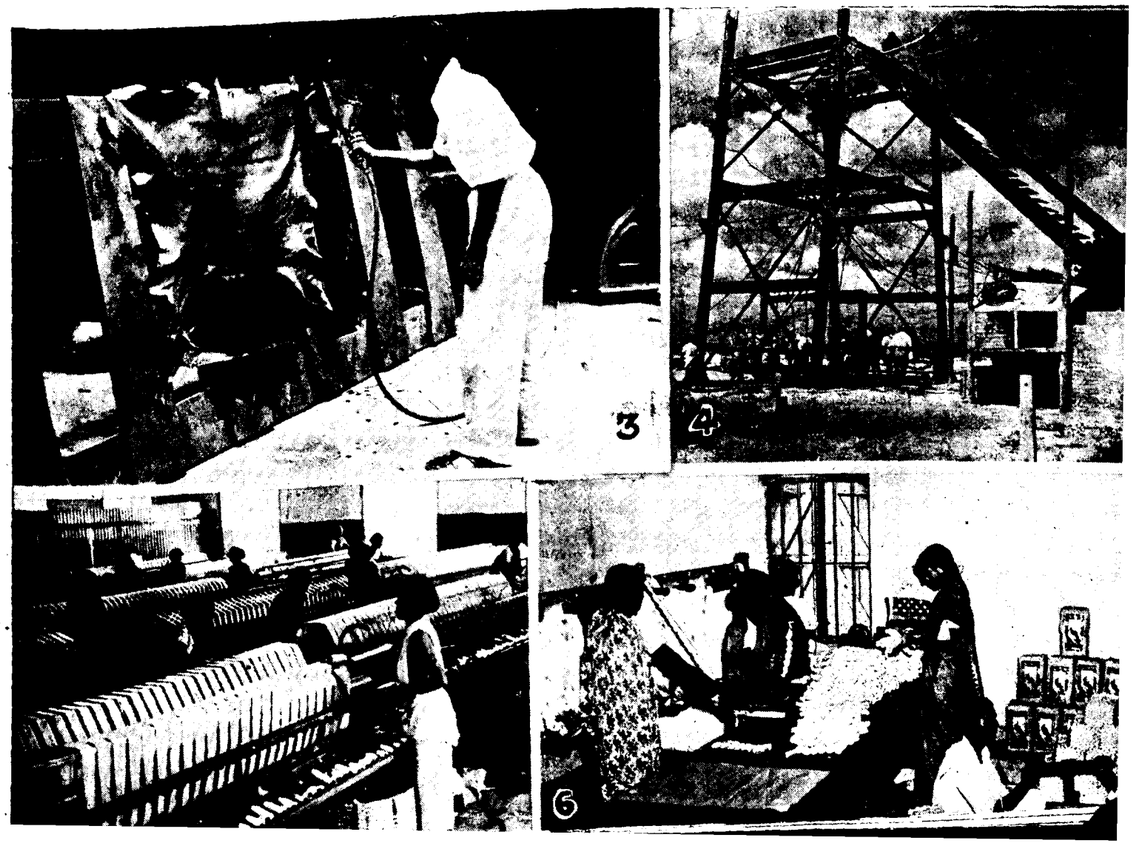
The 5th and 6th Centuries, perhaps the 4th Century also, formed the age of Kalabra Interregnum when Buddist scholars went from Tamil land to Nalanda, Ceylon and China to preach and popularise the religion which had become well established in the age of Manimekalai just preceding.

It was the age of Tirumular, the mystic and the yogi, of the age of Karaikalammaiyar and probably of the first Alwars, according to a few authorities. It was also the age of the majority of the ethical collections like *Naladiyar*, *Thirukkural*, the universal Bible of Man, great for the fundamental grasp of the essentials of life and for its wonderful universalism, perhaps belonged to an earlier period.



INDUSTRIAL DEVELOPMENT

1. *Making soap boxes in a plastics factory.*
2. *Kerala Soap Institute, Kozhikode.*
3. *Leather tanning.*
4. *Lignite Pilot Project at Neiveli.*
5. *Cotton textile mill.*
6. *Government Silk Filature.*

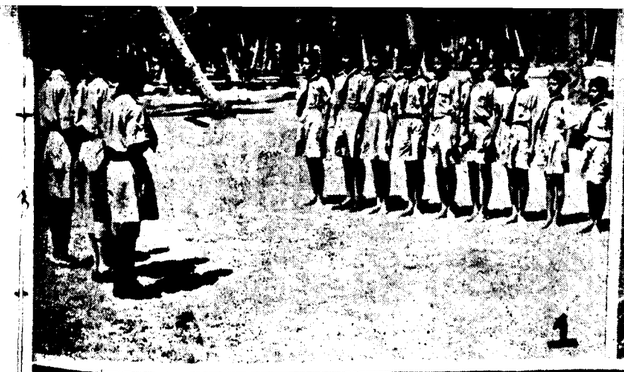


The 2nd and the 3rd Centuries were probably the period of the civilization depicted in *Silappathikaram* and *Manimekalai*, known as the twin epics. *Silappathikaram* was the first epic in Tamil, and it is great as giving us only the story of Kovalan, a common man. It was a national epic in the sense of portraying the whole of Tamil land as a cultural unit.

The later epics coming after this had necessarily to become the epics of the chaste women. It is full of verses, patterned on the folk songs of the day, where music ruled the rhythm. *Manimekalai* was the story of a girl born in a family of dancing girls becoming a Teacher of the World. Philosophy was here ruling the destinies of poetry.

The first two centuries of the Christian era and the two centuries preceding it formed the period of Sangam poems, which give us a picture of love and heroism, ideals and visions which still rule us through their poetry of Noumenon (அகம்) and the poetry of the Phenomenon (புறம்). Every village is our birthplace and everyone is our kith and kin—so sang these universal poets. Patterns of folk songs are found echoing in these poems, especially in *Ainkurunuru*.

Tolkappiyam belonged to a much anterior period, laying down rules for Tamil prose and poetry which are to a certain extent valid even today, for stories and poems in colloquial and classical styles. Though there is no book in Tamil anterior to *Tolkappiyam*, this book itself gives a picture of the traditions of a past age. In this way Tamil has been thus shaped through the past two thousand years and more, to its present democratic form and cosmopolitan import.



YOUTH TO THE FORE

1. *Boy Scouts line up.*
2. *Girl Guides (Bulbuls) take the Salute.*
3. *Rifle training for the N.C.C.*
4. *School boys lay a road.*
5. *Scouts do a good turn—road making.*

Progress of Education

N. D. SUNDARAVADIVELU
Director of Public Instruction

THERE has been a great social awakening in the country in recent years and, with the advent of Independence in particular, we have witnessed an ever growing thirst for and interest in Education at all levels. It has, therefore, been the endeavour of the Government and the Education Department to devise a system of education taking note of the requirements and the genius of the people; and the post-Independence period may be truly said to be an era of expansion and reorganisation.

I shall confine myself in this article to outline briefly the progress of Education in the last few years taking the birth of the Republic on the 26th January 1950 as a landmark to make comparisons. I should also refer to the partition of the State that took place with effect from the 1st October 1953, and state that all data set forth in the article refer solely to the Madras State as it stands today.

Elementary Schools

There were about 20,500 non-Basic elementary schools at the time when the Republic was born and the enrolment of 15·95 lakhs of boys and 8·87 lakhs of girls worked out to a bare 50 per cent of the total school-going population, and universal education was far from being achieved. With the Constitution directing the States to provide, within a period of ten years from the commencement of the Constitution, for free and compulsory education for all children until they complete the age of 14 years, the need to provide education on a larger scale than hitherto has become very urgent.

From the Pre-Basic . . .

Steps were, therefore, taken to open more schools and the drive for enrolment was stepped up, with the result that at the end of the year 1953–54 we have now over 21,400 elementary schools of the non-Basic type with a total enrolment of 18·29 lakhs of boys and 10·81 lakhs of girls. The increase recorded during the period was 2·34 lakhs in the case of boys and 1·94 lakhs in the case of girls, which is no mean achievement.

Article 45

Our attempts have so far been concentrated more on the provision of educational facilities for the age-group 6–12 and for the first five classes than for the age-group 12–14. And taking the former age-group alone we find that 71·3 per cent of boys and 42·8 per cent of the girls are at school. (*Please see chart.*) Government have been giving serious consideration for effectively putting into practice the principle of implementing the scheme of free education for all up to a specified age.

By the introduction of the Modified Scheme of Elementary Education in non-municipal areas during 1953–54, an attempt was made to double the enrolment with almost the same amount of human and material resources. The Scheme, however, had to be given up after a year. I should refer in this connexion to the appointment of a Committee under the Chairmanship of Dr. Rm. Alagappa Chettiar, to examine the present system of elementary education in this State in all its aspects and, among other matters, to suggest ways and means for implementing the Directive Principle contained in Article 45 of the Constitution providing for free and compulsory education for all children till they complete 14 years of age.

Single-Teacher Schools

The Central Government have sanctioned, under the Scheme to provide relief for the educated unemployed, subsidy for the employment of 3,000 teachers in the State. The State Government have decided to utilise this allotment by opening 2,800 single-teacher schools in school-less centres in the State and appointing 200 additional teachers for the higher elementary standards to be opened in the existing elementary schools, and it is expected that all the 2,800 schools would have begun functioning before the end of the year 1954.

The public response to this measure has been so good that in a considerable number of these newly opened single-teacher schools the enrolment will justify ere long the appointment of at least the second teacher. Besides providing employment to a larger number of educated unemployed, the scheme is calculated to reduce the number of school-less centres in the State and thereby help to meet the requirements of the Constitution in the matter of universal free education.

It is the intention of the Government to have an elementary or Basic school in all villages with a population of 500 and above. There were about 3,000 such villages at the end of the last school year, and it is expected that with the opening of all the schools under this scheme, almost all the existing school-less villages would have been provided with schools.

Basic Schooling

Basic Education has been accepted by Government as the pattern to be adopted in the elementary education stage. In pursuance of this policy, the Government have decided to convert the existing elementary and training schools in this State into the Basic type as early as possible. There were about 250 Basic schools in 1950 with an enrolment of about 17,000 boys and 7,500 girls.

During these four years, as many as 655 schools have been opened or converted into the Basic type, raising the total to over 900. The enrolment in these schools has also gone up to 74,500 in the case of boys and 45,300 in the case of girls.

Secondary Education

There has been a wide awakening among the rural population as well, and consequently, the demand for providing higher education for their children has been pressing. This has resulted in a great expansion in the field of Secondary Education in the last few years. As many as 211 secondary schools for boys and 47 schools for girls were opened in these four years, raising the total from 596 to 807 in the case of boys' schools and from 157 to 204 in the case of girls' schools. The strength of the schools at the end of the year 1953–54 was 3·69 lakhs in the case of boys and 1·10 lakhs in the case of girls, the increase recorded in these four years being 69,000 for boys and 30,000 for girls.

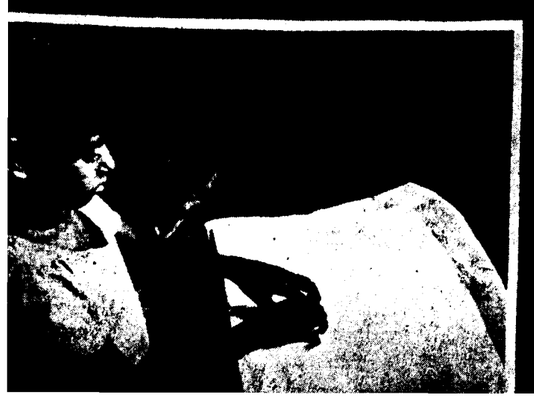
The Secondary Education Scheme was also greatly reorganised during the period. The language scheme was revised with a view to enable the students to study the regional language, the mother-tongue or a classical language and Hindi, besides English. A Scheme of Diversified Course is in force in secondary schools, its main object being to provide a variety of courses, instead of the merely academic one, to suit the varied requirements of children of different aptitudes. Care has also been taken to see that such students are not shut out from pursuing higher studies if they so choose.

The Diversified Course is now functioning in as many as 127 schools, the subjects introduced being Electrical Engineering, Textile Technology,

. . . to the University stage

NEW EDUCATION

1. Washing up at a pre-Basic school. 2. Young artists. 3. Reeling khadi 4. Seeing fingers read Braille. 5. School for grown-ups.



Agriculture, Teaching, Secretarial, Home Science, Drawing, Painting and Music.

Citizenship Training

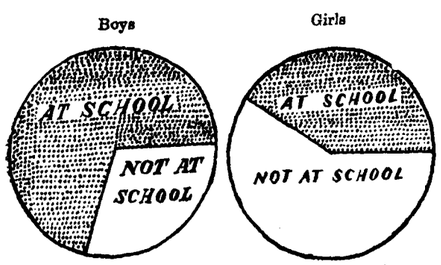
Education, as we all know, is preparation for life. Life in a modern society implies Citizenship. Hence schools have to train our boys and girls to be good citizens. Such a training is attempted by means of 'Citizenship Training' which was introduced a few years back as a new scheme of activities in all the forms. Purpose and unity have been introduced in the subjects of History, Geography and Civics by integrating them into one subject under the head "Social Studies".

The Report of the Secondary Education Commission appointed by the Central Government has been under the consideration of the State Government for some time past. The Secondary Education Scheme followed in this State is already in conformity with several of the recommendations made by the Commission. In order to improve and accelerate the progress of what is already in vogue and to implement the other recommendations, Government have constituted a Committee with Dr. A. Lakshmanaswami Mudaliar, Vice-Chancellor of the Madras University, as Chairman.

University Stage

Let us turn our attention for a minute to College Education. Excluding the departments managed by the Universities, there were 39 colleges for general education for men. There were besides the Annamalai University, six Honours, 25 first grade and eight second grade colleges, making a total of 39. The number of colleges for general education for women was 14, of which one was Honours, eight first grade and five second grade. Of these as many as six colleges for men and four colleges for women were opened in the last four years. The strength in the various University classes at the end of the last school-year was 33,800 men and 5,250 women.

CHILDREN IN THE AGE-GROUP 6–12 UNDER INSTRUCTION IN CLASSES 1–5.



With the rapid expansion in the number of secondary schools and the need to teach through the medium of the regional languages, the necessity for opening more training colleges in the different linguistic areas in the State was keenly felt, and as many as five new training colleges for men, besides the Teaching Faculty of the Annamalai University, were opened in these four years. The total number of training colleges at the end of the last school-year was eight for men (including the Annamalai University) and three for women, the total number of B.T. students on roll being 526 men and 236 women.

Training Teachers

Reviewing the facilities for teacher training, we find that a variety of training schools—the ordinary, the Basic, the nursery, the kindergarten, the Montessori, the pre-Basic and for physical education—provided for the training of teachers of the various types, and their output has been greatly increased in keeping with the ever increasing requirements for trained teachers of the various categories.

Suffice it to say that there are in the State 48 non-Basic training schools for men, 50 non-Basic training schools for women, 28 Basic training schools for men, 14 Basic training schools for women and five institutions for the training of pre-primary children, besides other types of training institutions. The total enrolment in all of them is over 11,500 men and 8,500 women. The percentage of trained teachers to the total number working in elementary schools is as high as 96, of which we may well be proud.

Adult Literacy

The Government have reviewed the policy and procedure in regard to Adult Education during the year, and have resolved to confine adult education efforts to the areas covered by the Community Projects and the National Extension Services. A total number of 650 adult schools will be opened in the areas covered by the Community Projects

ARTS AND CRAFTS

1. Tailoring and embroidery class in a girls' school. 2. Dance. 3. Musical lesson. 4. Modelling a the School of Arts and Crafts. 5. Machine work for boys.

and 1,000 adult schools in the areas covered by the National Extension Services.

As new blocks of National Extension Services are taken up the Scheme will be extended to those areas also, so that it will cover the entire State when National Extension Services become a State-wide scheme. Persons between ages of 8 and 18 alone will be admitted to the adult schools.

The education of the handicapped also received due attention in these last four years. New schools were opened under Government management at Salem and Kasaragod for the blind, and at Chunangad for the deaf mutes. The total number of schools for the handicapped is now 15, of which five schools are for the deaf mutes, five for the blind and one for both the deaf mutes and the blind, and four for the crippled. 862 boys and 412 girls were under instruction in these schools at the end of the last school-year.

Visual Aids

Recognising the large and important part played by visual appeal in the education of children, the scheme of Visual Education, through motion pictures and other projected pictures, is being pursued with vigour. Steps are continued to be taken to equip an increasing number of schools with projectors with a view to enable the teachers to use films, film-strips, etc., effectively for classroom instruction.

A total number of 338 schools have been equipped with 16 mm. projectors, and 283 schools with 35 mm. film strip projectors: 575 schools have been equipped with radio sets. Nearly 30,000 film shows were given in educational institutions during the last school-year with films and film strips hired at nominal rates from the Central Film Library, maintained by the Education Department.

National Cadet Corps

The Scheme of National Cadet Corps is also now working in full swing. Recruitment to the Senior Division has been made from among the male students of the Universities and colleges, and to the Junior Division from among the high school boys. The Senior Division has been ordered to be further expanded during the current year, for which necessary action is now in progress. There were 99 Units of the National Cadet Corps functioning in 58 secondary schools n the State including six Air Wing and six Naval Wing units at the end of the last school-year.

Steps have also been taken to raise 19 additional troops during the current year includng three Air Wing and three Naval Wing units.

For the first time in the history of the National Cadet Corps, ten troops of the Grls' Division (Junior) are being raised in the secondary schools for girls. The Auxiliary Cadet Corps has also been ordered to be raised for the firs time in the State in 100 schools, of which 93 units in 93 secondary schools have already bee raised, aad efforts are being made to raise the remaining units.

Establishing Libraries

The Library Act provides for the etablishment of well-organised libraries throughout the State. Local Library authorities have been constituted under the Act with statutory powers to enable them to establish libraries within their areas and Central Libraries have been estabished in all districts including Madras. The scheme of opening Branch Libraries is in progress in almost all the districts.

Much has been attempted and aclieved, both quantitatively and qualitatively, in the field of education during the four years following the ushering in of the Republic, but much nore remains to be achieved. Let us look forward to the recommendations of the Committees for Secondary and Elementary Education that have been recently set up by the Government, to show the way to take yet another step in the march towardseducational progress.

Where Madras Information *is Printed*

THE tempo of modern life has given the printed word a position of first-rate importance. With the steady growth of education among the masses, the printing press has become a vital factor in administration and publicity. No Government can therefore afford to ignore the need for, or the needs of, a Press. The Madras Government are singularly fortunate, for they have what is perhaps the largest single unit Press East of the Suez. From small beginnings in December 1831 when the Press was started with some second-hand types and a staff of about 10 workmen, it has developed into an institution worthy of a highly enlightened State.

The Mint buildings where the Press is located, accommodates a variety of machinery, some old, others fairly good, and a few most modern. The factory employs over 2,000 workmen and produces printed material of every description, be it in colour or plain letter-press. Most people judge the Government Press by the *Fort St. George Gazette* or by the innumerable forms printed there, but productions like the *Republic Day Souvenir* of 1954, the *Chinese Cultural Delegation Souvenir of* 1952 and the *Museum Centenary Souvenir* generally go unnoticed. A State Press is ordinarily equipped for plain letter-press printing, but the Madras Press can do, and has done, prestige printing of which any commercial printer may be justifiably proud.

Men Behind the Scenes

Few people however visualise the enormous amount of work involved before the finished article is released. Little or no credit is given to the men behind the scenes—the men who are responsible for editing, composing, imposing, reading, printing, binding and distributing. The workmen in the Madras Government Press are specialists in their own sphere and with their innate intelligence and capacity for sustained effort, they are second to none in the field of printing.

From the shaggy and beetle browed-compositor with spectacles of uncertain vintage who day in and day out picks up and sets minute sizes of types in the hand-composing section to the young and dapper foreman meticulously pecking at diminutive bits of metal from his spotless shirt-front, all of them have helped to make the Press the reliable arm of State administration that it is today. Hardly ever in the limelight, they have toiled day and night and responded magnificently to every call. Their versatility and resilience have been truly remarkable.

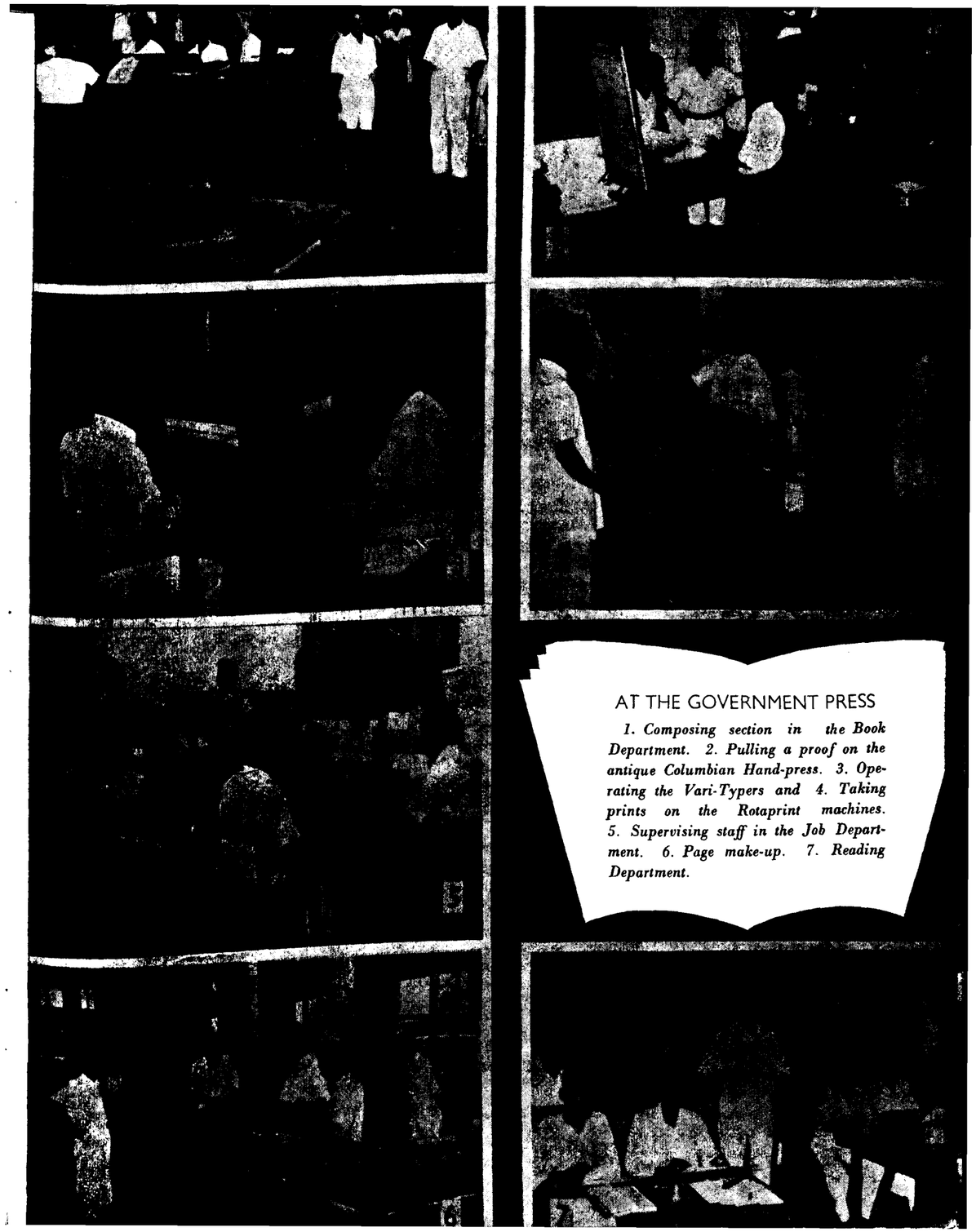
Colossal Jobs Completed

The outbreak of war in 1939 and the introduction of controls laid a very heavy strain on the Press. Literally, millions of ration cards and publicity material had to be produced at extremely short notice, and under great pressure both to men and machines. With little or no prospect of replacements of machinery and spare parts, every available machine had to be tended carefully and coaxed into giving its maximum outturn.

The effects of the war are still with us and machinery that should have been replaced long ago in the normal course of events is still in commission in the Government Press. The General Elections of 1952 based on adult franchise, probably the first of its kind in the world, brought in its wake a still further period of unexpected and impossible strain. All these situations the Press was able to meet with confidence and with complete success, because of the unstinted co-operation of all its workers.

Figures Speak

The wage bill of the Press during the year 1953–54 exceeded 20 lakhs of rupees and in overtime the labourers were paid a sum exceeding Rs. 8 lakhs. The amount of work turned out during that year was also colossal. In the field of printed Government forms the production was



AT THE GOVERNMENT PRESS

1. Composing section in the Book Department. 2. Pulling a proof on the antique Columbian Hand-press. 3. Operating the Vari-Typers and 4. Taking prints on the Rotaprint machines. 5. Supervising staff in the Job Department. 6. Page make-up. 7. Reading Department.

serve to better his prospects, but compelling domestic reasons made him return to the Government Press, instead of seeking employment in private presses and newspapers. By this time, the monthly pay scale had replaced the piece-rate system.

Earnestly he started to make a case for the Lino men: "Of course our salaries have been revised in the recent past, but they still compare unfavourably with the rates that prevail outside. After years of hard and loyal work, a man should have the satisfaction of getting adequate remuneration."

E. K. Subramanian continued: "I was one of those who joined the Government Press in the old days, because there was then a drive for recruiting educated persons. I think it is necessary that more and more educated persons should be invited to take up the printing line, in the Government Press; they should be encouraged with good salaries and attractive conditions of service."

A. L. Swamy of the Public Department is a short stocky man of 35, with a printing tradition in his family. His father retired from the Burmese Government Press at Rangoon as Chief Computor, and Swamy was also trained as Compositor and Computor at the same Press.

In 1949 he returned to India an evacuee, and in 1951 he joined the Government Press as a Compositor.

"I would like to become a Computor," he said, "because I was particularly trained for it."

"Would you prefer a clerical job to creative work?"

"Well, a Computor works less hours, does not have to show a minimum outturn and gets more pay," he countered.

"So you prefer a white collar job?"

"Not exactly. I would rather take up machine-composing and become a Lino or Mono operator. I like to deal with machines."

"What about your leisure hours? How do you spend them?"

"In the evenings we generally put in overtime work, so we are not free till night. But I am a home-lover and I prefer to go home direct and spend some time chatting with my family and read the newspapers before turning in."

V. M. Doraiswami, Machine-minder in the Machine Department, is a soft-spoken mild-mannered person, whose slim build belies his age of 45 and his service of 24 years.

He entered the Press as an apprentice and is now a senior machineman, specialising in colour work. His elder brother is Foreman of the Indian Languages Department, but Doraiswami explains his own comparatively retarded career to lack of adequate schooling.

"When I was young, I was rather irresponsible, and did not take kindly to studies. Naturally I cannot hope to make much of myself," he explained frankly.

Doraiswami is a true printer, a breed that lives on printer's ink. "I think we should get some new machines suitable for special work," he stated. "We have sent some good ones to Andhra and so we should be re-equipping ourselves."

He is fascinated with the job of colour printing and welcomes the idea of the Press undertaking the printing of more multi-coloured jobs. "I also think we badly need a machine for mixing ink; mixing of ink by hand is unsatisfactory, as we may not get quite the required shade, and further it entails great wastage."

Doraiswami is a great reader and he feels that the Press should have a small reading room where the workers could glance at the papers and read some of the popular journals.

Besides, he is an ex-footballer, giving up the game only after receiving a leg injury. "We should have a convenient playground also," he urged, "a place accessible to all of us, where games could be organised. I am sure there will be many here who would like to play a little in the evenings."

Kumari K. Jayalakshmi, Compositor in the Job Department, is a pleasant young woman of 26 with a beaming smile.

She has studied up to III Form, and got her training at the Vavilla Press, a publisher's establishment specialising in book work. She admitted that she had no particular interest in printing as such when she began her apprenticeship, but now the art was beginning to get a grip on her.

"Can women take up all the jobs in the printing trade?"

Jayalakshmi replied: "Here women are doing composing, ruling and binding work. Some were put on the machines, but probably due to a few accidents and so forth, it was decided that other work should be given to them. However, they have not been tried in the heavy jobs of lino, casting, foundry, stereo and so on."

"Do you feel that work here is physically arduous?"

"Well, we do have a little trouble with the heavier galleys, locked-up forms and such furniture. But with a little mutual assistance we are able to manage."

"What are your chances for advancement?"

"If we are given the training we can do display composing and bigger imposing. There is also scope for becoming computors and even assistant foremen. Promotion depends on our ability to handle the higher job."

"Are women anxious to make a career here?"

Of course Most of the women here are dependent on their salaries and they would gladly welcome hopes of confirmation and prospects of permanancy. Security is as essential to us as to the men."

As for amenities, Jayalakshmi wanted a rest-room for ladies. "In the lunch-hour, we have no place to sit down for a chat," she revealed.

Srimathi Roxy Nurse, Lady Binder in the Binding Department, is a slim Anglo-Indian girl of 23 who has already put in five years of service at the Government Press. She is now working in the 'matriarchy' of the Press—the place where women rule. In other words, she attends to one of the machines that puts the faint blue lines on ledgers, drafting pads and so on.

She likes the work—ruling and binding—and she likes the people with whom she works.

"No, I don't feel the work so monotonous or tedious, though we do have to put in long hours. I consider that it is a job that has to be done and so I am anxious to get on with it."

"I look forward to coming to work every day," she continued, "and I take things as they come."

"What are your chances of advancement?"

"Unless one has the necessary training, it is not possible to get any promotion. Personally, I have little time to do any part-time course at the Polytechnic or any other similar institution, but then I am not worrying about that. With me, it is only the job on hand that matters."

over 510 millions. Over three lakhs of printed pages in foolscap size were composed and set in type. Even without taking into consideration various other jobs like binding, ruling and the manufacture of envelopes, these figures will give an indication of the amount of work that is being turned out at the Press. And all this is being done without any appreciable increase either in man-power or machines. In 1931 the employees numbered 1,998—today it is a little over 2,000.

Recent additions to the machinery include a few of the latest linotype machines and ruling and folding machines with automatic feeders and some rotaprint machines which are reputed to be the latest word in modern methods of bulk production. These sturdy little machines have, by their performance during the last 18 months, proved that the Press cannot have too many of them. It is hoped that a few more will be installed soon.

Machines . . . .

Modern printing technique is advancing rapidly and to keep pace with this it would be necessary to obtain the latest machines that are being produced in America and the Continent. We have plants for stereo-typing and electro-typing, but they are of an antiquated type. The use of the plastotype, the latest achievement in the printing world, the complete replacement of obsolete machines by the modern offset system of printing and the introduction of photo mechanical composing machines would be a consummation devoutly to be wished for.

. . . and the Human Factor

No industrial organisation can afford to ignore the human factor, and the labour welfare measures undertaken in the Press are indicative of Government's abiding interest in the welfare of their workmen. The piecework system was replaced several years ago by the salaried system and every permanent employee of the Press is assured of a pension when he retires. An efficient co-operative society helps those in need and a most modern canteen, where wholesome snacks are available at competitive prices, is run by the workers themselves with Government aid.

A Medical Officer attends the factory every day and a Labour Welfare Officer has been appointed. It is to the credit of the workers that in spite of jarring elements—some given to rasping banter, others to infuriating impudences—they have on the whole maintained a dignified atmosphere through the years.

A journalist who recently interviewed a typical cross-section of the workers of the Government Press has recorded the following.

First came S. S. Govindaswami, Imposer in the High Court Department. A dark middle-aged man with thick moustaches, he takes his other duties of Secretaryship of the Government Press Workers' Union seriously. He has nineteen years of continuous service to his credit. He admitted that being a Government servant certainly added to one's stature in private life. There was respect for Government service in non-official circles.

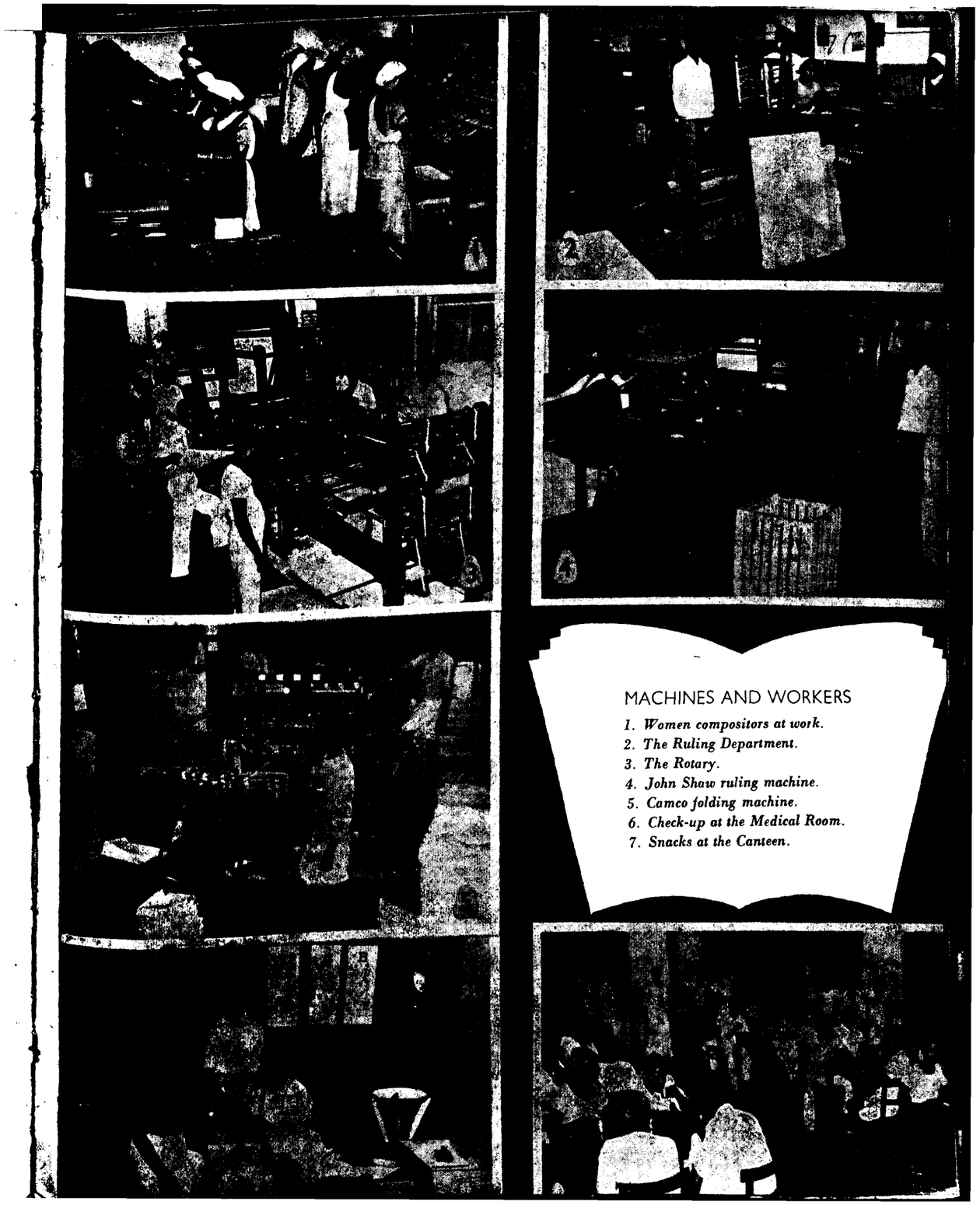
Govindaswami is proud of his Union work, and he pointed out that the Union was responsible for getting certain posts upgraded with increased pay scales.

He observed: "Low income is the greatest handicap of the Press workers; of course we realise that the Government cannot grant all our demands, but we keep submitting reasonable appeals for sympathetic consideration."

The Union official favoured promotions by seniority. "Supervising posts are limited, so not everybody can look forward to promotion." Govindaswami was aware that Labour legislation provides for the introduction of a number of amenities. "Perhaps," he declared, "it may not be possible to comply immediately with all the regulations Labour laws enforce, but I should certainly like to see iced water served during summer and more tiffin sheds erected for the workers".

E. K. Subramanian represented the Lino Department, one of the sections which calls for skilled work from experienced hands. Fair and 49, Subramanian has put in nearly 30 years at the Government Press.

He was trained here as a Lino Operator, but, in 1939, dissatisfied with the piece-rate system of wages—whereby operators were paid on outturn—he went to Calcutta for a six-month training in the Linotype Company in operation and mechanism. Such training, he rightly felt, would



MACHINES AND WORKERS

1. *Women compositors at work.*
2. *The Ruling Department.*
3. *The Rotary.*
4. *John Shaw ruling machine.*
5. *Camco folding machine.*
6. *Check-up at the Medical Room.*
7. *Snacks at the Canteen.*

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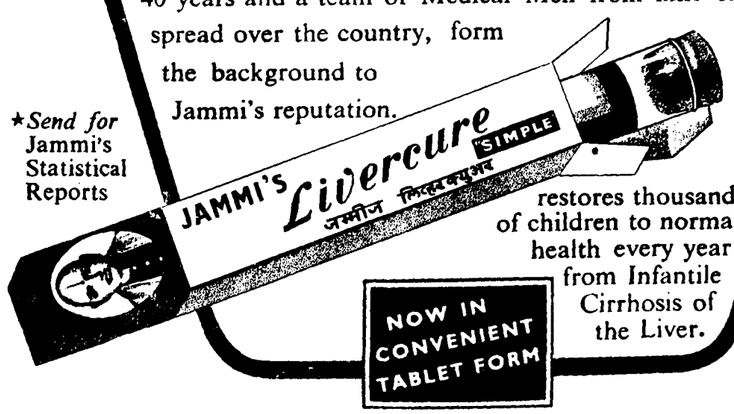

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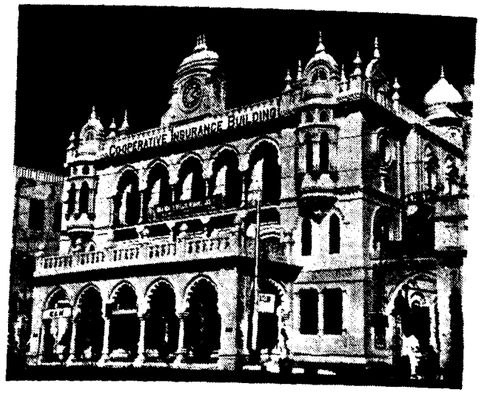

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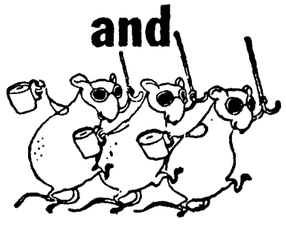

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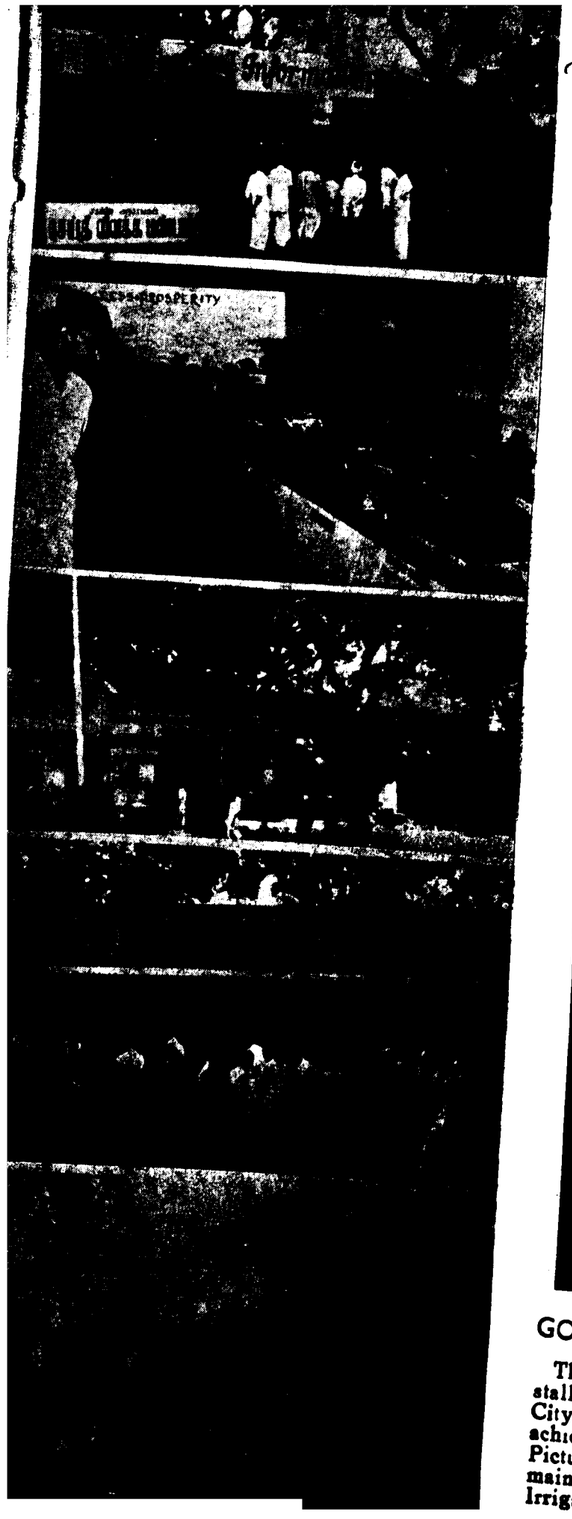

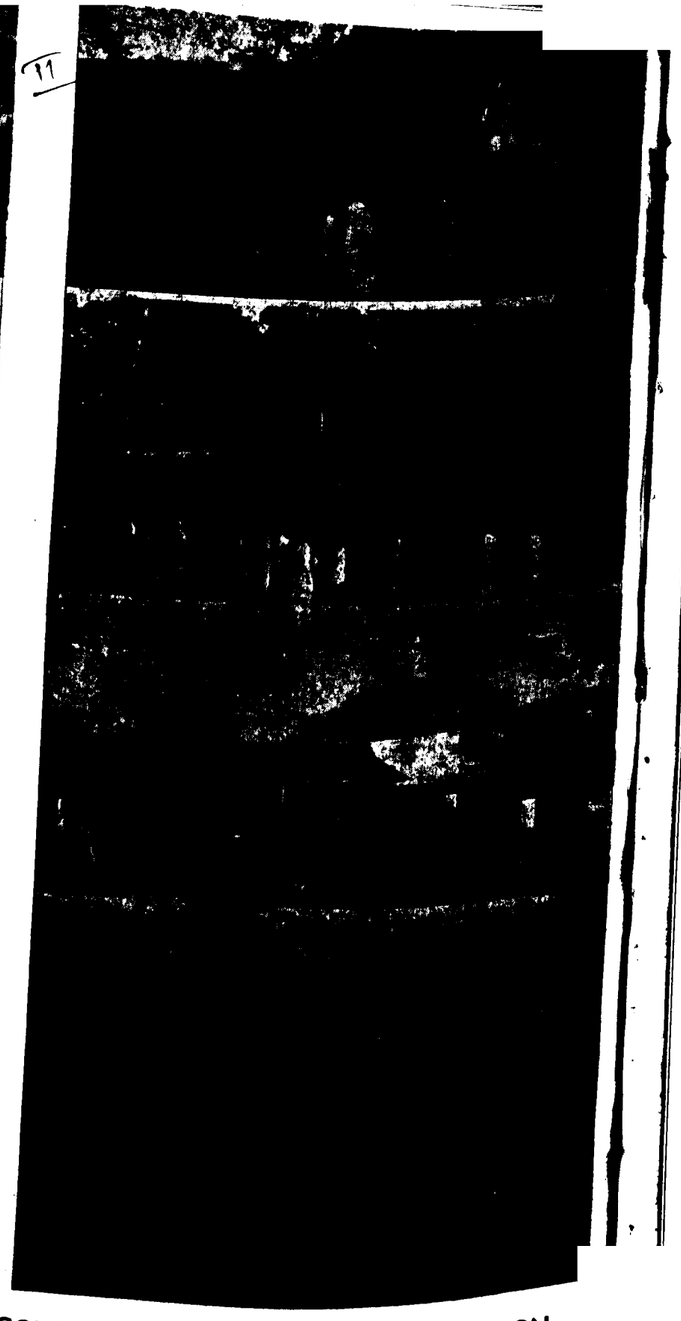

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ANNUAL NUMBER

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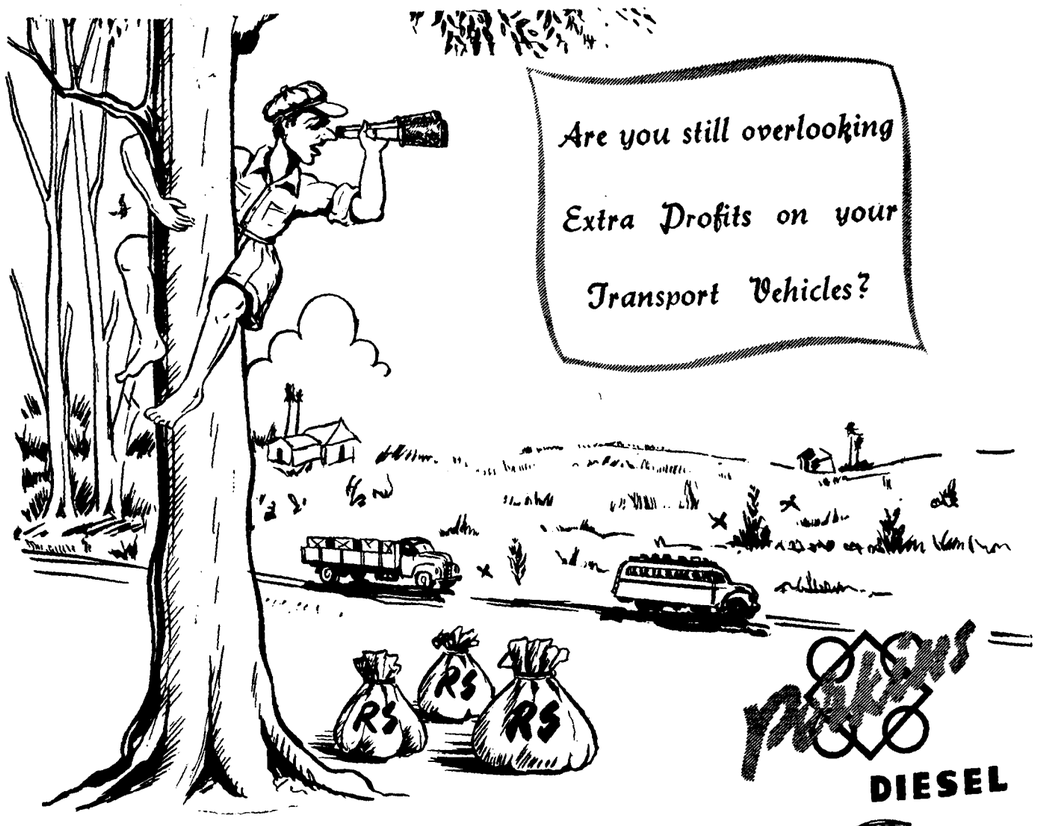

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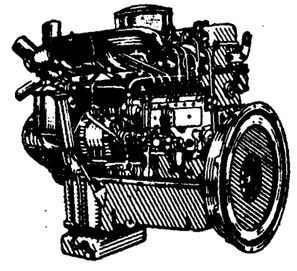

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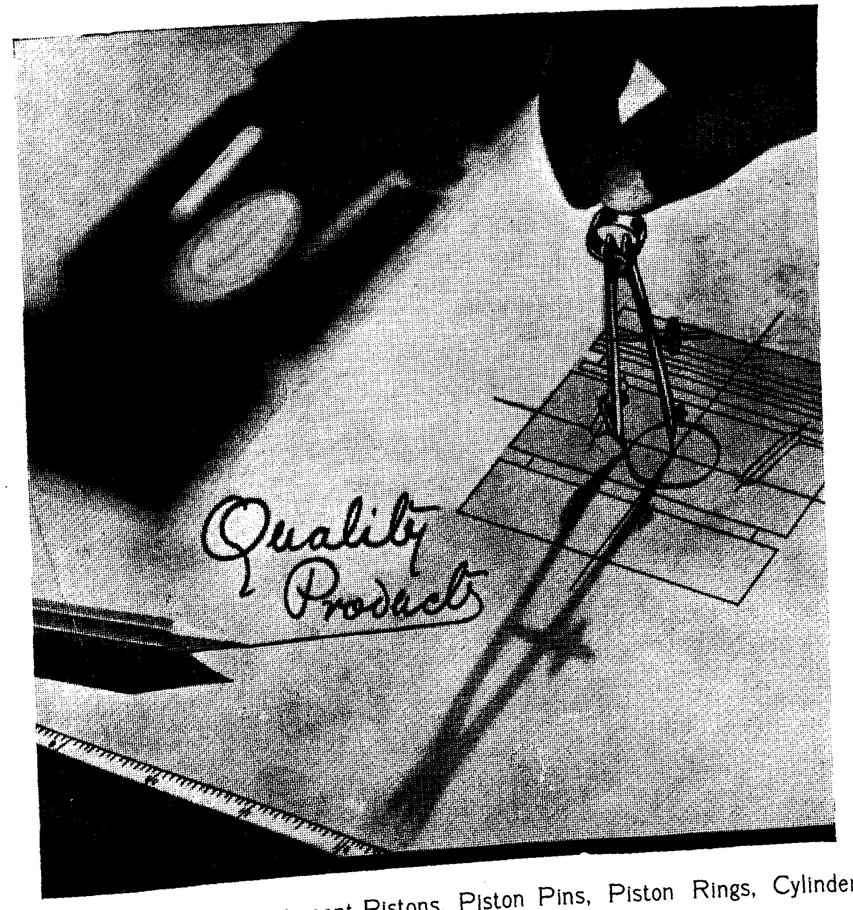

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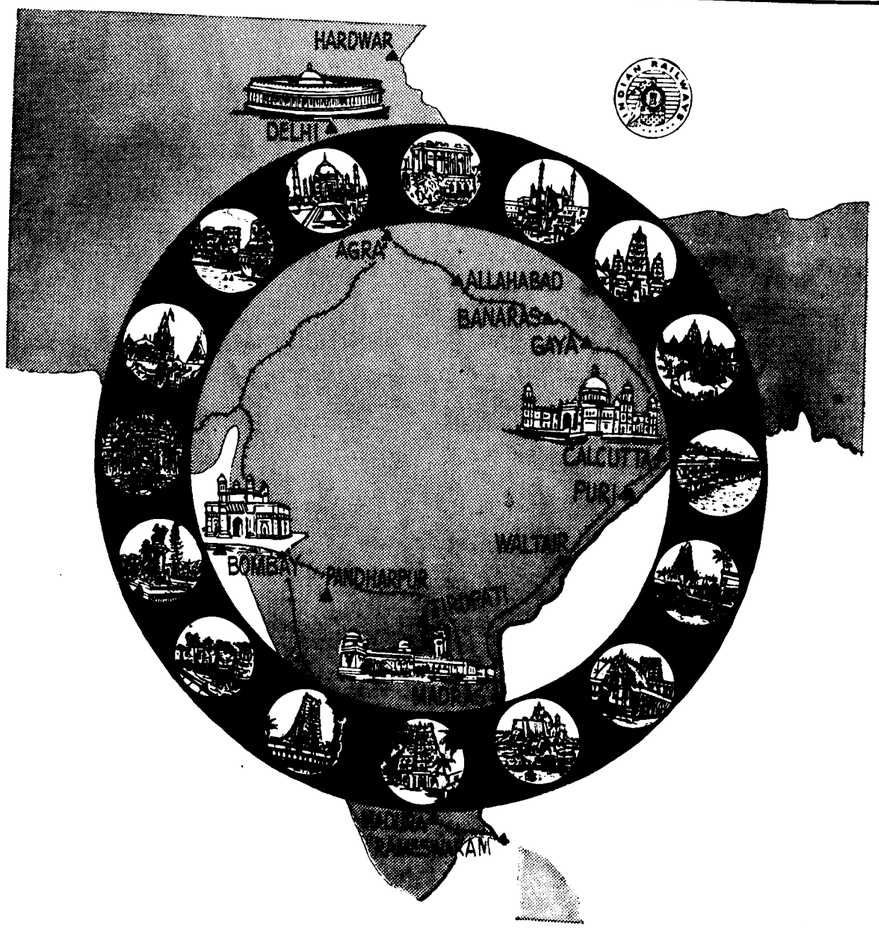

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MADRAS INFORMATION

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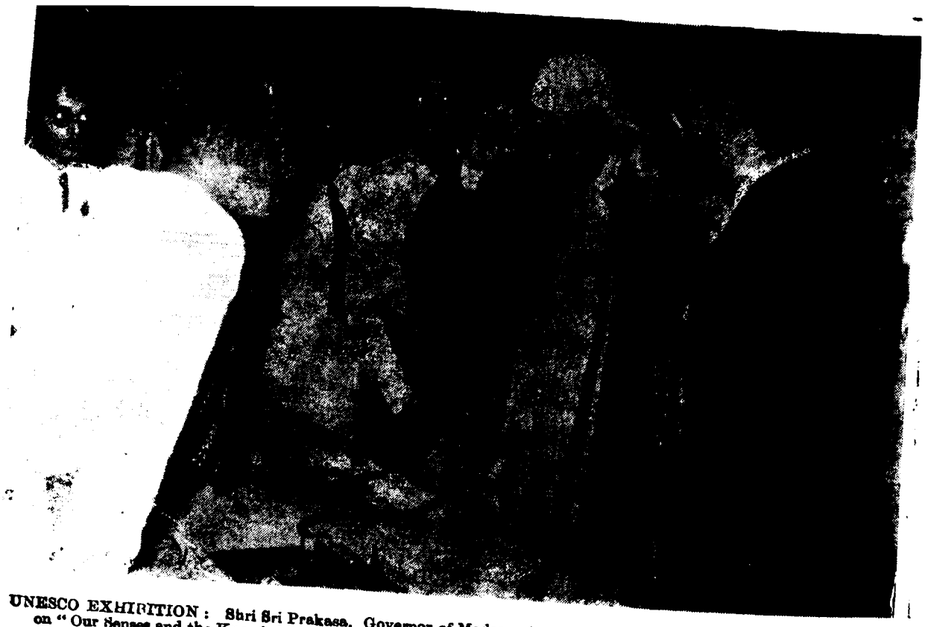
COVER PAGE: The picture on the cover page is that of the arch which stands majestically at the entrance of the Madras Government stalls in the Congress Exhibition at Tayampet (Madras City).



UNESCO EXHIBITION : Shri Sri Prakasa, Governor of Madras, inaugurated the UNESCO Scientific Exhibition on "Our Senses and the Knowledge of the World" at the Examination Hall, Marina (Madras City). The picture shows the Governor examining one of the hearing-aid instruments.

ANNIVERSARY day of the Vigilance Home and Stri Sadana was celebrated recently. Sri K. Kamaraj Nadar, Chief Minister, presided over the function.

The Krishnagiri Project

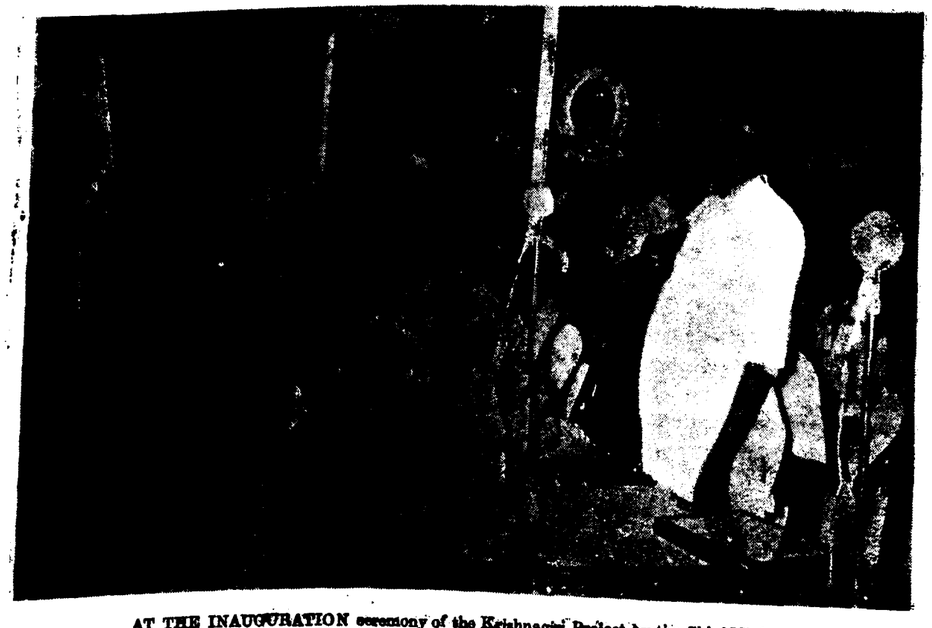
By SRI U. ANANDA RAO, Chief Engineer (General)

Sri K. Kamaraj Nadar, Chief Minister, inaugurated on January 1, 1955, the work in connexion with the Krishnagiri Reservoir Project, estimated to cost about Rs. 184 lakhs, in a village about 6½ miles from Krishnagiri. The project is expected to be completed in 3½ years and will give work for 10,000 people for three years. About 7,500 acres of land would be irrigated under the project.

The district of Salem occupies a prominent place among the dry districts of the Madras State. In point of population, this district stands fourth in this State. Most of the arable lands in Salem District are dry and the crops are mainly rainfed. The tract generally receives poor rainfall in the south-west and north-east monsoon and even these cannot always be depended upon. But a fairly good quantity of water is now running to waste in the Ponniyar without being stored. All these pointed to the need for a storage reservoir on the Ponniyar to benefit a portion of Salem District.

Course of Ponniyar

The river Ponniyar has its source in the south-eastern slopes of the Chenna-kesava hills in Mysore territory near Chickballapur, north-east of Bangalore. After flowing for 53 miles in the Mysore State under the name of Dakshina-Pinakini, the river enters the Madras State territory at a place three miles north-west of Bagalur village of Hosur Taluk, Salem District. From here, the river which runs in a south-eastern direction, takes a sharp turn and flows in southerly direction through Salem District. In this district, a small river, Chinnar, joins the Ponniyar near Bikkinapalli village and the Markandanadhi joins further down.



AT THE INAUGURATION ceremony of the Krishnagiri Project by the Chief Minister

Below this, the Vaniar draining Harur Taluk and the Pambar draining Tiruppattur Taluk of North Arcot District fall into the Ponniyar on the right and left side respectively. The length of the Ponniyar covered in this district is 110 miles. Flowing through deep ravines and narrow gorges, the river enters the North Arcot District. In this district, the Ponniyar traverses 21 miles through thick jungles of the Ponniyar Reserve Forest and flowing through South Arcot District for 76 miles, it finally enters the sea north of Cuddalore Town.

The total length of the Ponniyar from its origin to its infall into the sea is 260 miles and the total area drained by the river is about 5,000 square miles. In its course through this State, the river has the Aliyalam and Nedungal anicuts in Salem District and the Tirukkoyilur and Ellis Choultry anicuts in the South Arcot District, which irrigate extents of 4,718 and 35,012 acres in the two districts respectively. There are also several open channels, irrigating a total extent of 28,856 acres. The total existing irrigation under the river is 68,586 acres.

"The Thomas Project"

The idea of forming a reservoir on the Ponniyar to benefit areas in Krishnagiri Taluk is as old as 1875 when the suggestion was made by one Mr. Thomas, the then Collector of Salem District. The proposal was for a reservoir to benefit 50,000 acres. After investigation, plans and estimates were prepared for a reservoir of 6,000 m.c. ft. capacity to benefit 15,000 acres, the cost being about Rs. 67 lakhs. But in view of the unreliable nature of the data of river discharge and want of finance, the scheme was abandoned. Even now, the project is locally called as "Thomas Project".

In 1947, the project was taken up for active consideration, consequent on the general drive to augment food production in the State. Detailed investigation was taken up in 1948 and completed in 1949. Since it is proposed to impound only the surpluses over Nedungal anicut to the extent available at the dam site, after meeting the needs of the existing irrigation in both the districts of North Arcot and South Arcot, the project will not affect the lower irrigation in any way.

Storage Capacity

The Krishnagiri Reservoir Project, as now proposed, consists of a storage reservoir of 2,410 m.c.ft. capacity across the river about two miles west of mile 163/4 of the Madras-Calicut Trunk Road in the village limits of Periamuthur of Krishnagiri Taluk and about 6½ miles from Krishnagiri, the nearest Railway station being Tiruppattur of North Arcot District, 27 miles away, on Jalarpet-Salem section. Steep rising hills on both sides, though not immediately from the river margin, restrict

KRISHNAGIRI: View of the site of the proposed dam

considerably the length of the dam. The river margin and the country contiguous thereto on the left side of the river is high with a steep rising slope towards the hill, and this reduces considerably the length and height of dam on this side. There is no appreciable area of wet land to be submerged under the proposed reservoir, but submersion of four villages is involved.

However, it is proposed to protect the wet lands just below F.R.L. with foreshore bunds, wherever possible, so that loss due to submersion may be reduced to the minimum. The capacity of the reservoir has been reduced mainly with a view to save a very important village "Gangileri" from submersion and also to reduce the cost of diversion of the Krishnagiri-Royakottai Road. But it will not adversely affect the requirements of supply to the proposed irrigation.

The dam will be 3,623 feet long, 2,316 feet being of earth and 807 feet being masonry. In the masonry portion, there will be a spillway section on the river bed 396 feet long. The storage capacity as now fixed is 2,410 m.c.ft. which will be obtained by installing gates 20 feet high over the crest of the spillway section.

Two canals will take off from the reservoir direct, one from each flank. The left side canal which is nine miles long will irrigate an extent of about 3,440 acres and the right side canal eight miles long an ayacut of 4,060 acres in Krishnagiri Taluk. Of the total ayacut of 7,500 acres, 5,040 acres will be new and 2,460 acres existing wet to which supply will be assured.

The project is expected to add 3,500 tons of rice annually to the food production in Salem District which has to depend mainly on imports from other surplus districts. With reference to the supplies of water available, the project will be successful during 25 years in a period of 30 years.

The total cost of the project is Rs. 1·34 crores including all charges. The project is programmed to be completed in 3½ years.

This project will confer benefits of lasting and permanent nature to the backward taluk of Krishnagiri.

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I Adopted the Japanese Method

By SRI S. MUTHUKUMARAN, Vadakolakudi

Over 210 millions of acres are being cultivated with paddy throughout the world. About 107·5 million tons of rice produced contributes food for about half of the world population. To satisfy the full need of those who take rice as food, it becomes necessary to produce more.

Out of the many countries, India is the only country which has large areas under paddy. Even then, rice has to be imported as there is food shortage.

In India, Madras is one of the important rice growing States. Having a population of more than 3½ crores, it becomes necessary to increase food production to wipe out food shortage.

There are two ways to increase food production: (1) to increase area under food crops, and (2) to obtain higher yield per acre.

It becomes essential to provide irrigational facilities and to reclaim fallows for increasing area under food crops. But to increase yield per acre, it can be done both by cultivating high yielding varieties with good manuring or by adopting new methods of cultivation.

Increasing the Yield

At present the average yield of paddy per acre is 1,800 lb. To increase this low yield, the new method, the Japanese Method of Paddy Cultivation, can be adopted. This method has been examined in Kora Kendra and they have enunciated nine important points about the Japanese Method of Cultivation.

THE AGRICULTURE Minister is taken round the farm by Sri Muthukumaran

1. The best use of common sense in cultivation.

2. Application of organic manure like compost, cattle manure and green leaf in plenty.

3. Selection of healthy seeds from the best variety.

4. Raising nursery in raised seed beds.

5. Weeding and manuring should be done for the nursery. And the seedlings should be removed carefully.

6. Inter-cultivation in between rows and application of manures in several doses have to be done.

7. Inter-cultivation should be done three to five times.

8. Seedlings should be planted straight in lines with proper interspace. Two to four seedlings per hill should be planted.

9. Ploughing should be done immediately after harvest.

It is appropriate to say that this method, of Japanese Method of cultivation is being increasingly adopted in different parts of the country, with considerable success.

Even our esteemed Prime Minister, Sri Jawaharlal Nehru, has pointed out that this new method does not need big machinery and small implements are enough. It is enough if little quantity of seed is used. All that is necessary is to work with common sense If it is seen that more than 80 per cent is saved in seed, there will be savings in crores. The yield obtained is three times the normal yield. Even if one fourth of what the Japanese say is done, there will be a radical change in the food position of our country.

Saving in Seeds

I followed the Japane Method as propagated by the Kora Nilayam, in the matter of preparation of seedlings of Kuruvai, Samba and Thaladi. I prepared seed bed to the extent of 10 acres in Vadakolakudi village in Chidambaram Taluk.

I also prepared 33 cents according to the existing method. There was a saving of 50 per cent in the cost of seeds alone.

I cultivated four acres of land according to the Japanese Method. The details are as follows:

Preparation of seedlings on seed beds of raised level.

It is but natural for the agriculturists to doubt the veracity of the newspaper as to the preparation of seed beds at a very low cost. But it is quite possible to prepare such seed beds at a very low cost.

In the nursery channels of one foot width and 3" depth should be formed at intervals of 4 feet width. Each interval will form a raised seed bed width of 4 feet with reasonable length according to the length of the nursery. The whole plot can be prepared like this to form raised seed beds. Like this I prepared 9·60 acres of wet nursery and 40 cents of dry nursery. After good ploughing, there is no necessity for levelling in the wet nursery, but each seed bed was made even with the help of palmyrah-leaf stalk or a rectangular wooden rod. The earth on the seed bed may slide into the one foot channel. It was set right on the second day after sowing.

Usually in our parts small channels called (தூம்பு. கால்) are made at random to drain away water from the nursery after the seed is sown. Here the Japanese Method is done methodically before sowing the seed. It is highly advantageous to prepare the nursery according to the new method. The wastage of seed is minimised and facility is afforded for the removal of the weeds, etc.

This method of dry nursery is particularly advantageous to commence the operation soon after the letting in of the water in the irrigation channels. In all places with good irrigation facilities, it will be highly advantageous to adopt this method of dry nursery to commence and complete the operation in time.

These channels between seed beds afford easy drainage and also let in sufficient light and air for the seedlings to grow stout and strong with tillers. One can easily walk into the nursery and apply pesticides or manure with the help of the one-foot channels. With this method of nursery the quantity of seed and the extent of land are reduced to the required minimum.

Manuring the Nursery.—Thirty cart-loads of farmyard manure were spread and mixed well with the soil for one acre of nursery. After the preparation of seed beds, 160 lb. of manure mixture was sprinkled over all 4 feet wide beds. Then the seed was sown. The cost of manure comes to Rs. 30 only, i.e., Rs. 3 per 10 cents of nursery sufficient for one acre. With this quantity of manure, the seedlings were stout and strong with good tillers. If it is manured according to the new method the seedlings will be better and the quantity of seeds also can be lessened.

Selection of Seeds.—Good and well formed seeds were selected, by immersing the seed in salt water (I.M.M. in 4 gallons) and rejecting the floating seed. The good seeds settled down. Those seeds were taken out draining the salt water and they were used as usual.

This time, soaking the seed in perenox solution was not done. If it had been done, the seedlings would have come up still more better.

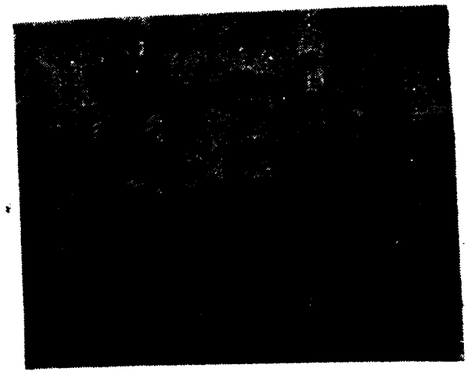
Sowing of Seeds.—At the rate of 9 Madras measures (22·5 lb.) of seed per 10 cents were sown to transplant an acre. Besides that as per the old method, 10 cent nurseries were sown at the rate of 18 M.M. of seed. By adopting this new method of raising nursery, it is possible to save about 50 to 80 per cent seed. In the old method of raising nursery, the seed rate ranges from 60 to 75 lb. for Samba and 60 to 120 lb. for Kuruvai. If done like this, not only the seeds get wasted but also we won't get healthy seedlings. But if the nurseries are raised on the new lines, we get good, healthy and strong seedlings. We even get excess seedlings after transplantation.

Weeding.—It becomes necessary to weed the wet nursery as it will be more weedy. Weeding can be easily done standing from the one-foot channels.

The net profit for 10 cent nursery is Rs. 3–1–0. Hence for 10 acres nursery it is Rs. 306–4–0.

The seedlings were pulled out for planting 30 days after raising the nursery.

Pulling Seedlings.—The seedlings were removed carefully without beating with the sticks as is



PLANTING paddy in the Japanese Method with the help of ten-foot planks.

done to remove the mud. The bunches of seedlings were tied with straw and not with seedlings. By doing this, the loss of seedlings by breakage was prevented.

Planting—(*a*) *Manuring.*—Sesbania pure crop for manure was ploughed *in situ*. One bag of groundnut cake and 140 lb. of manure mixture was applied. The Planting was done 10″ along both ways in lines.

(*b*) *Planting in lines.*—A 50-foot rope was taken and it was marked with red thread knots 10″ apart. Ten-inch sticks were provided to the persons who held the ropes. Then planing was done 10″ apart having the marks as guide. By planting the seedlings straight, it is noticed that the crop took root soon. Last year four acres were cultivated by this method of planting. During this year, instead of ropes, marked reaper plants were used which reduced the labour of holding the ropes.

To study the difference between the Japanese Method and the ordinary method, 82 cents of land was divided into two equal portions by a small bund. Manuring was done equally. One portion was planted with the ordinary method and the other in the Japanese Method. Fifteen days after planting, hand rotary cultivator was worked after applying 25 lb. of ammonium sulphate in the Japanese plot. In the ordinary method plot, 25 lb. of ammonium sulphate was applied and weeding was done. Again for the second time, the hand rotary cultivator was worked after 15 days. The rotary cultivator was worked only twice as it is a new practice. Hence, it was not worked four to five times. Even then, there were 25 to 35 tillers in the Japanese planting whereas there were only 10 to 15 tillers in the ordinary method of planting.

The harvest details which were submitted to the Minister for Agriculture when he visited my farm is given on page 9.

(*c*) *Weeding.*—Fifteen days after transplanting, the crop was manured and the hand rotary cultivator was worked. Again after 13 days, the hand rotary cultivator was worked. This should be done three to five times for a crop. By doing this, the weeds were completely eradicated. Moreover there are more tillers with good aeration and the vegetative growth is controlled.

(*d*) *Filling up gaps.*—Filling up gaps should compulsorily be done if there is necessity before 15 days after transplanting.

Hitherto, I tried my best and have given the details of cultivation done in my farm. It is evident that the Japanese Method is effective and much benefit can be got by working the hand rotary cultivator in-between rows of crops.

Instead of cultivating in the ordinary way with less manuring, if the Japanese Method is adopted, it is possible to obtain two to three times increased yield. But one should think of what the *Tirukkural* says if he feels that the cost of cultivation is high.

What the Kural Says

Thiruvalluvar says in the chapter *on Agriculture* that the good-wife earth laughs at the foolishness of men who sit idle, bemoaning their poverty (i.e.) when there is land to cultivate which will yield in the measure of your labour, it is foolish to bewail your destiny and remain idle and poor. Having this in mind, every one should cultivate in the best method and increase the yield:

The *Kural* says that more important than ploughing is manuring. Then after weeding the field more important than even irrigating is the guarding of the crop.

"எரினும் நன்றால் எரு இடுதல்—கட்டபின்
நீரினும் நன்றதன் காப்பு."

If every cultivator heeds the *Kural* and also adopts the Japanese Method of cultivation, our country will be rich with abundant harvests and our nation will prosper.

Warning Against Imitation of Currency Notes

The Ministry of Finance, Government of India, have issued the following Press Note:—

It has been brought to the notice of the Government of India that photo-prints or other reproductions of currency or bank notes are being issued for advertisement or other purposes by some individuals, firms, companies, etc., in certain parts of the country. Attention, in this connection, is drawn to the Indian Penal Code (Amendment) Act, 1943, whereby the production, sale or use of imitation notes purporting to be or resembling a currency or bank note or so nearly resembling one as to be calculated to decieve unwary members of the public is an offence and must not be indulged in. Such reproductions are particularly apt to deceive the illiterate and the practice is, therefore, dangerous and has been made illegal. All concerned are, therefore, warned that the production, sale or use of such reproductions will render them liable to action under the law.

Cost of Raising 10 cents Nursery.

Number.	Particulars.	Japanese Method.	RS. A. P.	Ordinary Method.	RS. A. P.	Remarks.
1	Cattle manure	3 cl.	6 0 0	3 cl.	6 0 0	
2	Ploughing	2 pl.	4 0 0	2 pl.	4 0 0	
3	To form 4′ beds	1	1 4 0	..	..	
4	Levelling		..	½	0 10 0	
5	Manuring	16 lb.	3 0 0	16 lb.	3 0 0	
6	Seeds	1 m.m.	4 0 0	18 m.m.	8 0 0	
7	Weeding	½ woman.	0 5 0	..	..	
8	Pulling seedlings ..	10 bundles.	..	12½ bundles.	..	
			18 9 0		21 10 0	

Comparative Study of the Japanese Method of Cultivation with the Ordinary Method, 1953–54.

Expenditure.

Serial Number and Particulars.	Japanese Method with Inter-cultivation by Hand Rotary Cultivator 10″ × 10″. RS. A. P.		Ordinary Method with Weeding. RS. A. P.	
1 Nursery Co. 25	10 5 0		10 5 0	
Main field—0·41 acre. Ploughing and manuring (basal).	34 0 0		34 0 0	
2 Transplanting—				
(*a*) Pulling	1 5 0	2 bundles of seedlings.	3 0 0	4½ bundles.
(*b*) Transplanting	2 4 0	3 coolies.	3 12 0	5 coolies.
(*c*) Holding rope for line planting	1 6 0	2 ,,	..	
3 Manuring—Ammonium sulphate, 25 lb.	5 4 0		5 4 0	
4 Inter-cultivation	1 2 0	1½ coolies.	1 8 0	1½ coolies.
5 Harvesting and thrashing (machine)	3 12 0		3 12 0	
	59 6 0		61 9 0	
6 (*a*) Yield for 0·41 acre	21·5 kalams.		17 kalams.	
(*b*) Paddy yield per acre	3,176 lb.		2,630 lb.	
A. Number of tillers per clump	25 to 35		10 to 15	
B. Length of ear-head	10″		8″	
C. Number of grains per head	220		190	

Particulars.	Japanese Way. RS. A. P.	Ordinary. RS. A. P.
Income.		
Total cost of paddy yield per acre	468 12 0	375 4 0
Total cost of straw per acre	17 0 0	13 4 0
Total ..	485 12 0	388 8 0
Expenditure.		
Cost of cultivation per acre	123 1 0	128 0 0
Net Profit ..	362 11 0	260 8 0

Soil Conservation

By SRI N. S. ARUNACHALAM, I.C.S., Secretary, Agriculture Department

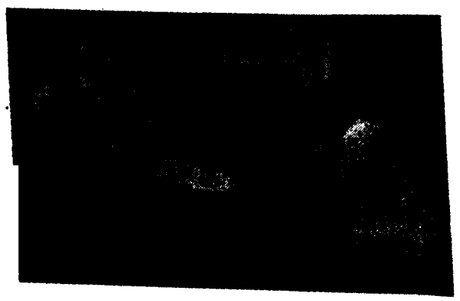
Of the many problems which man has brought on himself and is engaged in combating, that of Soil Conservation certainly takes a high priority both with reference to its urgency and its importance for human economy. It is usual to speak disparagingly of the superficial and appreciatively of getting to the bottom. But the values are reversed in respect of soils where the most valuable is that on the surface known as the 'top soil'. This is followed by two layers of sub-soil of varying depth with the soil material at the bottom.

From its physical characteristics, chemical composition and the comparatively large admixture of organic matter, the top soil is indispensable for nourishing plant life and enables us to gather various crops for sustaining mankind.

Destructive Action

In a state of nature with its usual cover of grass and tree growth, soil erosion, though continuous, is relatively insignificant. Not only is it quantitatively small but it is almost compensated by the reverse process of soil formation from rock through its contact with the atmosphere and the physical, chemical and biological changes following thereafter. But when the soil cover is broken, there is greater scope for destructive action by wind and rain and accelerated erosion follows.

The opening up of the soil by man in his quest for food and by his increasing herds of cattle in their quest for pasture, no doubt, marks an important stage in the development of human civilization, but unfortunately it is also the genesis of soil erosion.



DISTINGUISHED VISITOR: Dr. Abdel Razak Sidky, Egyptian Minister for Agriculture, during his stay in the City, met Sri M. Bhaktavatsalam, Minister for Agriculture, at the Secretariat.

Surface Flow of Water

The damage to soil as a result of rain is largely due to the run off or surface flow of water and circumstances which increase the run off therefore accelerate erosion. The total rain falling on land is dissipated through interception by and evaporation from standing vegetation, percolation through soil and the residual run off.

Vegetation, directly by its leaves and stems and indirectly through the humus or organic matter resulting from its decomposition, helps to increase the rain absorption in various ways, thus materially minimising the phenomena of run off and consequent soil loss.

The opening of soil takes place gradually in settled countries depending on the rate of extension of cultivation to provide for the increase in population. In newly colonised areas, the settlers generally open up large areas for extensive cultivation with a view to realize a quick income. These operations are carried out without any safeguards, and result in soil erosion on an unprecedented scale virtually rendering large areas permanently unfit for future cultivation.

Loss of Fertility

The ill effects of run off show themselves firstly in the loss of water that might otherwise be of use to the plants and secondly in the removal of soil along with the water flow. Both these aspects are cumulative in the sense that in course of time, the effect tends to increase itself and the consequent damage. Rainfall under these conditions instead of being beneficial to the crops by storing the moisture underground and making it available over longer periods, tends to become a scourge by the increased possibility of causing floods followed by drought.

Another important point about the loss of soil caused by run off is that the finer portions of the top soil are involved which, as already mentioned, are the most fertile and contain not only the best of the soil but most of the nutrients that have been

artificially added. It has been proved that the loss of fertility due to erosion is considerably more than the depletion caused by the growth of crops themselves.

Soil erosion is a double curse as it involves removal from fields where it is vitally required and deposit at unwanted places in the beds of tanks, reservoirs and drainage courses, thus causing them to become inefficient leading to their eventual failure for irrigation and drainage purposes.

Rate of Erosion

The rate of erosion depends on a series of factors which finally determine not only the quantity of run off but also the rate and manner of the flow. The amount and intensity of rainfall, the vegetative cover including the nature of the crops raised, the slope of the land and its general topography including the existence of drainage courses are some of the factors effecting the run off. In relation to soil erosion the rapidity of the run off is even more important than its quantity, especially where the land is steep when the destructive powers of run off are vastly increased.

The type of vegetation is also vitally important, for while grasses offer perfect protection against erosion, followed very closely by dense tree growth especially with a heavy bottom layer of humus, crops requiring intertilling like cotton and potatoes offer the poorest safeguard against soil loss.

Types of Soil Loss

Erosion is described as 'sheet', 'rill' or 'gully' according to the type and stage of soil loss. In sheet erosion the loss of soil is more or less uniform over the entire surface and is indicated by the absence of the dark colour characteristic of good top soil. Rill erosion which generally accompanies the former especially on ploughed land, results in long and shallow depressions irregularly dispersed. These, if unchecked, widen into deep ravines by undermining and downward cutting and are then known as 'gullies'.

We may at this stage wonder why the attention of man has not been drawn earlier to this important problem affecting him in so vital a manner. Perhaps it is analogous to the failure in detecting human ailments involving slow impoverishment of the blood. The process is so gradual and insiduous that the earlier symptoms are overlooked or disregarded and only a near breakdown brings on a realisation of the necessity for treatment.

The advances in the study of soils together with an awareness of the colossal loss of irreplaceable soil wealth have, however, given an impetus to the study of this problem. The United States of America has taken a lead in this direction, probably because the evils of improvident exploitation of land were so recent and on such a large scale there.

Interests of the Community

Before dealing with the control of erosion, it is important to emphasise that the largest measure of damage has been caused by individuals to what is now private property and that remedial measures to be effective should be undertaken in relation to the whole catchment or locality suffering from erosion without reference to individual holdings. Voluntary co-operation might flow from enlightened self-interest; but where necessary directives with legal force would be essential in the larger interests of the community.

The question of cost would also have to be considered not intrinsically and with reference to the present but in relation to the repercussions in other areas and with reference to the future when the need for land would become inescapable on account of the pressure of population and the cost of the work due to progressive erosion would have become inflated.

Methods of Control

Various methods have been adopted to control sheet and rill erosion but all these have this in common, that they encourage retention of moisture by the soil. Deep ploughing, tillage across the slope, addition of more organic matter, all these tend to lessen the run off. The nature of the crop is also an important factor—intertilled crops generally increasing the tendency for soil erosion. Ploughing the land across the slope or contour tillage as it is called, slows down the velocity of the flow and is highly beneficial.

A further development of this method consists in cultivating crops in narrow strips, running on the contour and at the same time adopting a system of crop rotation including grasses. Contour strip cropping, as this is called, is protected by a system of ditches which are covered with grass where necessary to prevent formation of gullies. This method of soil conservation and management enables the cultivator to gather a variety of crops according to his needs without undue loss of soil or depletion of its fertility.

Construction of Terraces

Where the slopes are steeper, it is found necessary to construct terraces whose width again depends on the gradient. In very hilly country where fields are carved out of the mountain side, the terraces will be pretty narrow of six to eight feet with the drainage sloping inwards. The provision of suitable drainage courses to catch the run off and lead it safely into the nearest natural stream is highly essential for the maintenance of the terraces. The bed of the drain should be grassed to prevent damage.

The treatment of 'gullies' depends of course on their size, the nature of the soil and other factors. Temporary dams of brush wood or permanent dams of earth, stone or concrete of

various patterns may be utilised and adapted to the different circumstances; but the aim in every case is to check the velocity of run off and induce growth of suitable vegetation at the bottom and sides of the gullies making them grassed waterways in due course, thus preventing further erosion.

Legal Sanctions

The need for legal sanctions to achieve effective control of soil erosion has already been indicated. In the United States of America, a Federal Law exists under which the Soil Conservation Service, a national organization, finances and guides all local activity in this direction. Its functions include the rehabilitation of cultivators affected by soil erosion and the compulsory acquisition of sub-marginal land with a view to their being retired to grass or forests. The voluntary organization of farmers known as 'Soil Conservation Districts' forms the local link in this comprehensive scheme.

In our own State, legislation regarding soil erosion has been in force only for the last five years. The Soil Improvement Schemes Act of 1949 provides for the Government directing the preparation of local schemes which are to be sanctioned after enquiry by the Board of Revenue which is empowered to take further measures for the execution of the schemes and for the collection of contributions from those benefited.

Famine Relief Measures

A number of works have been carried out in the Nilgiris and Coimbatore Districts, in the latter largely as famine relief; but the Act itself has been utilised rather sparingly in view of the cumbersomeness of some of its provisions. Its utility is also restricted as the works contemplated by the Act do not cover items like planting trees, removal of vegetation or enforcement of soil management. It is necessary to amplify its provisions and also to simplify their operation in practice. It is also essential to bring within the four corners of the Act individual attempts to open up steep hill sides, instances of which painfully strike every visitor to the Nilgiris.

Another aspect meriting attention is the need to train gangs of labourers in the practical work connected with the terracing, grassing of channels and plugging of gullies so that these gangs under trained maistries could get through most of the operations with a minimum of technical assistance, thus enabling the Agriculture Department to tackle more areas without additional staff. These labour gangs would be available to the landholders also and thus contribute to economy and expedition all round.

Research and Training Centres

The Government of India have been exhibiting the most vivid concern regarding this problem. The Five-Year Plan has set apart a sum of two crores of rupees to be utilised for loans and subsidies to the State Governments for operation under this head. The Central Government further contemplate setting up several Research-*cum*-Training Centres in various parts of the country to deal with different types of soils. It is hoped that one such centre would be located in the Nilgiris which is the problem district in this State so far as soil erosion is concerned.

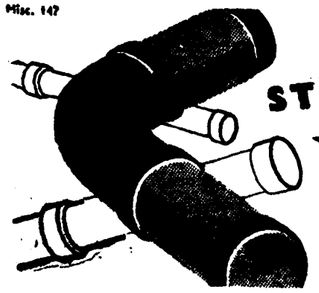
The Madras Government apart from the works they have already executed have under active consideration several schemes of Soil Conservation covering the major portion of the Nilgiris District and other areas in different districts suffering from soil erosion and wind damage.

Urgency of the Problem

It is, however, of the utmost importance that landowners in affected areas should realise the seriousness of the problem as well as its urgency. Some of the village officers in these tracts have been given training in these methods; but it is more necessary that the peasant proprietors and their sons should be put through a simple course in the theory and practice of soil conservation and management.

This will enable knowledge on this important subject to filter down to those actually in need of it and who may be expected to utilise it for their benefit without delay. [*A.I.R., Madras.*]

Misc. 147



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Public Health in the Five-Year Plan

By SRI A. B. SHETTY, Minister for Health

The Planning Commission published in July 1951, a draft outline of the various development schemes coming under the Five-Year Plan, in consultation with the State Governments. The schemes were prepared, taking into consideration the resources available with the States and the financial aid given by the Centre. The Plan included the development schemes already in operation in the States and those which were new.

PUBLIC HEALTH DEPARTMENT

In the field of Public Health, the projects included and implemented under the First Five-Year Plan in so far as the Public Health Department is concerned, are:

1. Malaria Control.
2. Nutrition Research.
3. Propaganda and Publicity.
4. Expansion of Health Services.
5. Training of Health Visitors.

The programmes under each of the schemes and the achievements thereof are outlined below.

Malaria Control

Malaria has been one of the major public health problems in several districts of the State. Large tracts of fertile lands in highly endemic areas have consequently remained unexploited. Institution of sustained anti-malarial measures will afford better health resulting in increased manpower and will also pay high dividends in course of time, by increased use of land for greater food production. An organised drive against malaria was therefore taken up to eradicate malaria from the State within a few years.

A separate Malaria Bureau on the lines indicated in the report of the Health Survey and Development Committee was created in 1945. The organisation consists of a Central Directive and Training Unit, with two Regional Malaria Organisations in the mufassal, each in charge of malaria work in six or seven districts. Till 1952, malaria control work consisting of twelve schemes was confined to the districts of South Kanara, Malabar, Coimbatore, Salem, North Arcot, Chingleput and Madurai.

In 1953, advantage was first taken of the assistance given by the Central Government under the National Malaria Control Programme to extend the malaria control work to three new areas and in 1954 to all malarious tracts in the State. The scheme will benefit a population of two millions immediately and will be extended to another one million in urban areas in the State. So far, 1,800 villages and hamlets have been brought under the scheme.

The main control method consists of reducing to negligible proportion, the mosquito population by residual indoor spraying with DDT. during the transmission period. This is supplemented by the administration of anti-malaria drugs distributed free to all cases of malaria.

The results achieved so far have been very satisfactory, as measured by malaria metric indices (spleen rate, parasite rate, fever incidence, etc.). Large malarious tracts have been rendered habitable and it was possible to carry on various developmental activities like engineering projects by the control of malaria in the project areas. The estimated expenditure on malaria control in the State is about Rs. 50 lakhs during the First Five-Year Plan.

Nutrition Research

Several unhealthy conditions of the people are traced to malnutrition. The problems of nutrition are mainly due to economic conditions, but it could also be tackled from the health front. A small beginning was made as early as 1944 mainly to assess the nutritional status and to appraise the food value of diets consumed by nutrition and diet surveys. The Bureau was reorganised in April 1950 with the object of assessing deficiencies found in the diets of families representing various socio-economic groups for studying the diet patterns, and for evaluating the nutritional status of the vulnerable sector of population, namely, children and expectant and nursing mothers.

It was also proposed to institute as far as possible, ameliorative measures to combat deficiency diseases among these vulnerable groups. Other activities consisted of educating the masses

on nutrition by exhibitions and demonstrations and training of technical personnel in nutrition. To carry out these objectives, the bureau at the Centre was expanded and two Nutrition Units, one at Gandhigram in the Community Project area in Madurai District and the other in the Poonamallee Health Unit area, were established.

During the past four years, about 450 diet surveys covering about 3,500 families were carried out and the deficiencies in the diets of the families were assayed. About 26,000 children were examined to detect diseases due to malnutrition. A provision of Rs. 2,500 per year has been made for each nutrition unit for free supply of vitamin supplements, skimmed milk and midday meals to those who were found in the nutrition surveys conducted by the units to need such supplements. In this connection full advantage was taken of the offer of skimmed milk powder and rice by the UNICEF and large-scale schemes of free distribution of 2,106 tons of skimmed milk and 4,155 tons of rice among malnourished children under fourteen years and expectant and nursing mothers were also undertaken since July 1950.

The UNICEF has also offered skimmed milk to be distributed free to children and mothers through the Maternity and Child-Welfare Centres and pediatric and maternity hospitals in the State for a period of two years, 1954 and 1955. This will benefit 14,400 children and 9,600 mothers under the care of 433 Maternity and Child-Welfare Centres and 96 hospitals in the State. This has been implemented from May 1954 and it is proposed to extend this scheme to cover children in primary schools and food scarcity areas.

Special lectures and demonstrations on nutrition were conducted for Health Officers and Medical Officers undergoing the Refresher Course, the students of the L.P.H. & B.S.Sc. classes, the Women Medical Officers attending the Diploma Course in Maternity and Child-Welfare, Village Level Workers selected for Community Projects, the health personnel in the Orientation Training Centre, the teacher trainees, the medical undergraduates, etc. In order to intensify the nutrition work in rural areas 58 Health Inspectors, Sanitary Inspectors and Health Visitors were specially trained in two batches. The course extending over a month consists of lectures, demonstrations and practical work.

Intensive campaigns to educate the people on the general deficiencies in their diets as revealed in the diet surveys were carried out and measures to rectify the deficiencies of diets by inclusion of cheap and nutritious foodstuffs locally available were also suggested. Exhibitions on nutrition were organised and educative films on the subject were exhibited to the people in festival centres, exhibitions and villages. Pamphlets were distributed and radio talks were given. Group talks and lectures were also conducted. Propaganda to rear kitchen gardens and school gardens was carried out by the Nutrition Units and vegetable seeds were supplied free of cost wherever required.

The following research studies have been undertaken in the Nutrition Laboratory: (*a*) analysis of diets in various institutions such as penitentiary schools, orphanages and hostels, (*b*) analysis of food fishes, (*c*) loss of minerals due to washing and cooking, (*d*) estimation of vitamin contents of sprouted pulses, (*e*) supplements to rice diet, (*f*) digestability of protein foods.

Studies on the effect of yeast in combating malnutrition among school children and toxaemias of pregnancy in relation to diet and nutrition have also been undertaken.

The estimated expenditure on activities connected with the Bureau during the First Plan period will be about Rs. 3·67 lakhs.

Health, Education and Publicity

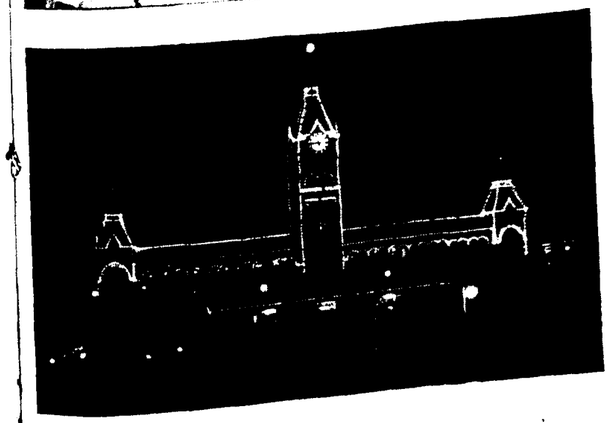
Illiteracy and superstition among large sections of the people are the chief impediments in the progress in public health. The main plank of public health activity should therefore be directed to educating the people in the elementary principles of health habits. In order to carry out effective health education so as to reach the large sector of the illiterate rural population within a short time, facilities should be made available for organising exhibitions, cinema shows, talks, lectures, etc. A mobile van equipped with cinema projector and radio equipment, a film library, health models, propaganda literature, posters, leaflets, etc., are necessary for participation in exhibitions organised in rural areas. Minimum health and technical staff, purchase of propaganda van, preparation of films and health models have been sanctioned in 1954 for establishing a Central Bureau of Health, Education and Publicity. An expenditure of nearly Rs. 4 lakhs will be incurred in the Plan period. The proposals are being implemented.

Expansion of Health Services

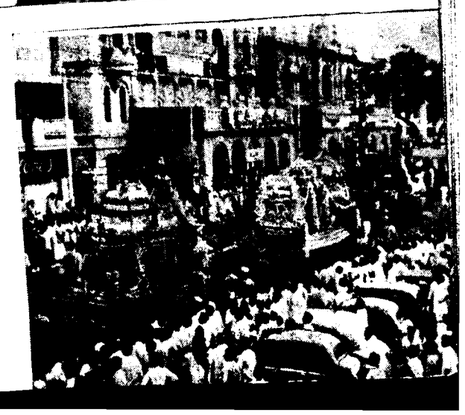
Adequate provision of medical and public health services will go a long way in improving the health of a community. Such services are grossly inadequate in this State at present. For instance, medical aid is rarely available in the rural areas; there is only one Health Inspector for 150 to 250 villages and midwifery services in villages are practically negligible. It was therefore proposed to provide a rural dispensary to serve the villages with a total population of about 10,000 within five miles round it. The dispensary was staffed with one Medical Officer, one Health Inspector, one compounder and one midwife so that the public health and medical services may radiate to the villages in the area.

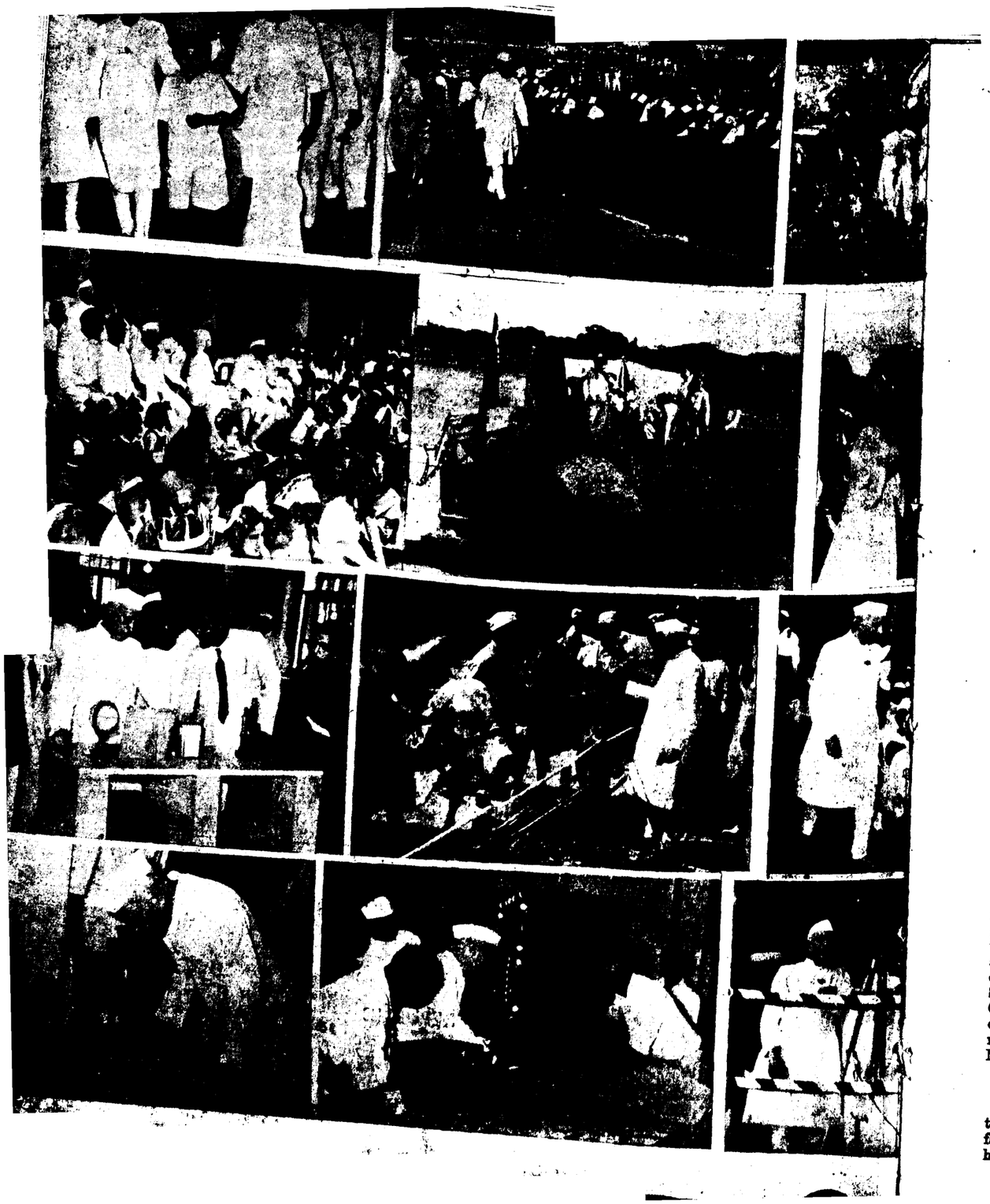
Republic Day, January 26, 1955, was celebrated with solemn dignity and colourful pageantry in Madras City.

After Flag-hoisting at the Island Grounds, the Governor took the Salute at the March Past, and decorated Major V. Rangaswami with the Vir Chakra. Later there was a *malkhamb* exercise display by the students of the Y.M.C.A. College of Physical Education. At the Victory Memorial there was a grand show of fireworks. Students of Kalakshetra danced at the reception in Raj Bhavan. Many public buildings, like the Central Station, were illuminated. An attractive pageant was organised, which went round the main streets of the City.



REPUBLIC DAY IN MADRAS





HEALTH

As provision of those services throughout the State would involve large expenditure, the scheme was first introduced in 18 centres in the districts of North Arcot, Coimbatore and Malabar. The results achieved under this set were not up to expectations. It is proposed to replace these centres by mobile medical units.

To demonstrate how a well-knit public health organisation could improve the health conditions of a rural population, a Health unit was established at Poonamallee covering 36 villages with a population of over 60,000. The staff employed consists of one Health Officer, one Woman Medical Officer, four Health Inspectors, ten Maternity Assistants, four Vaccinators, and other ancillary personnel.

This staff has since been augmented by a Resident Matron, eight Maternity Assistants and other menial staff.

In order to extend the activities of the Health Unit, provision has been made to sink four bore-wells per year for a period of five years at a cost of Rs. 6,500 per year. It is also proposed to construct 450 private latrines per year by providing water seal squatting slabs at one-third cost, an isolation shed costing Rs. 1,500 for hospitalising infectious cases and a laboratory at a cost of Rs. 8,000 for providing facilities for diagnosis and treatment of diseases. A sum of Rs. 1,000 has also been provided every year to meet the diet charges of mothers who are confined at the maternity homes of the Health Unit.

Training of Health Visitors

One of the main difficulties in implementing schemes under the Five-Year Plan is dearth of technical personnel. In respect of Maternity and Child Welfare services in this State, there is urgent need for qualified Health Visitors. A training school for health visitors was therefore taken over from the Indian Red Cross Society by the Government in 1938. At present, there is only one Woman Medical Officer of Grade II who is both a tutor and a warden.

In order that more numbers of Health Visitors may be trained, the Government of India have given financial aid by which 60 pupil Health visitors will be trained in a period of three years at a total cost of Rs. 1·56 lakhs, of which an expenditure of Rs. 60,350 will be borne by the State Government and Rs. 95,650 by the Central Government. This includes a capital expenditure of Rs. 70,000 borne entirely by the Central Government. The scheme is now taken on hand in November 1954.

MEDICAL DEPARTMENT

So far as the Medical Department is concerned, the Five-Year Plan provides for the expansion of facilities for medical education, improvements to hospitals and dispensaries, extension of medical relief, opening of new Tuberculosis Sanatoria and clinics, intensification of the anti-leprosy campaign, improvements to medical college libraries, construction of Infectious diseases hospital, opening of eye departments and eye clinics and provision for research and a few other items.

Medical Education

In respect of medical education, the position in 1951 was that only 225 (125 in the Madras Medical College, Madras, and 100 in the Stanley Medical College, Madras) seats were available each year in the Medical Colleges excluding those in the Andhra Medical College, Visakhapatnam, and the Guntur Medical College, Guntur, that were in the Composite State of Madras. The Five-Year Plan provides for improvements to the Stanley Medical College, Madras, and the opening of a full-fledged Medical College at Madurai.

Stanley Medical College, Madras

On the implementation of the Five-Year Plan it has been possible for the M.B.B.S. students to undergo their training in Organic Chemistry, Anatomy, Physiology and Bio-Chemistry, in the Stanley Medical College itself. Before the Five-Year Plan was implemented, the M.B.B.S. students of this College had their training in these subjects at the Madras Medical College. With this achievement, the Stanley Medical College becomes a full-fledged Medical College with facilities for the training of medical students in all the subjects of the medical curriculum.

The Sanitary Inspector's course was also started in this college and the first batch of sixty-eight

Centre to Issue Passports

It is hereby notified for the information of the public that the Government of India in the Ministry of External Affairs have taken over the issue of all passports other than Pakistan passports from the Madras Government with effect from 17th January 1955. The issue of passports other than Pakistan passports by the Government of Madras in the Home Department will cease with effect from the afternoon of 15th January 1955. With effect from 17th January 1955, passports will be issued by the Regional Passport Officer, Madras, whose office will be located at 'Lakeside,' 73, Poonamallee High Road, Madras, in the first floor of the building where the Office of the Controller of Emigration is now located.

students was admitted to the course in July 1951. The number of admissions to this course has been increased to 100 since 1952. The Health Visitor's Training Class was also transferred from the Madras Medical College to the Stanley Medical College, Madras, in 1951. Refresher course for Health Officers, Class II, and classes in Hygiene and Preventive Medicine for probationary Nurses of the Government Stanley Hospital are also under taken by the Hygiene Department of this college from July 1953.

The Anatomy Department of the college which was upgraded as part of the scheme of the Government of India for the upgrading of existing medical institutions for post-graduate courses such as M.Sc. and Ph.D. and research, was declared open by Rajkumari Amrit Kaur, Minister for Health, Government of India, on the 24th October 1952.

A total sum of Rs. 23·95 lakhs has been spent on the improvements to this college up to the financial year 1953–54, under the Five-Year Plan.

Madurai Medical College

Although attempts were made ever since 1946 to establish a Medical College in the heart of Tamil Nad, it has been possible only now to establish one under the Five-Year Plan. The major part of the budget for this college was sanctioned only in March 1954 and the Medical Department deserves praise in giving effect to their programme with top speed. The old Taluk office buildings were converted into the administrative block, stores block, staff rooms and library sections. This block is situated over the southern portion of the Medical College site on which is rising up steadily the regular Madurai Medical College buildings which will be completed.

The college started functioning in July 1954 with fifty students. When the scheme is completed, there will be provision for the admission of hundred students in the college. The college is in full swing in its academic functions as well the extra-curricular activities. The local Government Headquarters Hospital is equipped for 665 beds and is reputed for its traditions of high-class surgery. This institution is in the process of being raised to the collegiate status.

With the advancement of the college in the next few years, the Madras State Government and the Union Government will have satisfied the needs for providing adequate medical aid to the people of Tamilnad as well as conquered another goal in the expansion of medical education within the country.

Training

The training of hundred additional Maternity Assistants formed part of the scheme of training additional ancillary personnel. Due to financial reasons, it was first implemented during 1952–53 when 47 Maternity Assistants were trained. Seventy-seven were under training during the period 1953–54.

During the three years 1951 to 1953, 220 compounders were trained in the various medical institutions in the State. Fifteen C.R.A. candidates are being trained each year in the Government General Hospital, Madras, of whom eight are paid stipends.

Hospitals and Dispensaries

Extension of Medical Relief.—Thirteen schemes are included in the Five-Year Plan. Until recently, people living in the interior had to come all the way to the hospitals in the Madras City for specialised treatment and also for want of accommodation in hospitals near at hand. Both Taluk and District Headquarters Hospitals lacked facilities for new methods of diagnosis and attention. Even general medical relief facilities were not easily available. The Government have therefore taken steps to provide special facilities in the District Headquarters Hospitals to start with and later on in the Taluk Headquarters Hospitals.

After the implementation of the schemes under the Five-Year Plan, every District Headquarters Hospital is fitted with diagnositic X-ray apparatus and clinics have been started for specialised treatment of Tuberculosis, Leprosy, Venereal Diseases, and Ear, Nose and Throat Diseases.

The Improvements to Hospitals and Dispensaries included in the Plan provide for completion of the construction of new Headquarters Hospitals at Tiruchirappalli and Kozhikode (in the Districts of Tiruchirappalli and Malabar, respectively). The Government hospitals at Erode (Coimbatore District), Tuticorin (Tirunelveli District) and Mangalore (South Kanara District) are among those that have been set down for improvements in the Five-Year Plan. The buildings for the new Headquarters Hospital, Tiruchirappalli, is nearing completion. The bed strength of the Headquarters Hospital before the construction of the new Headquarters hospital building was 145 and that in the new hospital buildings is 275.

When the scheme under the Five-Year Plan is completed, the bed-strength will be raised to 350. In the new hospital, special departments and a blood bank have been provided and are functioning very well. The installation of a steam laundry for the hospital is in progress and is expected to be completed shortly.

Headquarters Hospital, Kozhikode.—The old Headquarters Hospital at Kozhikode was lodged in a dilapidated thatched building and was cramped with patients. It was with these as the background that the proposal for construction of the new Headquarters Hospital was taken up. The completed buildings were occupied in 1951 and the bed-strength was raised from 271 to 324.

Various blocks have been constructed under the Five-Year Plan—Such as X-ray block, servants' quarters, isolation ward, etc., and when the scheme is completed, the bed-strength will be raised to 450.

Government Headquarters Hospital and Lady Goschen Hospital, Mangalore.—The Government Headquarters Hospital at Mangalore has at present only a bed-strength of 116. With the implementation of the scheme under the Five-Year Plan, the bed-strength will be raised to 350. The construction of an out-patient block and a medical ward of 120 beds has been completed and the other works such as electrification, drainage and septic tank and overhead tank are in progress. The new hospital building is likely to be opened in January 1955. Clinical facilities for the teaching of the second M.B. students of the Kasturba Medical College will be provided in the Headquarters Hospital from January 1955.

Government General Hospital, Madras.—The Government General Hospital, Madras, a premier institution both in the Composite State and in the present Madras State, is situated in the heart of the City facing the Central Station of the Southern Railway.

This institution with a sanctioned bed-strength of 894 is fairly well equipped with modern apparatuses and affords treatment to cases of general nature and also to very many specialities. The hospital is affiliated with the Madras Medical College, one of the best in India. The treatment afforded in the hospital is based on modern trends and its popularity attracts patients not only from the various parts of the City but also from mufassal areas with the result that the hospital is overcrowded. Lack of space for extension was a big handicap.

The vacant site in the Y.M.C.A. grounds opposite to the Madras Medical College has been utilised for building up a separate Home for accommodating nurses, who hitherto had been housed in the third storey of the hospital. This has a dual advantage of not only providing a separate and comfortable home for the nurses, but also to utilise the space occupied by them for extension to the institution, thus increasing the bed-strength of the hospital.

The bed-strength of the hospital before the implementation of the Five-Year Plan was 887. Since the implementation of the Plan, the bed-strength has been increased to 1,135. When the scheme is completed, the bed-strength will have been increased to 1,147.

Various Improvements to Taluk Headquarters Hospitals have also been effected, thereby providing additional accommodation for the large number of patients seeking admission. The Government have also provincialised a few Local Fund medical institutions, as this formed one of the items in the expansion of medical relief in this State.

Other Schemes

Seven schemes were under the scope of this scheme. Under the Anti-Leprosy campaign a night segregation unit was established in the South Arcot District. Improvements to the Lady Willingdon Leprosy Sanatorium, Tirumani, were also effected. Measures are also being taken to control the high incidence of leprosy in Saidapet. The medical education committee of the Madras Medical and Public Health Conference, 1947, considered the question of improving the medical library facilities in the State and explained the urgent need for the employment of qualified and trained librarians and for providing adequate grants to equip the libraries properly with latest medical books and periodicals. The Government have approved the scheme for the reorganisation of the libraries in the Madras Medical College, the Stanley Medical College and the King Institute, Guindy.

With the implementation of the scheme under the Five-Year Plan, several useful volumes of books and back-dated sets of journals have been added. More number of journals are being subscribed to during these years. The libraries are now found to be better utilised by more number of readers. Reference work for the post-graduates and staff is now a special feature of the libraries.

The establishment of an Infectious Diseases Hospital at Madurai is one of the seven schemes coming under this main head, viz., "Other Schemes." This scheme provides for the construction of a separate Infectious Diseases Hospital at Madurai, as during the epidemics, the wards and sheds ofthe Erskine Hospital, Madurai, are overcrowded. This will serve also the requirements of the new Medical College at Madurai for teaching purposes.

A site has been secured and the construction work will begin early in 1955.

One other scheme coming under this main head is "Grants to the State Research Committee for promotion of medical researches". This scheme is designed to encourage research on local problems under the guidance of one or more of the experienced workers in their respective fields of work. Researches have been undertaken and the results published in scientific journals.

WATER-SUPPLY AND DRAINAGE

Pursuant to the recommendations of the Water-Supply and Drainage Committee, the Sanitary Engineering Branch was reorganised in 1949 integrating the functions of investigation, design and execution of schemes under the Sanitary Engineer. The Branch was constituted as the nucleus of the future Public Health Engineering Department of the State. The State Government also adumbrated a Five-Year Plan for Municipal Water-Supply and Drainage Schemes covering the period (1949-50—1953-54) with a number of

schemes included in the Plan based on the relative ranks in the priority list drawn up for the purpose.

But with the announcement of the Five-Year Plan of the Planning Commission by the Union Government, the Five-Year Plan of the State was integrated with the National Five-Year Plan to cover the period 1951-52—1955-56.

The number of schemes dealt with and the expenditure incurred each year after the reorganisation of the Branch are given below :—

Year.	Number of Schemes dealt with.	Total expenditure in lakhs.	Amount of Government grant given in lakhs.
1948–49 ..	30	9·48	4·71
1949–50 ..	46	37·40	18·70
1950–51 ..	47	64·44	30·84
1951–52 ..	49	82·91	47·64
1952–53 ..	57	78·76	37·09
1953–54* ..	46	47·83	8·50

* The figures for 1953–54 relate to Residuary Madras State (Formation of Andhra State on 1st October 1953).

The present stage of some of the important Municipal Water Supply and Drainage Schemes is indicated below :—

(i) Major Schemes such as the Salem (Mettur) Water-Supply Scheme, Kozhikode Water Supply Scheme, Kumbakonam Water Supply Scheme (II Stage) have been completed.

(ii) New Water Supply Schemes for Mangalore, Palayamkottai and Srivilliputhur and Coimbatore Drainage Scheme are under execution. The last three are almost nearing completion. A major scheme of improvement to the Dindigul Water Supply Scheme has been sanctioned for execution.

(iii) Improvements to the Coimbatore, Tiruchirappalli and Cuddalore Water Supply Schemes are under execution.

(iv) Schemes of improvement to the Madurai Drainage Scheme are under execution.

(v) Major Schemes of improvement to Water Supply for Madurai, Tiruppur and Coimbatore (comprehensive improvements) have been investigated and are awaiting sanction for being executed in the coming year.

(vi) A composite Rural Water Supply Scheme for 11 villages in Tirunelveli District including Tiruchendur, Kayalpatnam, Arumuganeri, etc., is in an advanced stage of execution by the Sanitary Engineering Department.

The previous handicaps to progress in the matter of organisation, training of personnel, procurement of materials and priority lists for planning of Schemes, etc., have been largely overcome. A reserve stock of C.I. pipes and fittings has been built up to the value of Rs. 20 lakhs and the pipes required for schemes are being diverted from the Reserve Stock as necessary. The question of financing major schemes for urban towns under the existing policy resulted in some delay and difficulties in the implementation of the programme in the wake of the financial stringency faced by the State Government and the inability of the Municipalities to finance their costly schemes.

Consequently, the State Government could not achieve the expected measure of progress during 1953–54 and 1954–55. The Government have sanctioned a few schemes which are offered to be financed solely from the Municipal funds without Government aid, irrespective of the rank assigned to them in the priority list.

Since financing of these urban schemes has been a major problem of the State Government, they have taken the opportunity, recently afforded by the Union Government, for assistance to the States in the matter, and have sought financial aid from the Central Government in order to accelerate the progress on the schemes and keep to the programme under the First Five-Year Plan.

Some 25 Municipal Water Supply and Drainage Schemes of a major magnitude are proposed to be pushed through during the remaining period of the First Five-Year Plan involving a total expenditure on all the schemes of the order of Rs. 2·38 crores. Financial aid from the Centre of the order of Rs. 2 crores in the shape of loans is expected against the work load as programmed. A sum of Rs. 50 lakhs is also expected for the schemes of the Madras Corporation.

The following preliminary arrangements are under way to implement the accelerated programme of work :—

(*a*) Procurement of essential materials such as C.I. Pipes and Specials for executing the major schemes is in progress.

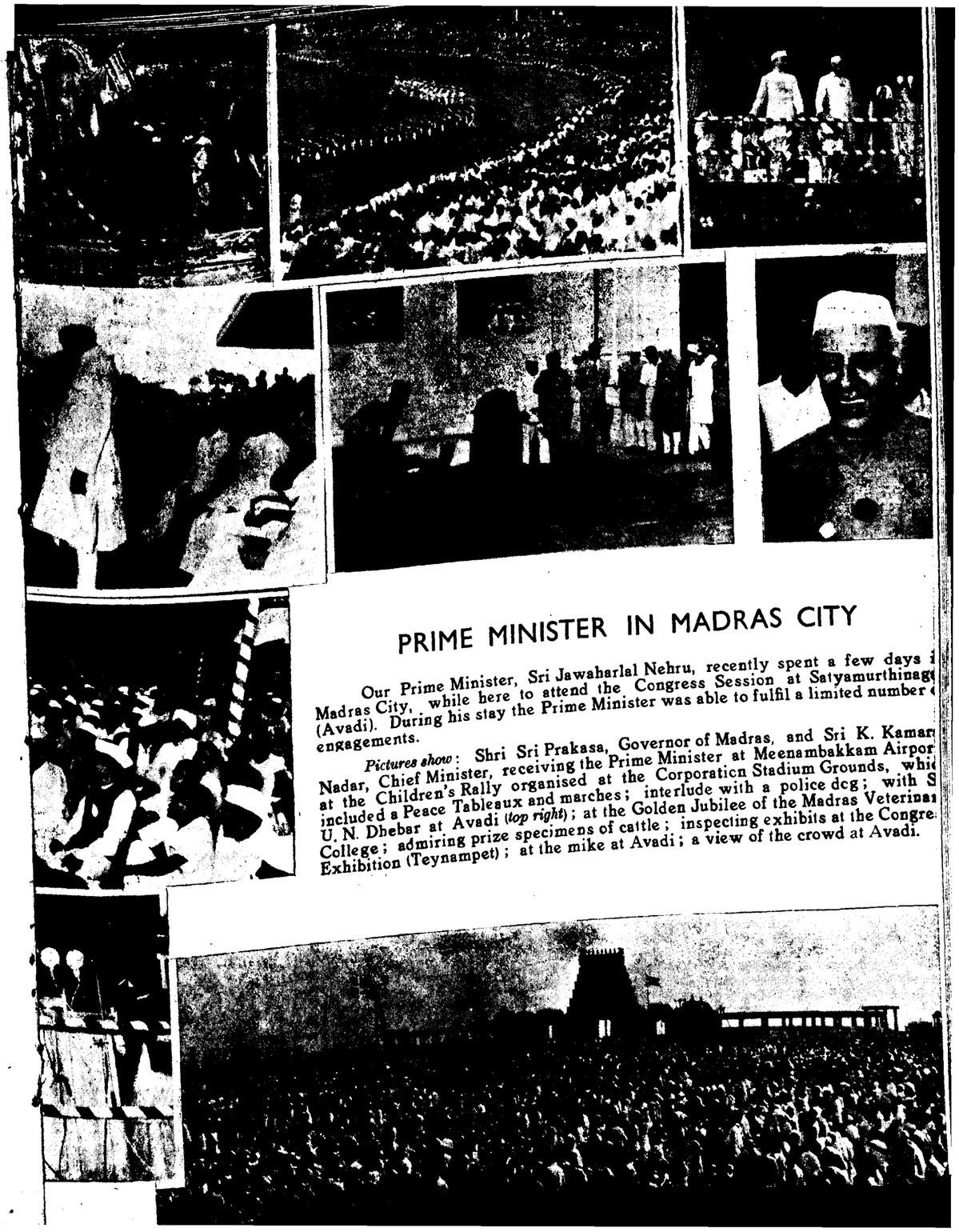
(*b*) Preparation of plans and estimates for the schemes for which design has not been completed is being speeded up so that work can be started immediately after administrative sanction is accorded by the State Government.

(*c*) The Sanitary Engineering Department has been expanded with additional staff for design work in the Sanitary Engineer's Office and employment of additional staff is proposed for taking up the execution of the major schemes.

Rural Water Supply

For the provision of protected water-supply in the villages, there are three separate programmes under the control of this Department. They are as follows :—

(1) Comprehensive Rural Programme.	Rs. 40 lakhs provided in the Budget Estimate for 1954–55.



PRIME MINISTER IN MADRAS CITY

Our Prime Minister, Sri Jawaharlal Nehru, recently spent a few days i Madras City, while here to attend the Congress Session at Satyamurthinag (Avadi). During his stay the Prime Minister was able to fulfil a limited number o engagements.

Pictures show: Shri Sri Prakasa, Governor of Madras, and Sri K. Kamar Nadar, Chief Minister, receiving the Prime Minister at Meenambakkam Airpor at the Children's Rally organised at the Corporation Stadium Grounds, whic included a Peace Tableaux and marches; interlude with a police dog; with S U. N. Dhebar at Avadi (*top right*); at the Golden Jubilee of the Madras Veterina College; admiring prize specimens of cattle; inspecting exhibits at the Congre Exhibition (Teynampet); at the mike at Avadi; a view of the crowd at Avadi.

A Cultural Delegation from the People's epublic of China recently toured India, iving song, dance and drama recitals at arious centres. Pictures show the Dele- ation in Madras City: Being received by ri C. Subramaniam, Minister for Finance nd Education, at the Central Station; e leader of the Delegation meets ri K. Kamaraj Nadar, Chief Minister; vo scenes from the famed Peking Opera; folk dance 'Picking Tea Leaves and hasing the Butterfly'; a visit to the useum; excursion to Mahabalipuram.

CHINESE CULTURAL DELEGATION

(2) Local Development Works Programme.	Rs. 29·7 lakhs have been allotted by the Government of India, for 1954–55.
(3) National Rural Water Supply and Sanitation Programme.	A grant of Rs. 60 lakhs is expected from the Government of India, for 1954–55 and 1955–56.

I. *Comprehensive Programme.*—The scheme is intended to meet the needs of areas with a population of less than 10,000.

The execution of works is in the hands of the Revenue Department, the local bodies being responsible for their maintenance.

Since 1948–49, the scheme has been executed on a planned basis and a Five-Year Plan was introduced in 1949. The comprehensive scheme has since been dovetailed with the Planning Commission's Five-Year Plan, and a programme for 1953–54, 1954–55 and 1955–56 was approved in March 1954. The Madras Plan, as approved by the Planning Commission, provided for an outlay of Rs. 42 lakhs in 1954–55 and of a like amount in 1955–56 on Rural Water Supply. The State Government actually made a provision of Rs. 40 lakhs in the State Budget for 1954–55.

Till recently, in executing well works under this scheme, no contribution was expected from the beneficiaries. However, in G.O. No. 1841, Public, dated 1st October 1954, it has been decided that in future a minimum contribution of 25 per cent should be collected from the beneficiaries, on works undertaken, the balance being met by the State. This has been done because, in the case of well works executed under the Community Projects and Local Development Works Programme, a contribution is levied from the beneficiaries and in order to have a uniform policy without making distinction between one set of people and another set of people. It has however been decided that, in respect of drinking water wells which are exclusively for the benefit of Harijans and poor and backward people, no contribution from the beneficiaries need be insisted on and that the entire cost might be met from the State Funds.

The following statement shows the number of works carried out from 1946–47 to 1953–54 and the expenditure incurred in the construction of wells :—

	Number of well works.	*Total expenditure incurred.* RS.
1946–47	767	8,06,722
1947–48	776	14,22,327
1948–49	1,068	15,07,364
1949–50	1,179	23,44,758
1950–51	1,777	29,43,841
1951–52	1,763	31,81,493
1952–53	1,531	42,12,007
1953–54	1,330	35,15,427

It is also seen that during the period 1946 to middle of 1954, 241 borewells were sunk of which 190 were successful.

II. *Local Development Works Programme.*—The Government of India have allocated to this State for the current year (1954–55) a sum of Rs. 59·4 lakhs, towards their share of expenditure on Local Development Works. One-half of this amount (i.e., Rs. 29·7 lakhs) is set apart for Rural Water Supply Works. The total value of the works that can be taken up under this programme, is Rs. 59·4 lakhs and this amount is allocated to the various districts on a population basis.

The Board of Revenue has been placed in administrative charge of the Rural Water Supply Schemes. Necessary additional staff [i.e., one Public Health Division consisting of one Executive Engineer (Public Health), five Assistant Engineers (Public Health) and necessary subordinate staff] have been sanctioned in connection with the Rural Water Supply Works under the comprehensive programme as well as Local Development Works Programme.

It has been ordered that the Rural Water Supply Schemes under this programme should for the present be undertaken in Panchayats, subject to the condition that the contribution from the beneficiaries (including Panchayats) should be limited to 25 per cent. A grant of 25 per cent will be made from the State Funds, the balance being met by the Centre. If the entire amount cannot be spent in Panchayats, it may be extended to non-Panchayats also.

Under this scheme, the maximum limit of the Central Government grant for each item of work will be limited to Rs. 10,000. But the Board has been informed that attempts should be made to prepare as many composite schemes as possible, which would provide for a pipe system for groups of villages. In such cases, the maximum limit of Rs. 10,000 referred to above will not apply. The Central grant admissible will be the corresponding multiple of the maximum allowed to any one village.

On the suggestion of the Board of Revenue it has been ordered that 50 per cent of the provision under the Rural Water Supply Schemes and fifty per cent of the Central grant available under the Local Development Works Programme, should be reserved for major works (i.e., works with overhead tanks and pipes) in Major Panchayats, also.

III. *National Rural Water Supply and Sanitation Scheme.*—The Government of India have drawn up a proposal for payment of grants to the States for providing water supply and sanitation facilities in villages with a population of less than 5,000. The share the Madras Government will get will be approximately Rs. 60 lakhs. According to the Central proposal, 50 per cent of the expenditure on any approved scheme is to be met

by the Government of India and the balance is to be met by contribution from the beneficiaries, the local bodies and or the States concerned. The Board of Revenue which was consulted, has drawn up a tentative programme. According to the programme, the area of operations is to be selected from out of each of the following districts in order of priority shown below :—

(1) *Tanjore District.*—Villages along the Cauvery and Arasalar rivers and their channels, particularly in Papanasam and Kumbakonam Taluks.

(2) *South Arcot District.*—Villages along the Cauvery Rajan Vaikal in Chidambaram Taluk.

(3) *Tirunelveli District.*—Villages along the banks of Tambaraparni river in Ambasamudram, Tirunelveli and Srivaikuntam Taluks.

(4) *Tiruchirappalli District.*—Villages along the Cauvery river and its channels in Musiri and Lalgudi Taluks.

(5) *Ramanathapuram District.*—Villages along the Vaigai river in Sivaganga, Paramakudi and Ramanathapuram Taluks.

The Board has also stated that in deciding upon the exact area which should be covered under each of the districts, in the regions mentioned above, all contiguous villages in the belt with a total population of about a lakh in each area are to be considered.

The Board has estimated that the provision of a safe piped water supply with infiltration works and a small network of distribution system and the provision of sanitary conveniences both individual and communal and minor sanitary works like collection, conveyance and disposal of sullage, in the rural areas in question may cost Rs. 120 lakhs. The proposal will involve an additional expenditure of about Rs. 90,000 per annum on the formation of a Public Health Division for executing the works. A grant of Rs. 60 lakhs can be expected from the Government of India. The balance of Rs. 60 lakhs has to be met by the State Government, local bodies and the beneficiaries.

The Government have decided that the proposal of the Board of Revenue may be accepted, that no minimum contribution need be insisted on from the beneficiaries and that whatever contribution may be available may be accepted.

A summary of the proposal has been forwarded to the Government of India. They have been requested to approve the scheme, to provide a sum of Rs. 60 lakhs as grant and also to sanction a loan of Rs. 60 lakhs to meet the Madras Government's share of cost of the matching expenditure. They have also been requested to meet one-half of the cost of the staff necessary for executing the schemes.

ANUSUYA MANDAPAM, constructed by Shri Sri Prakasa, Governor of Madras, out of his personal funds and named after his wife, was handed over to the Corporation of Madras for maintenance. It is intended for the benefit of dhobies in Saidapet (Madras City).

Industrial Development

By T. K. PALANIAPPAN, I.A.S., Director of Industries and Commerce

The Department of Industries and Commerce, Madras, is in charge of four commercial concerns (State-owned).

1. Government Silk Filatures, Kollegal.
2. Kerala Soap Institute, Kozhikode.
3. Government Oil Factory, Kozhikode.
4. Government Hydrogenation Factory, Kozhikode.

The activities of these concerns are detailed below :—

Government Silk Filatures, Kollegal

The Government Silk Filatures, Kollegal, the only one of its kind in the State, serves as a model factory for silk reeling, using power. It was originally established by the Government of India in 1943 and later purchased by the Madras Government in 1945. About 55,000 lb. of raw silk is produced every year. The silk twisting section has an "Atwood silk twisting plant" imported from U.S.A. A portion of raw silk is converted into thrown silk in this section.

A small handloom weaving unit consisting of 24 looms is also attached to the Filature. Silk fabrics such as sarees, shirting, coating, dhoties, upper cloths and blouse pieces are produced on experimental basis. There is also a proposal to start a silk weaving factory, if the working of the handloom weaving unit proves satisfactory.

Staff and Labour: The factory is managed by about 50 staff members and 750 skilled labourers (about 50 per cent women). Important amenities such as labour colony, grainshop bonus, etc., have been provided to the labour employed and they are governed by the Factories Act and Payment of Wages Act. Employees' State Insurance has also been made applicable to the labourers.

The factory gives a turnover of about 20 lakhs per year with satisfactory results.

Kerala Soap Institute, Kozhikode

The Kerala Soap Institute forms one of the several important industrial concerns run by the Department of Industries and Commerce, and has established its name as a pioneer soap factory in India. Its products Willingdon, Sandalwood, Rose, Vep, Coaltar, Washwell, Vegetol, Shaving stick, Insecticided soap, etc., are well known throughout the Madras State and in fact throughout the Indian Union.

One of the main objects of the Government in running this Institute is to train young men as experts, foreman and soap boilers who can manage small factories and thus encourage the spread of the industry in India. Several batches of students have passed out of this Institute. Soap manufacture and analysis of oils and soaps form the chief subjects of study. This Institute occupies a unique position as probably the only one of its kind in India where theoretical knowledge combined with practical training is imparted in a factory which works on a commercial basis. The Institute watches the career of its ex-students and offers them free advice and instructions whenever necessary.

The workmen are allowed bonus whenever the factory makes profit.

With a view to replace the old machinery and improve production, Government sanctioned an expenditure of Rs. 1,34,800 in 1950. This amount was spread over a period of three years as shown below :—

	RS.
First year	75,300
Second year	31,700
Third year	27,800

The machinery proposed to be purchased during the first two years has already been purchased. The erection of the machinery and the remodelling of the toilet room has been undertaken and is in progress. An indent has been placed for the purchase of the machinery for the third year with the India Stores Department, London. The replacement of the machinery was necessitated not only to improve the efficiency in the manufacture but also to improve the quality of the products manufactured.

It may be gratifying to note that the Institute is more than self-supporting. The production, sales and profit for the last five years are furnished below :—

Years.	Productions.	Sales.	Net profit.	
	TONS.	TONS.	RS.	A. P.
1949–50 ..	285	285	78,895	0 0
1950–51 ..	322	351	31,915	0 0
1951–52 ..	314	327	53,074	0 0
1952–53 ..	266	296	53,188	0 0
1953–54 ..	342	350	81,412	0 0

Shark Liver Oil Industry in Madras

This is a centenary year for the shark liver oil industry also. Way back in 1854, a Civil Surgeon of Calicut had arranged to extract the oil from the livers of sharks and use it for medicinal purposes.

The industry, however, soon languished against the crippling competition from imported cod liver oil. The two world wars, however, revived it again. The Madras Government Oil Factory was established in 1940 to develop this industry.

Till their livers were shown to be rich in Vitamins A and D, the sharks have always scared people. But since then these frightful animals have been much sought after. Deep-sea fishing methods have been improved and intensified to catch these sharks for their vitamin-rich livers.

There are more than fifty species of sharks varying in size from a few feet to thirty feet in length. Their bilobed livers also vary in weight from a few ounces up to four hundred pounds. Although rendering oil from these livers is comparatively a simple operation, the efficiency and quality of oil obtained in the early years of the industry were far from satisfactory.

Processing the Liver

Today, while the industry is still being carried on on a cottage industry scale, a large portion of the liver is collected, preserved and sent to the Calicut factory for processing. Here it is disintegrated in a high speed disintegrator. The resulting liver mass is then digested under controlled conditions and then passed through centrifuges for recovery of light coloured and polished oil. By this process the yield has been increased by one-third.

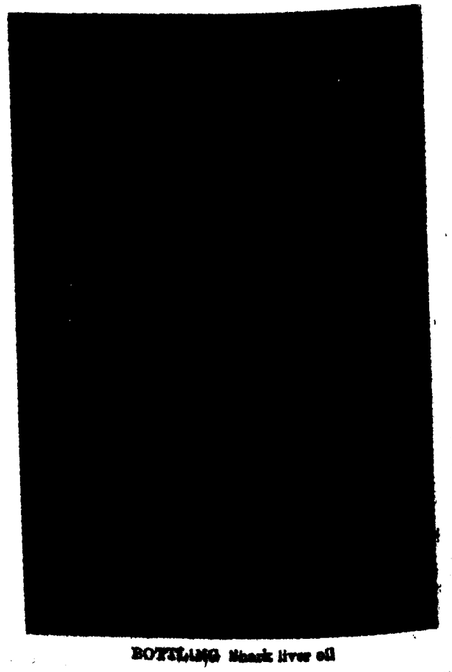
Moreover, the liver debris which was lost in the old process is now saved. As this has been shown to be rich in B Group vitamins it can be turned into a valuable poultry feed. The oil is then graded and blended to various potencies. A super-centrifuge spinning at 15,000 revolutions per minute frees all the final products from the last possible traces of impurities and turns them into brilliantly polished medicinal oils. At every stage of processing the oil is carefully tested for purity by the most modern equipment.

Enriching the Diet

Shark liver oil products derive their importance from the presence of the twin fat soluble Vitamins A and D. These two vitamins are essential for growth, good vision and strong bones and teeth. As these protective ingredients occur only in traces in vegetable foodstuffs, the customary vegetarian diets are highly deficient in these vitamins. In fact dietary surveys have revealed that diets of all classes of people are lacking in these important nutrients to varying degrees, from 50 per cent to 90 per cent. Therefore, the products of the factory have greatly helped to enrich the diet and thereby improve the health of the nation.

It is not very well known in this country that Vitamins A and D are as much required for livestock as for human beings. To meet this specific demand, the Government Oil Factory at Kozhikode also prepares veterinary vitamin oil specially intended for the improvement of our livestock.

The establishment of the factory has stopped a national waste. The livers which were once



BOTTLING Shark liver oil

INDUSTRIES

thrown away or allowed to rot in the sun to yield an illuminant or an oil to paint boat bottoms, have been rendered to yield a source of Vitamins A and D, thus lessening our dependence on foreign products.

Government Hydrogenation Factory

With a view to cope with the increased demand for ghee, the Government in 1943 decided to start a Hydrogenation Factory at Kozhikode for production of vanaspathi and refined oil.

The construction of the factory and the installation of machinery have been completed and the factory in its trial run has now produced its first batch of vanaspathi which was analysed by the Government Analyst, Guindy and found to be conforming to the specification laid down in the Vegetable Control Order of 1947.

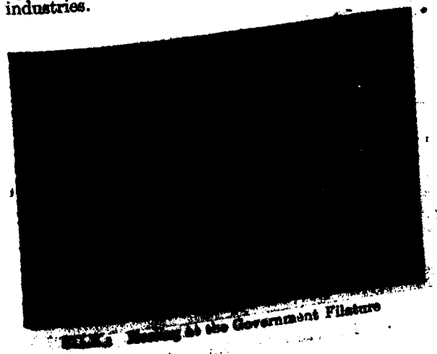
A sum of Rs. 18,39,521 has so far been spent for the construction of buildings and installation of machineries in the factory against the total sanction for Rs. 19,57,150.

The factory has a capacity to produce 3,000 tons of vanaspathi and 1,500 tons of refined oil per year.

Government Industrial Engineering Workshop

A Government Industrial Engineering Workshop at Washermanpet, Madras, is also run by the Department of Industries and Commerce, Madras, for servicing the Departmental pumping and boring machinery. It was started nearly half a century ago. The workshop at its infant stage was located in Poonamallee High Road, Madras, and was subsequently shifted to the present place on 16th January 1923. The Workshop manufactures complete hand boring sets and executes repairs to power drill tools of the pumping and boring section of the Department.

The Workshop also undertakes repair, mechanical jobs from the public. In addition, the Workshop undertakes the manufacture of improved appliances required for cottage and small scale industries.



[illegible] Running at the Government Filature

Quarantine Stations

The Government of Madras have decided to set up 20 quarantine stations in the Districts of North Arcot, Salem, South Kanara, Coimbatore and Chingleput as a safety measure against the spread of Rinderpest disease from other States. At present Rinderpest is practically extinct in this State and the only precaution necessary is to prevent infection from infiltrating from border areas.

The present scheme is designed towards this end and the quarantine stations are situated on the cattle routes. Inoculations will be carried out at these stations and the safety belt under the All-India Scheme will be pushed forward by about at least 10 miles of the borders of the State, thus completely eliminating the possibility of the infection spreading into this State.

Under the First Five-Year Plan, Government sanctioned an amount of Rs. 4,21,700 in their G.O. Ms. No. 1866, Development, dated 15th April 1948, for the expansion of the Workshop in order to meet the post-war needs of cottage industries in the Province and to effect a general improvement in the administration of the Workshop. The above amount has been utilised for the purchase of machinery and construction of new buildings.

After expansion the turnover of the Workshop has increased to 2·5 lakhs from 1·25 lakhs per year before. With the purchase of additional machineries for the expansion scheme, modern methods of production have been introduced and it has been possible to manufacture certain items of tools such as winches and couplings, slotted pipes, etc., in the Workshop.

Further expansion of the Workshop in order to manufacture power drill tools of the percussion type is engaging the attention of the Department.

Industrial Education

The Department of Industries and Commerce, Madras, is concerned with the training of (1) Supervisory staff capable of guiding the artisans and (2) artisans in different trades which have scope for development and prospects of employment in industry.

In order to meet the growing demand of technicians in all trades Government sanctioned the establishment of five Polytechnics on a regional basis at Madras, Madurai, Coimbatore, Kozhikode

at the Amindivi Islands, and demonstration has been shifted to the Laccadive Islands from October 1954.

Inland Fisheries

During the last few years the activities of the Department of Industries and Commerce have expanded considerably and several schemes relating to the development of inland fisheries have been undertaken. Some of the important development schemes under this for which provision has been made in the Budget are intensive seed collection and distribution for stocking fish in inland waters, rural fishery demonstrations, paddy-*cum*-fish culture in backyard wells, etc.

About 50,000 acres of inland waters have been stocked. During the year 1953–54, 20,094,956 fish seeds were collected.

The fish resources of Mettur Reservoir, extending over 60 square miles and impounding a volume of 94 million cubic feet of water, have also been fully utilised. A batch of 18 Departmental units operated under Departmental supervision. In addition, fish were purchased from the local fishermen licensees at the rate of 3 annas and 2½ annas per lb. for different species. A total quantity of 77,200 lb. of fish were landed by Departmental units during 1953-54. Besides, 373,046 lb. of fish were purchased from the local fishermen licensees.

Pisciculture in Paddy Fields

A pilot scheme for the culture of fish in paddy fields was sanctioned by the Madras Government. There are about 10 lakhs of acres of paddy fields in Tanjore District. They obtain a copious supply of water from the Cauvery irrigation system and double crops are raised in them. With a view to step up the production of fish, it is intended to culture fish in the paddy fields. Besides the paddy fields, the network of canals and extensive water-logged areas are also intended to be used.

To begin with, 300 acres of paddy fields in three taluks, Tanjore, Kumbakonam and Mayavaram, have been selected for culture. These areas will be stocked with fingerlings of catla and labeo at the rate of 1,500 fingerlings per acre. It is expected to yield about 775 lb. per acre, in the seven months, i.e., 112,500 lb. or 50 tons of fish valued at Rs. 22,500 on the whole. Besides, the culture of fish is also expected to have beneficial effect on crops. The fish will feed on the microscopic organisms which are likely to cause crop pests.

Wells offer a comparatively unexplored source for rearing certain varieties of fishes especially murrels (*ophiocephalus*) and pearl spot (*etroplus suratensis*). Several large irrigation wells have been dug all over the State and it is now proposed to launch an intensive drive in selected areas for stocking these two fishes which are quite edible and tasty, fairly quick growing and capable of breeding in confined waters.

Thousand wells in each of the districts of Chingleput, North Arcot, Coimbatore and Salem are being selected and stocked with 50,000 murrels and one lakh pearls spots at the rate of 12 murrels and 24 pearls spots per well. The cost of fingerlings will come to Re. 1. Each well is expected to yield Rs. 6 to Rs. 10 worth of fish at the end of the year.

Amenities for Fishing Folk

There was a remarkable progress in the growth of fishermen co-operative societies during 1953–54. The number of societies in the Residuary State has increased from 176 to 231 during 1953–54.

During 1953–54, the Department has been running 64 fisheries schools including two high schools, one middle school, 17 higher elementary schools, and 44 lower elementary schools. These schools had a total strength of 12,022 pupils (7,100 boys and 4,922 girls). The teaching staff consisted 422 teachers. In addition to this the Department was running two night schools for adult education.

Fish Curing Yards.—There were 71 fish curing yards in the Residuary State at the beginning of the year and two more yards were opened during the year. So at the end of the year there were 73 fish-curing yards.

During the year 1,434,539 maunds of fish were cured in the yards, and 212,898 maunds 15 seers of salt were issued for curing purposes in the Residuary State. The fish cured in the yards of the Composite State and salt issued during the previous year were 1,571,413 maunds 21 seers and 233,243 maunds 36 seers respectively.

Fisheries Demonstration Factories

The preparation of products like fish manure, fish meal and fish oil from inferior quality of fish and fish waste such as guts and gills, was demonstrated in six coastal fishing villages in the State during the year: 60,093 lb. of fish manure and 17,097 lb. of fish meal were manufactured in these centres in the Residuary State during the year, as against 59,938 lb. of fish manure and 9,374 lb. of fish meal in the Composite State last year; 3,756 lb. of oil was also made during the year in the Residuary State, as against 2,276 lb. manufactured last year in the Composite State.

The deep sea fishing operations have shown better results during the year than in the previous year. A total quantity of 198,908 lb. of fish which realised Rs. 18,498–10–10 and yielded 11,918 lb. of shark liver was caught during the year in the Residuary State, as against 197,643 lb. caught in the Composite State last year.

In addition to this, as a result of the operation of the mechanised boats, used for demonstrating to the fisherman the advantages of using such boats 177,102 lb. of fish, which realised Rupees 11,903–10–6 were also caught during the year.

Chank Fisheries

The chank fishery operations yielded good results during the year. From the Tirunelveli Fishery 998,580 full sized, 83,878 undersized and 61,152 wormed chanks were caught during the year, as against 896,792 full sized, 86,467 under sized and 39,843 wormed chanks caught last year.

The Sivaganga Chank Fishery yielded 987 chanks as against 469 of last year, and the Tanjore Chank Fishery yielded 19,913 chanks as against 29,493 of last year.

There was improvement in the lease amount obtained from the chank fisheries of Chingleput, South Arcot and Tanjore also. The amounts realised during this year were Rs. 3,021 for Chingleput, Rs. 10,725 for South Arcot and Rs. 9,231 for Tanjore.

Special Marriage Act

The Special Marriage Act, 1954, is designed to provide a special form of marriage which can be taken advantage of by all persons in India and by all Indian nationals in foreign countries, irrespective of the faith which either party to the marriage may profess. The parties may observe any ceremonies for the solemnization of their marriage, but certain formalities are prescribed before the marriage can be registered by the Marrage Officers. For the benefit of Indian citizens abroad, the Act provides for the appointment of diplomatic and consular officers as Marriage Officers for solemnizing and registering marriages.

Provision is also made for permitting persons who are already married under other forms of marriage to register their marriages under the Act and thereby avail themselves of the benefit of its provisions.

On the coming into force of the Act on January 1, 1955, the eighty-two year-old Special Marriage Act of 1872 will stand repealed.

POLICE SPORTS: Sri K. Kamaraj Nadar, Chief Minister of Madras, inaugurated the annual State Police Sports, in Madras City. The picture shows the Chief Minister addressing the competitors.

and Mangalore merging with them the Industrial Schools then existing as adjuncts. All the five Polytechnics commenced working from 1946. The establishment of these Polytechnics and the construction of buildings for them have been included in the First Five-Year Plan.

Training Courses

Each Polytechnic provides training both in diploma and certificate courses best suited for each region with workshops attached to provide adequate training and gradually advancing practical training to the students and a separate factory unit to undertake commercial jobs and afford facilities to learn modern methods of manufacture. Over thirty lakhs of rupees have been sanctioned for the purchase of equipment for all the Polytechnics.

Necessary equipment suitable for imparting instruction in the various branches of engineering, viz., mechanical, electrical, civil, automobile and chemical and subjects like food technology, cinematography and sound engineering, and fisheries technology and navigation, have been purchased and arrangements are being made to purchase additional equipment.

Special Institutes

In addition to the above Government Polytechnics there are the following Government Institutions providing training in special subjects :—

(1) Institute of Leather Technology, Madras, provides diploma course in Leather Technology and certificate course in leather goods manufacture.

(2) Government Textitle Institute, Madras, provides certificate courses in subjects relating to the Handloom Industry.

(3) School of Arts and Crafts, Madras, provides training in diploma and certificate courses in painting and allied fine arts and also crafts like carpentry, goldsmithy, enamelling, etc.

The final examination in diploma courses in the Polytechnics are conducted by outside examiners appointed by the Technological Diploma Examination Board. This Board consists of the Joint Director of Industries and Commerce as Ex-officio Chairman and about 18 experts each to represent a special course of studies. The Board is responsible for the conduct of diploma examinations and issue of diplomas to successful candidates on their completion of one year intensive practical training in recognised concerns.

The final examination for certificate courses are conducted by outside examiners appointed by the Joint Director of Industries and Commerce. The successful candidates are awarded certificates countersigned by the Joint Director of Industries and Commerce, Madras.

There are about 44 private industrial schools functioning in this State which have been recognised by this Department. This Department gives aid to the recognised institutions in the form of building grants, maintenance grants, equipment grants and capitation grants.

Cottage Industries

With a view to develop Cottage Industries on Rational lines, the State Government have set up a Khadi and Village Industries Board with the Minister for Industries and Agriculture as the Chairman. Further, in order to assist the Board in the scrutiny of the various schemes and problems, a sub-committee has been set up on 14th July 1954 with the Director of Rural Welfare as the Chairman. The sub-committee has recommended that the development programme for the various types of cottage industries, should be in the following order of priority :—

(a) *Industries included in the Five-Year Plan with slight amendments.*—Bee-keeping, gur and khandsari, hand-made paper, soap-making with neem oil, toy making, village oil industry, leather, paddy husking and pottery.

(b) *Processing of Agricultural Produce.*—Decortication of groundnut, ginning of cotton, etc.

(c) *Goods to meet the Needs of Everyday Life.*—Blacksmithy, carpentry, brick and tile making, utensil making, etc.

(d) *Industries connected with Ancient Crafts.*—They include crafts in which the artisans have after many years of practice acquired knowledge and skill of a high order and which have been handed down through generations.

(e) *Industries to Utilise the Local Raw Materials.*—Bamboo and cane products, brushes, coir fibre and grass products, glue, lac, chalks, charcoal, etc.

(f) *Industries to Produce Articles that are at Present being Imported from Other Places.*—Fancy goods, baby and invalid carriages, domestic chemical products for cleaning, disinfectants, art chinaware, surgical and scientific equipment, plastic and sports goods, etc.

SOAP : Packing the famous Kerala Soap

Surveys being Conducted

Keeping in view the above programme, surveys are being conducted particularly in all the Community Project and National Extension Service Blocks, both for organising existing industries and also for introducing new ones. While preparing schemes for the development of Cottage Industries the following important factors are taken into consideration, so that the artisans may not be put into any hardship :—

(1) Provision of finance by way of loans up to a limit of Rs. 500 on proper security repayable in easy instalments.

(2) Introduction of modern production techniques with a view to bring down the cost and also to improve the quality of the finished goods.

(3) Organising co-operative societies with a view to ensure regular supply of raw materials to the artisans at reasonable rates and in order to provide marketing facilities.

(4) Patronising the products of Cottage Industries in the Government purchases.

Important Schemes Implemented

Some of the important schemes so far implemented for the development of Cottage Industries in the State include the following :—

(1) Two training centres for glass bangles and beads have been set up, one at Madurai and another at Kasargod, with a view to train artisans in the art of manufacture of glass bangles and beads and thus enable them to set up their own units in due course.

Provision exists for admission of 15 trainees in each centre every year. The duration of the course is eleven months. Each trainee is paid a stipend of Rs. 25 each per mensem for a period of eleven months.

(2) A training centre in scientific glass equipment manufacture has been set up at Madras as there are at present no units manufacturing the above items and as the entire requirements of this State are being imported from outside.

(3) A coir school has been set up at Beypore in Malabar District, with a view to train artisans in the process of extraction of fibre, spinning yarn and ropes and in the production of other coir goods.

Provision exists for admission of 40 students every year. The duration of the course is two years. Each trainee is paid a stipend of Rs. 18 per mensem.

(4) A Cottage Industries Research Institute has been set up at Madras. It commenced working in October 1952. The aims and objects of the Institute are—

(i) to make a comparative study of designs, tools and methods followed here and elsewhere in Cottage Industries and to adopt and improve upon them and when necessary to design new tools and evolve new techniques and processes ;

(ii) to investigate and solve problems relating to the treatment of materials used in specific cottage industries ;

(iii) to conduct experiments and research on mechanical treatment of raw materials used in cottage industries.

Major Items of Work Done

Some of the important items of work that have been completed are :—

Fabrication of three yarn twisting machines, manufacture of hand operated lever press with a set of dies to manufacture buttons, etc., animal hair cutting shears, hand operated leather glazing machines, etc.

The Government of India have sanctioned an expenditure of Rs. 58,000 to meet the non-recurring expenditure of this Institute.

(5) A training centre for the manufacture of fancy articles like ladies' hand-bags, etc., out of fine korra mats has been set up in Pattamadai of Tirunelveli District.

(6) Demonstration units for the extraction of oil using improved types of Wardha ghani have been set up in the Lower Bhavani and Periyar Projects.

(7) A model blacksmithy unit has been set up in the Lower Bhavani Project with a view to train the local artisans.

(8) A scheme for the manufacture of paper toys in Pullivalam village in Musiri taluk has been recently sanctioned.

(9) A scheme for setting up of a demonstration unit for the manufacture of glazed pottery in Karigini has been sanctioned by the Government. The Government of India have granted the entire expenditure of Rs. 5,000. The work connected with construction of kiln has since been taken up.

(10) A coir demonstration unit has been set up in South Kanara District for popularising up-to-date processes of coir industry among the people and to enable them to take to the industry.

About 150 people are being trained in the unit per annum. No stipend is paid to the trainees.

(11) A coir demonstration party has been deputed to the Laccadive and Amindivi Groups of Islands in the West Coast for popularising the improved methods of spinning coir yarn by the use of charkas and for developing coir industry in the Islands. About 220 persons of the Islands are being trained in the coir industry every year. From December 1951 the demonstration was functioning

Saturday, 19th February 1955—*cont.*
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Sunday, 20th February 1955.
Sivaratri Mahatmiyam : Katha Kalakshepam.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Monday, 21st February 1955.
Guineaworm in Cattle : Discussion.
Swatantra Suriyan : Song.
Aandi Madam : Serial Feature.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Tuesday, 22nd February 1955.
Farm Forum : Discussion.
Katha Prasangam.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Wednesday, 23rd February 1955.
Care of Throat : Discussion.
Tavazhndu Tavazhndu : Song.
Listeners' Letters.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Thursday, 24th February 1955.
Farm Forum : Discussion.
Musical Bouquet .
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Friday, 25th February 1955.
In the Village School : Asukaviroyar.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Saturday, 26th February 1955.
Kudisai Tozhilali : Coir making ; Discussion.
Pon Vilaiyum : Song.
The Adult Literacy Class.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Sunday, 27th February 1955.
Mucuna, the new Green Fodder : Discussion.
Tangam Vilaiya : Song.
The Pial School of Political Science.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Monday, 28th February 1955.
Fish Farming in Village Tanks : Discussion.
Tondugal Seididu : Song.
Makkal Tiruppani.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Reservation of Appointments in Public Services

The Government of Madras have changed, with effect from December 30, 1954, the proportion of reservation adopted for recruitment to the public services to which recruitment is made with reservation in favour of the Scheduled Castes and Scheduled Tribes and the Backward Classes as follows :—Scheduled Castes and Scheduled Tribes—16 out of 100, Backward Classes—25 out of 100, Open competition—59 out of 100.

Consequent on the change ordered above, five more turns will be added at the end of the order of rotation in which appointments are made. The order of rotation after the change will be as follows : (1) Open Competition, (2) Scheduled Castes and Scheduled Tribes, (3) Open Competition, (4) Backward Classes, (5) Open Competition, (6) Open Competition, (7) Backward Classes, (8) Open Competition, (9) Scheduled Castes and Scheduled Tribes, (10) Open Competition, (11) Open Competition, (12) Backward Classes, (13) Open Competition, (14) Backward Classes, (15) Open Competition, (16) Scheduled Castes and Scheduled Tribes, (17) Open Competition, (18) Open Competition, (19) Backward Classes, (20) Open Competition, (21) Open Competition, (22) Scheduled Castes and Scheduled Tribes, (23) Open Competition, (24) Backward Classes and (25) Open Competition.

In the fourth cycle of 25 turns, the 25th turn will be reserved for the Backward Classes. The rotation will not start afresh but will continue from where it last ended until four cycles in the above order are completed.

This action has been taken on reconsideration of the proportion of reservation in the light of the percentage of the population of the Scheduled Castes and the Scheduled Tribes in the State as constituted after the formation of the Andhra State on the basis of the figures of the Census of 1951.

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INVEST IN INDIA'S FUTURE

Rural Programmes for February 1955

Rural programmes as scheduled for broadcast from All-India Radio, Tiruchirappalli, in the month of February 1955, are given below :—

Tuesday, 1st February 1955.

Farm Forum : Discussion.
Villuppattu.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Wednesday, 2nd February 1955.

Nattu Nalam : Discussion on National Extension Service.
Attam Paraka Vareer : Malai Kuravan.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Thursday, 3rd February 1955.

Farm Forum : Discussion.
Have You Heard This Song ?
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Friday, 4th February 1955.

Grama Kalakshepa Mandapattil : Tirumazhisai Azhwar.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Saturday, 5th February 1955.

Talk in Tamil on Untouchability; arranged by the Department of Harijan Welfare, Government of Madras.
Tamizhan Enru : Song.
The Adult Literacy Class.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Sunday, 6th February 1955.

Tobacco Diseases : Discussion.
Kathaigal Solli : Song.
Akkam Pakkam : Play.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Monday, 7th February 1955.

Anthrax in Cattle : Discussion.
Pongal Viduthalai : Song.
Village Women's Forum : Discussion on the Welfare of Women, Children and Family Welfare under The Five-Year Plan.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Tuesday, 8th February 1955.

Farm Forum : Discussion.
Grama Pattum Katchiyum.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Wednesday, 9th February 1955.

Small pox : Discussion.
Malai Pozhudhil : Song.
Listeners' Letters.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Thursday, 10th February 1955.

Farm Forum : Discussion.
Musical Bouquet.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Friday, 11th February 1955.

In the Village Panchayat : Jallikattu Vazhakku.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Saturday, 12th February 1955.

Women's Costumes in Kashmir : Discussion.
Yamarinda Mozhigalile : Song.
The Adult Literacy Class.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Sunday, 13th February 1955.

Plantain Cultivation : Discussion.
Parukkulle : Song.
The Village Welfare Association.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Monday, 14th February 1955.

Cow Rearing : Discussion.
Sathya Jothiyai : Song.
Irulil *Oli* : Feature.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Tuesday, 15th February 1955.

Farm Forum : Discussion.
Gandharva Kudirai.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Republic Day Celebrations

The Fifth Republic Day was celebrated in Madras, with a ceremonial parade at the Island Grounds in which units from the Defence Services, the National Cadet Corps and the Police took part. The Governor of Madras hoisted the Union Flag and took the salute at the ceremonial parade. Unlike in the previous years there was a pageantry procession and fireworks this year. All public offices were floodlit. Several thousand people witnessed the parade and pageantry procession.

The Governor on arrival at the parade grounds was received by the Chief Minister and the General Officer Commanding, Madras Area, and was conducted to the saluting base. The parade gave a National Salute. The Governor then unfurled the National Flag and the Band played the National Anthem. Next the Governor accompanied by the Parade Commander and the Aide-de-Camp to the Governor reviewed the parade. After returning to the saluting base the Governor presented the Vir Chakra to Major V. Rangaswami in recognition of his meritorious services in the Indian Army.

The unit with which Captain Rangaswamy was serving was heavily mortared by the enemy on 19/20th May 1948 and a large number of casualties started arriving at the Main Dressing Station. During this difficult period, the officer worked with untiring energy almost non-stop for 72 hours. Despite the risk of being hit by enemy mortar fire he carried out operations efficiently and without any show of fear. By his personal example and devotion to duty he was largely responsible for maintaining the morale high. But for his endurance and good work, many lives would have been lost. The citation of investiture was read out by an Army Officer before the Governor made the presentation of insignia of Vir Chakra to Major V. Rangaswami.

Three volleys of feu-de-joie was fired, after each volley the National Anthem was played. Following this, units from the Madras Regiments, Indian Naval Contingent, Indian Air Force Detachment, Territorial Army, National Cadets Corps, Special Armed Police, Malabar Special Police and Mounted Police participated in the March Past. Immediately after the parade there was a demonstration of physical culture by the students of the Young Men's Christian Association College of Physical Education.

In connection with the Republic Day celebrations the Governor of Madras held a reception at Raj Bhavan, which was attended by a large gathering of officials and non-officials. This was followed by a dance recital by the students of Kalakshetra.

In the evening there was a pageantry procession consisting of nadaswara vidwans in a mandap, Police Band, swan shaped design with gopuram, flower palanquin and chappram on lorries. This was preceded and followed by Mounted Police. This pageantry procession is a new item in this year's Republic Day which thrilled thousands. The procession passed through important roads of the city and reached the Victory Memorial at the Marina where the Governor was present to witness the pageant. When the procession passed along the Marina there were scintillating fireworks at the Tilak Ghat and the Victory Memorial.

Wednesday, 16th February 1955.

Nattu Nalam : Discussion on the Working of the National Extension Service.
Tedi Unai Saran : Song.
Vizha Vaidyam : Play.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Thursday, 17th February 1955.

Farm Forum : Discussion.
Pattai Kelunga.
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Friday, 18th February 1955.

In the Village Dramatic Association : Industrial Development under the Five-Year Plan ; (Tozhil Parukki Vazhvom : Music Feature).
Market rates and water-level readings.
Topical Discussion ; Weather Report.

Saturday, 19th February 1955.

Talk in Tamil on Cottage Industries ; arranged by the Department of Industries and Commerce, Government of Madras.
Engal Vazhvum : Song.
The Adult Literacy Class.

Books on Food and Agriculture

The publications of the Madras Government listed below cover a variety of subjects on Food and Agriculture such as Food and Commercial Crops, Agricultural Research and Agronomy. Written by experts and available in English, Tamil and Kannada, these moderately-priced booklets will be particularly useful to persons interested in scientific farming, market gardening and rural husbandry.

Name of the Publication	*Language*	*Price* RS.	A.	P.
1 Report on the Marketing of Fish in the Madras State	English	6	0	0
2 A Handbook of South Indian Grasses	,,	4	8	0
3 The Coconut—A Monograph	,,	3	12	0
4 Revised Report on the Marketing of Cattle in Madras	,,	3	12	0
5 Fungoral Diseases of Important Crops in the Madras Presidency	,,	1	2	0
6 Bee-Keeping in South India	,,	1	0	0
7 Indian Central Sugarcane Committee Report for the Madras State—Five Years Ending 1952	,,	0	14	0
8 Mongosteen (Garcinia Mangostana L) and its Culture in South India	,,	0	12	0
9 Popular Account of Work Done at Agricultural Research Stations and Results Achieved during 1949–50	,,	0	8	0
10 Fodder Trees and Fodder Grasses	,,	0	8	0
11 Hedge Plants	,,	0	7	0
12 Cultivation of Tree Spices in South India	,,	0	5	0
13 Popular Account of Work Done at the Aduthurai Research Station	,,	0	5	0
14 Some Experiences of Plant Protection Work in Different Districts of Madras State	,,	0	4	0
15 Agricultural Research Station, Nanjanad: Its Importance and Contribution to Agriculture ..	,,	0	4	0
16 Agricultural Research Station, Nileshwar III: Its Importance and Contribution to Agriculture ..	,,	0	4	0
17 Sugarcane Research Station, Gudiyatham	,,	0	4	0
18 Popular Account of the Pomological Station, Coonoor	,,	0	3	0
19 Agricultural Research Station, Tindivanam: Its Importance and Contribution to Agriculture ..	English	0	3	0
20 Agricultural Research Station, Palur: Its Importance and Contribution to Agriculture ..	,,	0	3	0
21 Booklet on Millets	,,	0	3	0
22 Some South Indian Oilseeds	,,	0	3	0
23 A Popular Account of Rice in Madras	,,	0	3	0
24 Booklet on Pepper	,,	0	3	0
25 Tapioca	,,	0	3	0
26 Turmeric	,,	0	3	0
27 Agricultural Implements and Tools	,,	0	3	0
28 Growers' Pocket Guide to Commercial Fruits in South India	,,	0	3	0
29 Sweet Potato	,,	0	3	0
30 Grow More Cotton	,,	0	3	0
31 Vegetables	,,	0	3	0
32 Chillies	,,	0	3	0
33 Reclamation of Alkaline Soil	,,	0	3	0
34 Potato	,,	0	3	0
35 Avenue Trees	,,	0	5	0
36 Fruits	,,	0	3	0
37 Sugarcane	,,	0	3	0
38 Common Diseases of Citrus and their Control ..	,,	1	0	0
39 Insect and Pests of Oranges	,,	0	8	0
40 Five-Year Progress in the Nilgiris	Tamil	0	4	0
41 Agricultural Implements and Tools	,,	0	3	0
42 Guide-book for Vegetables	,,	0	2	0
43 Guide-book for Vegetables	English	0	2	0
44 Paddy Breeding Station, Mangalore	,,	0	1	0
45 Millets	Tamil	0	2	0
46 Millets	Kannada	0	2	0
47 Sugarcane	Tamil	0	2	0
48 Sugarcane	Kannada	0	2	0
*49 Report on Agricultural Research in the Madras State by the Expert Committee, 1949 ..	English	1	4	0
*50 Monograph on Madras Bananas	,,	7	6	0

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Copies can be had from the Office of the Director of Agriculture, Chepauk, Madras-5, or subordinate offices of the Agricultural Department.

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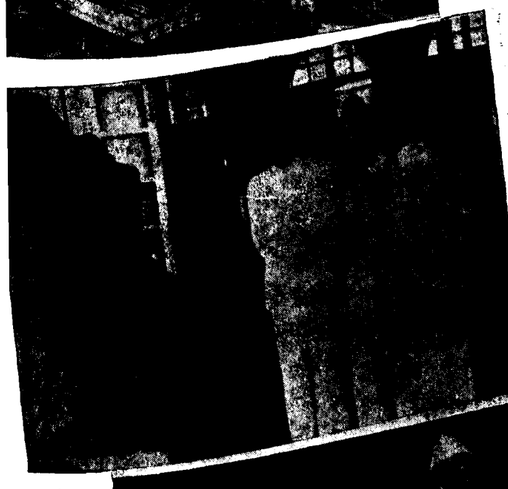
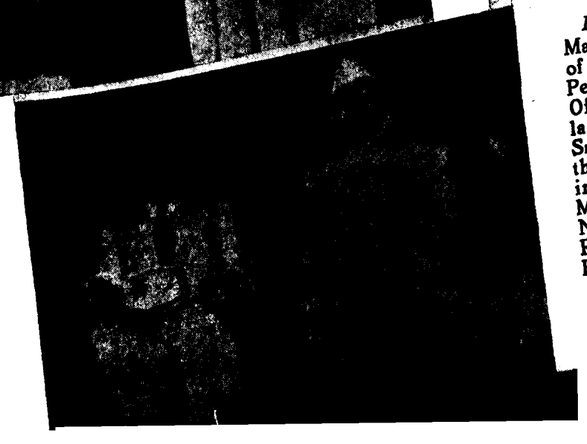
MARSHAL TITO VISITS MADRAS

Marshal Josip Broz Tito President of the Federal People's Republic of Yugoslavia, recently visited Madras in the course of his all-India tour.





Pictures show: Taking the Salute at the Madras Harbour; Inspection of the Guard of Honour; at the Integral Coach Factory, Perambur, where the Chief Administrative Officer Sri K. Sadagopan explains a model layout of the Factory to the Marshal; Shri Sri Prakasa, Governor of Madras, points out the finer points of a piece of sculpture in the Madras Museum; another study at the Museum; with Prime Minister Jawaharlal Nehru at the Avadi Congress; and at the Reception accorded by the Governor at Raj Bhavan.

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A Peep into Bihar's Past and Present

Some publications of the Public Relations Department, Bihar, Patna-1.

◆

1 Glories of Bihar—Re. 1
2 Mother of Pearl Industries in Bihar
3 Nationalisation of Transport in Bihar
4 Silk Industry in Bihar
5 Co-operative Movement in Bihar (*Hindi*)
6 Irrigational Development in Bihar
7 Educational Development in Bihar (*Hindi*)
8 Adivasis and their Welfare
9 Progressive Bihar, Vol. I
10 Expansion of Gram Panchayat in Bihar (*Hindi*)
11 Progress of Basic Education in Bihar (*Hindi*)
12 Rehabilitating Displaced Persons, Bihar
13 National Cadet Corps in Bihar
14 Housing Industrial Labour in Bihar
15 Facts and Figures about Bihar—Re. 1
16 Industrial Development in Bihar (*Hindi*)
17 Progressive Bihar, Vol. II
18 Community Project in Bihar—Re. 1
19 Community Project in Bihar (*Hindi*)—As. 12
20 Five-Year Plan for Bihar—As. 12.
21 Five-Year Plan for Bihar (*Hindi*)—As. 8
22 Patna (See Bihar Series I)—As. 12
23 Nalanda (See Bihar Series II)—As. 12
24 Ranchi (See Bihar Series III)—As. 8
25 Vaishali (See Bihar Series IV)—As. 8
26 Jamshedpur (See Bihar Series V)—As. 8
27 Rajgir (See Bihar Series VI)—As. 8
28 Jain Shrines (See Bihar Series VII)—As. 8
29 Diary, 1955 (*Hindi*)—Re. 1-4-0
30 Bihar, 1952-53 (*English*)—Re. 1-8-0
31 Bihar, 1952-53 (*Hindi*)—Re. 1
32 Bihar, 1952-53 (*Urdu*)—Re. 1
33 Bihar, 1953-54 (*English*)—Re. 1-8-0
34 Bihar, 1953-54 (*Hindi*)—Re. 1
35 Bihar, 1953-54 (*Urdu*)—Re. 1
36 Mica Industry in Bihar—As. 12
37 Panchayat Raj in Bihar—As. 12
38 Cottage Industries in Bihar—As. 10
39 Cottage Industries in Bihar (*Hindi*)—As. 8
40 Progressive Bihar, 1953-54—Re. 1

MADHYA PRADESH IS BUILDING FOR PLENTY

Madhya Pradesh is well set to building for plenty and prosperity.

Already large grounds have been covered in the fulfilment of targets under the State's Rs. 44·4-crore Five-Year Plan. On Education alone, the expenditure has been Rs. 4 crores.

A network of 90 Development Blocks is spread over 12,000 villages in the 22 districts of the State to cover a population of 5,000,000.

In the three years of the Plan, the State has brought 61,000 additional acres of land under irrigation, started 2,028 Primary Schools, established 1,702 Gram Panchayats and 1,262 Co-operative Societies.

Power plants in the State, designed to produce 160,000 K.W. are already supplying nearly 69·30 million units to Industry and 0·28 million units to Irrigation. Towns above the population of 10,000 will be supplied power as lines are erected.

The first Newsprint Mill in India, the Nepa Mills, is poised for production at the rate of 100 tons of newsprint per day.

The Ballarpur Paper and Strawboard Mills, with an annual production capacity of 7,500 tons, has already gone into production a year back.

A Cottage Industries Institute conducts research and imparts training in various crafts. A Rs. 5 lakh-scheme helps the unemployed who take to handicraft.

With its rich iron deposits and extensive coal-fields, vast areas of dolomite and limestone, near monopoly of the country's manganese yield, and a central position, the State bids to be the centre of basic heavy industries.

Mountains of iron ore--20 miles long and 400 feet high in one place, are estimated to contain 165 million tons of ore to form the nucleus of the State's Steel Industry.

The State has rich forests, mighty rivers and vast open spaces to make it the future industrial beehive of the country.

Madhya Pradesh bids to be a pillar of strength and stability in future India.

THE CONGRESS EXHIBITION

Madras Information

Published every month by the Director of Information and Publicity
Fort St. George

Vol. IX, No. 3 "WE SEEK TO SERVE AND NOT TO COMPETE" March 1955

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COVER PAGE : The gushing waters of the Periyar river, which are to be harnessed in the latest hydro-electric project launched by Madras State.

SECOND WRAPPER (*Opposite Page*) : Many distinguished visitors to the Congress Exhibition at Toynampet (Madras City) evinced keen interest in the Government stalls. Pictures show (Left) : Prime Minister Sri Jawaharlal Nehru at the Electricity stall ; Sri K. Kamaraj Nadar, Chief Minister, at the Hall of Information, the Stri Sadana and Police stalls ; The long queues : (Right) : The Prime Minister at the Highways stall ; Dr. Punjabrao Deshmukh, Union Minister for Agriculture, at the Agriculture stall ; Sri M. Bhaktavatsalam, Minister for Agriculture, at the Information stall ; and the Maharaj Kumar and Maharaj Kumari of Sikkim at the Industries stall.

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Local Development Works

Local Development Works are becoming increasingly popular. These are small works undertaken by the villagers for their benefit with a half-grant from the Centre. The scheme is restricted to areas which do not have the benefit of intensive development under the National Extension Services or the Community Development programme. It was not possible to do much on these works last year, but the unspent provision of Rs. 20 lakhs of last year and the sum of Rs. 29 lakhs available for the current year are all expected to be utilized before the end of the year. The Government have recently liberalized the rules for the sanction of these works. Villagers may now start works costing less than Rs. 3,000 each, without detailed estimate and prior scrutiny.

The Social Welfare Board, a Central organization for the uplift of women and children under the Chairmanship of Srimathi Durgabai Deshmukh, is starting various ameliorative measures in different centres in the country. Seventeen such centres are being set up in this State and each centre will be given a grant of Rs. 25,000 by the Central Welfare Board. The State Government and the villagers have to find an equal sum and the Government have agreed to assist this scheme with grants to the extent of Rs. 12,500 per centre, on the certificate of the District Collector that the centres in his district are doing useful work.

Road Development

We have been able to accelerate our road works very considerably during the year. The Government of India have agreed to give us grants amounting to about Rs. 138 lakhs on a number of road works of inter-State importance and intended to open up backward tracts. Twenty works are being taken up under this programme and substantial progress may be expected during the Budget year. Works have commenced on the West Coast Road which is being upgraded with bridges, culverts and black-top to provide an all-weather Highway from Bombay to Cape Comorin, at a cost of about Rs. 282 lakhs for the stretches in this State. The Madras Government had undertaken to meet half the cost of these works from the State's share of the Central Road Fund.

The Government of India have since agreed to meet the full cost of these works from the 1st April 1955 and this would release for use elsewhere, our share of the Central Road Fund. The Government have now decided to use Rs. 30 lakhs out of the sum so released, for giving black-top to stretches of State Highways bearing heavy bus traffic. The total provision in the Budget for capital improvements to our road system under National Highways, State Highways and Major District Roads, is about Rs. 172 lakhs and we may hope to improve on this outlay in the coming years.

came into force late in the year and may yield about Rs. 20 lakhs during the rest of the year.

Even with this addition, the proceeds from General Sales Tax amount only to Rs. 875 lakhs as against the Budget Estimate of Rs. 950 lakhs. The shrinkage in Sales Tax is made up to some extent under Land Revenue which is now expected to be Rs. 636 lakhs as against the original estimate of Rs. 595 lakhs. The favourable seasonal conditions and the new graduated surcharge on larger holdings account for this increase. Other favourable features on the Revenue side are receipts from Electricity, Rs. 257 lakhs against the original estimate of Rs. 207 lakhs and Forest, Rs. 145 lakhs against the original estimate of Rs. 110 lakhs. For the first time, we are taking a credit of Rs. 10 lakhs for this year and Rs. 25 lakhs for the next under Estate Duty levied on commercial and professional wealth.

Increase in Expenditure

The substantial increase on the expenditure side of the revised estimate should not cause any surprise. We have expanded the Development services during the course of the year. The Education Budget alone has gone up by Rs. 61 lakhs from Rs. 854 lakhs to Rs. 915 lakhs. Civil Works have registered an increase of Rs. 94 lakhs mostly on roads and to some extent on water-supply and drainage schemes. We have also covered new areas with the National Extension Services, after the Budget was framed.

The capital expenditure for the year is expected to be Rs. 13,51 lakhs as against the previous estimate of Rs. 12,62 lakhs. The increase has been substantial under rural electrification. There has been larger outlay under loans and advances also, mainly to Municipalities on Urban Water-supply Schemes. The loans expected from the Centre under different heads amount to Rs. 12,00 lakhs. The year is expected to close with a cash balance of Rs. 367 lakhs.

Budget Estimates, 1955-56

The Budget Estimates for 1955-56 anticipate a revenue of Rs. 46,27 lakhs on existing taxation and an expenditure of Rs. 49,58 lakhs, leaving a deficit of Rs. 331 lakhs. Provision has been made for 261 new schemes including the school-fee concessions and the special grant to Local Bodies referred to earlier. The present estimates are on the assumption that seasonal conditions will be normal, that Land Revenue will come in without material default and that no large outlay will be called for on distress relief measures. Receipts under Sales Tax have been fixed at Rs. 920 lakhs, taking credit for Rs. 40 lakhs from the increased sales tax on fine and superfine cloth and Rs. 25 lakhs as additional receipts due to the improved seasonal factor. In view of the rapid expansion of our power grid, the net revenue from electricity schemes is expected to be Rs. 320 lakhs as against Rs. 257 lakhs in the current year.

On the expenditure side, there is all round expansion in all the welfare departments. The provision for the welfare of Harijans and Backward Classes has been stepped up and is now expected to be about Rs. 110 lakhs. A provision of about Rs. 15 lakhs has been made for improvements to our hospitals and increase in bed-strength. There is an apparent increase under Police expenditure from Rs. 463 lakhs to Rs. 186 lakhs, but this is due to the transfer of the Prohibition staff from the Board of Revenue to the Police Department and involves no real increase.

Capital Expenditure

The anticipated capital expenditure for the year is Rs. 20,60 lakhs, made up of Rs. 746 lakhs on Irrigation, Rs. 11,40 lakhs on Electricity and Rs. 174 lakhs on buildings, transport, industries and as compensation to Zamindars. There is a provision of Rs. 15 lakhs for the construction of quarters for policemen in the City and mofussil. This is part of a long-term programme costing about Rs. 4 crores on which we have sought Central assistance. If that is forthcoming, we may hope to accelerate the pace of this programme, so that the policemen all over the State can soon be housed in reasonable living conditions. Other building provision includes allotments of Rs. 12 lakhs for basic training schools and Rs. 2 lakhs for further extensions to the Todhunternagar Government Servants' Colony.

It has been decided to strengthen the City transport with another batch of 50 heavy diesel buses, for which a provision of Rs. 25 lakhs has been made. We have been negotiating with the Andhra Government on the division of the shares worth Rs. 102 lakhs in the Industrial Investment Corporation, which was serving the Composite State. The Andhra Government are likely to take over the investments of the Corporation amounting to Rs. 16 lakhs in that area towards their portion of the share capital worth about Rs. 36 lakhs and we may have to pay them the balance in cash. Pending a satisfactory settlement which is now in sight, a provision of Rs. 20 lakhs is being made in the Budget.

Under Loans and Advances, the anticipated outlay is Rs. 612 lakhs. This sum includes a provision of Rs. 190 lakhs to Local Bodies for Urban Water-supply and Drainage Schemes referred to earlier. Recoveries during the year are expected to be Rs. 255 lakhs, leaving a net outlay of Rs. 357 lakhs.

New Taxation Proposals

With our enormous commitments on the capital side and our fast growing needs on Welfare Services, we cannot leave the large revenue deficit of Rs. 331 lakhs uncovered, especially after a run of deficit Budgets. The new taxation measures, namely, the Agricultural Income-Tax on Plantations, the Betterment Levy and the Revision of Court Fees may bring in about Rs. 50 lakhs during the Budget year and this may reduce the deficit to Rs. 281 lakhs.

It is now proposed to levy a flat surcharge of two annas in the Rupee on Land Revenue on all lands, wet, dry and garden and on all water-rates. The amount of this surcharge will not be taken into consideration for reckoning the special levy on larger holdings under Act XIX of 1954. This measure will yield about Rs. 75 lakhs and will go towards the grant of Rs. 75 lakhs proposed earlier for augmenting the revenues of Local Bodies.

Excepting superior cigarettes and cigars which are taxed separately under Act IV of 1953, tobacco and its derivatives are now exempt from the sales-tax. In a State where practically every commodity including foodstuffs and cloth are subject to sales-tax, there is no justification for exempting tobacco. We were taxing tobacco till about 1944, when it was given up in lieu of the compensation offered by the Centre. Now that the Central subvention has been stopped, the Government consider that tobacco and all its derivatives excepting superior manufactured tobacco which is being taxed at a higher rate under Act IV of 1953, should be subject to the General Sales-Tax as any other consumer goods. Cigarettes costing less than 3 pies each, will be taxed at 5 per cent of turnover at one single point and will thereafter be exempted from the General Sales-Tax now proposed. These measures may bring in about Rs. 50 lakhs in the Budget year.

In the last Budget, we gave exemption from sales-tax to certain perishable commodities like meat, fish and vegetables. On the same principle, it is now proposed to grant exemption from sales-tax to onions, potatoes, betel leaves and plantain leaves. Co-operative societies producing palm gur will be exempted from sales-tax on their sales of palm gur. Sales by cottage industrial co-operative societies of such articles as carpets, pots, stoneware, brassware, toys, etc., produced by the members of these societies, will also be exempted from sales-tax. These concessions will cost about Rs. 10 lakhs but may bring in considerable relief to a large number of petty dealers and co-operative societies.

The net yield of these new taxation measures will be about Rs. 115 lakhs and will further reduce the deficit to Rs. 166 lakhs. It is proposed to leave this deficit uncovered, in the hope that some further measure of assistance is in store for us in the Central Budget.

Ways and Means

Our requirements on the Ways and Means side during the year will be about Rs. 30 crores.

As against these requirements, we hope to have an opening cash balance of Rs. 367 lakhs and a net credit within the year of Rs. 212 lakhs under Deposit heads and State Trading Schemes, making a total of Rs. 579 lakhs. The Budget assumes that we would be able to get loans from the Centre and the open market to cover our further requirements amounting to about Rs. 24 crores.

	RS. LAKHS.
Capital Expenditure	20,60
Net disbursement under Loans and Advances.	3,57
Repayment of Debts to the Government of India and the public.	3,44
Revenue Deficit	1,66
Balance to be kept in the Reserve Bank and Treasuries.	50
Total ..	29,77 or Rs. 30 crores in round figures.

Second Five-Year Plan

The Second Five-Year Plan is now under consideration. The Planning Commission have yet to issue the broad directives for this Plan, but on present indications, it seems safe to assume that the second Plan can be double the size of the current one. The emphasis which we laid in the first Plan on large irrigation and electricity works was indeed very necessary for the rapid economic development of the country. But this meant that we did not have resources to cover larger tracts of the countryside with tangible benefits from the Plan. The second Plan should provide certain basic requirements of the people of all villages like primary education, drinking water-supply, rural communications, agricultural facilities, rural industries, medical assistance, etc.

The success of any Plan will depend largely on the willing co-operation of the people. In order to ensure this, the wishes of the people and the extent to which they are willing to assist in the endeavour with money and labour, should be ascertained in a general way. The State is too large a unit for planning of this detailed magnitude and therefore, the new Plan should be prepared for each district under the direction of the District Collector in consultation with an advisory body. It is yet too early to give any indication of the size of the district plan, but it may not be unrealistic, if the outlay expected of the Government over the villagers' basic needs in each district, is of the order of Rs. 2 to 3 crores for the five-year period. To this sum will be added the villagers' contribution in cash and kind and the portion of the outlay on larger works planned at the State and Central level, and we may arrive at Total District Plans of the size of Rs. 10 to 15 crores.

Targets for the New Plan

The targets for the new Plan under the various nation-building departments are getting ready. On Electricity, our target is to accelerate rural electrification to cover at least 1,000 villages per year. Large blocks of additional power will be required for this purpose and therefore, the Periyar and the Kundah Hydro-electric projects should be completed soon. The large quantities of seasonal power which we could generate during the irrigation season should be framed up by a big thermal plant based on Neiveli lignite. The plan for the Electricity Department may run up to about Rs. 80 crores.

On the side of Irrigation, we are almost at the end of our resources in respect of dependable water sources. A few medium-sized works like the Kattalai and Pullambadi channel schemes in Tiruchirappalli, the Thoppiar scheme in Salem, the Kanhirapuzha scheme in Malabar and a few others are being considered. The main emphasis of our irrigation programme should be on a large number of small works wherever water is available, on the renovation of the existing tank system, and also on tapping the underground water resources, where conditions are favourable. We may hope to spend about Rs. 100 to 150 lakhs on these minor works in each year of the Plan period. A target of about Rs. 25 crores is all that we can hope to reach on irrigation during the period.

In the field of Agriculture and Rural Development, we may extend the National Extension Service over the whole State early in the Plan period. This ameliorative measure coupled with the villagers' programme already mentioned, should bring in a fair measure of prosperity and contentment to our rural masses.

Regarding Industries, the Lignite project is well in sight as a Central enterprise. The possibility of using lignite for a steel plant is still being examined. We are also pressing for the location of Heavy Electrical Industry in the South and let us hope something will come out of these speculations.

For rapid industrial development and for providing employment opportunities to the rural masses we must necessarily turn to small-scale and cottage industries, well dispersed in the countryside. Even with the recent stress on the socialization of the means of production, this is a field where private enterprise has to play a considerable part. The industries selected must be capable of absorbing the spare time of agriculturists in between the crop seasons. The State may assist with technicians, capital and marketing facilities. The Government are now considering how the rules governing State Aid to Industries may be liberalized even at some measure of risk. We may set up industrial co-operatives under Government supervision to manufacture articles of common use such as agricultural implements and household utensils. We may also start industrial workshops in every district with a view to train skilled craftsmen like blacksmiths, carpenters, masons, cobblers and other skilled workers to be absorbed in rural industries. The Government's efforts have been mainly towards enrolling weavers into the co-operative fold, effecting improvements in their technique and ensuring them a reasonably protected internal market. The new plan should provide for a further intensification of these efforts, so that this major cottage industry could be placed on a stable basis.

APPENDIX I.

Statement showing the details of expenditure on the Schemes included in the Madras State Five-Year Plan.

Main Heads of Development. (1)	Provision made in the Five-Year Plan. (2) RS LAKHS	Expenditure incurred in end of 1953–54. (3) RS LAKHS	Estimate, Revised 1954–55. (4) RS LAKHS	Estimate, Budget 1954–56. (5) RS LAKHS	Total of expenditure incurred in the first three years and estimated expenditure for the last two years. (6) RS LAKHS
I. Agriculture and Rural Development—					
A. Agriculture	9,02	5,68	2,23	1,28	9,19
B. Animal Husbandry	56	22	10	15	47
C. Dairying and Milk Supply	13	9	1	3	13
D. Forests	75	12	6	7	25
E. Co-operation	17	6	4	3	13
F. Fisheries	49	26	6	5	37
G. Rural Development	30	31	7	6	44
Total I ..	11,42	6,74	2,57	1,67	10,98
II. Major Irrigation and Power Projects—					
A. Irrigation Projects	20,19	11,17	4,17	6,19	21,53
B. Power Projects	30,86	13,37	7,14	11,40	31,91
Total II ..	51,05	24,54	11,31	17,59	53,44
III. Industry—					
A. Cottage Industries	44	36	7	9	52
B. Other Industries	1,28	78	19	21	1,18
Total III ..	1,72	1,14	26	30	1,70
IV. Transport (Roads)—					
A. Highways	3,5	2,15	42	56	3,13
V. Social Services—					
A. Education	4,94	1,54	99	1,43	3,96
B. Medical	2,48	1,72	34	35	2,41
C. Public Health	5,18	2,00	96	2,58	5,54
D. Housing	1,90	1,06	28	27	1,61
E. Amelioration of Backward Classes.	4,16	2,38	1,03	1,08	4,49
Total V ..	18,66	8,70	3,60	5,71	18,01
Total State Plan— I to V	86,43	43,27	18,16	25,83	87,26

NOTE.—The figures for Community Development Projects, etc., which are excluded from the above statements, are as shown below :—

	RS LAKHS	RS LAKHS	RS LAKHS	RS LAKHS	RS LAKHS
Community Development Projects, National Extension Services and Local Development Works including contributions from the public.	6,41	56	2,82	3,47	6,85

-7 MAR 1955
MADRAS

Sri C. SUBRAMANIAM
Finance and Education

All-round Expa

Bud

By SRI C. SU

The Budget for 1955–56 covers the final year of the current Five-Year Plan. It envisages an outlay of Rs. 86·43 crores on schemes financed by the State Government and Rs. 6·41 crores on schemes like Community Development projects, National Extension Services and Local Development works, financed largely by the Central Government, making a total outlay of Rs. 92·84 crores. During the first three years, that is up to the 31st March 1954, we had spent on schemes in the State sphere, Rs. 43·27 crores or about 50 per cent. The slow progress of the Plan in the early years was due to the heavy strain on our resources, following adverse seasons necessitating large outlays on relief measures.

The expenditure during the current year, i.e., the fourth year of the Plan, is expected to be Rs. 18·16 crores and this leaves a balance of Rs. 25·00 crores to be expended in the Budget year. The actual outlay proposed in the Budget is Rs. 25·83 crores, which means that we are implementing the Plan for the State in full. The Centrally sponsored schemes of Community Development projects, National Extension Services and Local Development works were initiated only after we were half-way through the Plan. Of the sum of Rs. 6·41 crores proposed under these heads, only Rs. 56 lakhs were spent up to 31st March 1954. The proposed measures have since gained considerable momentum and an outlay of Rs. 282 lakhs is anticipated in the current year and Rs. 347 lakhs in the next year. If these anticipations come true, this part of the Plan will also be fully implemented.

What Planned Outlay Means

In order to appreciate the significance of the Plan, it is necessary to note the precise distinction between expenditure covered by the Plan and expenditure outside the Plan. A scheme is treated as part of the Plan only if it is intended to provide a new amenity to the people. The test to be applied is whether the outlay is on a new service and if so whether it confers

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(From the speech of Sri C. Subramaniam, Finance Minister, presenting the Budget for 1955–56 to the Madras Legislature on the 26th February 1955.)

Rural Water-supply

We have been able to make some headway on Rural Water-supply recently. The provision in the current year for this villagers' amenity is Rs. 40 lakhs from State funds and Rs. 30 lakhs from the Centre under the Local Development Programme. A contribution ranging from 25 per cent to 50 per cent is expected from the beneficiaries, which means that over rupees one crore worth of works can be done in the year. Composite schemes for groups of contiguous villages with overhead tank and pipe system are also being worked out. The Board of Revenue is now aiming at an annual target of 3,500 wells and about 50 composite schemes to cover about 4,000 villages.

We are now having about 15,000 public-owned drinking water wells in the State and at the present pace, we may hope to cover all villages and major hamlets with at least one well each during the second Plan period. Another programme under preparation, is to provide the Delta villages which are most affected by cholera, with composite schemes of protected water-supply. A Central grant of about Rs. 60 lakhs has been promised and we have to find an equal sum as contribution by villagers or out of State funds.

Urban Water-supply

In the matter of Urban Water-supply and drainage schemes, we have not been able to do much in the past for lack of resources. The Government of India have recently agreed to give us a loan of about Rs. 250 lakhs to be utilized before the end of the Budget year and the necessary Public Health organization is being built up. The Madras City Corporation will be given a loan of about Rs. 60 lakhs for setting up rapid mechanical filters and for improvements to the existing distribution system.

Comprehensive water-supply schemes are being taken up for the municipalities of Mangalore, Tiruppur, Tirunelveli, Melapalayam, Salem, Coimbatore, Madurai, Gobichettipalayam, Cuddalore, Dindigul and Kumbakonam.

National Extension Services

The Community Development projects and the National Extension Services are making steady progress after the initial teething troubles. The more intensive form of Development envisaged under the Community Projects, is now in operation in 21 blocks, each block covering about 100 revenue villages. The National Extension Services have been extended over another 48 blocks, making in all 69 blocks. We have thus reached the target of covering one-fourth of the rural areas during the present Plan period.

The Budget provides for taking up 36 new blocks under National Extension Services and for converting 14 of the existing National Extension Services blocks into Community Development blocks. An outlay of Rs. 1·91 lakhs is provided for these services in the current year and Rs. 256 lakhs in the Budget year.

LABOUR

The Employees' State Insurance Scheme

By SRI M. BHAKTAVATSALAM, Minister for Labour

It is a matter of pleasure that the Employees' State Insurance Scheme comes into operation from 21st January 1955, in Coimbatore Town and certain suburbs thereof. The Scheme covers in all about 40,000 employees including 8,000 women workers employed in about 100 factories. Coimbatore is one of the most important industrial towns in Tamilnad. Before the Scheme could be extended to all the factories in the State, the Government thought it desirable to make a start in Coimbatore first as an experimental measure with the plan for further extension in the shortest possible time. With public co-operation, I have no doubt that this plan will be fulfilled successfully.

So far, the Scheme has been in operation in Delhi, Kanpur, some industrial towns in the Punjab, Nagpur and Greater Bombay covering about six lakhs of employees. It is the intention of the Government of India to have the Scheme implemented in all the major industrial centres throughout the country before the close of this year. So far as our State is concerned, it will also be our endeavour to the extent our finance permits, to give effect fully to this intention of the Centre.

Comprehensive Social Security Measure

Briefly, the Scheme at present applies to all factories other than seasonal factories using power and employing 20 and more persons. In the first instance all employees including persons holding supervisory posts and drawing a monthly remuneration of Rs. 400 and below per mensem, are brought within its purview. There is provision for extending the benefits of the Scheme in course of time to all classes of establishments, industrial, commercial, agricultural or otherwise. So, this is only the beginning of an all-comprehensive social security measure covering all classes of persons throughout the country.

The benefits are of two types, one of kind and another in cash.

(*a*) *Medical Benefit.*—Every insured person is entitled to free medical treatment. Medical treatment comprises dispensary treatment or treatment at the Insurance Medical Practitioners' clinics, domiciliary visits by the Insurance Medical Officers or Insurance Medical Practitioners and in cases where the seriousness warrants, hospitalisation also. In addition to these, the workers under the Scheme would be entitled to specialists' services

SAVINGS FORTNIGHT: Sri K. Kamaraj Nadar, Chief Minister, presided over a public meeting held at Rajaji Hall (Madras City), in connection with the Savings Fortnight arranged by the National Savings Organisation.

and also X-ray and other pathological attendance. In cases of emergent accidents, ambulance facilities also would be provided. All these medical facilities would be free of charge to the workers.

In addition to these, costly medicines also would be given to the workers free of cost. Where there are no dispensaries or medical practitioners in places near the residence of some of the workers, especially those residing in sparse areas round about Coimbatore, a mobile dispensary would be visiting the areas and providing treatment. The intention is to make medical services available near the residence of workers as far as possible.

National Savings

The State, all powerful as it is, can levy more and more taxes; and the individual, finding himself helpless, has to go on paying, however unhappy he might feel in consequence. In the scheme of National Savings, however, we find a happy mean reached when individuals can voluntarily invest money in the coffers of the State, assured that that money will come back to them in their individual capacities in due time with a decent interest added on, while the State can receive the money it needs for specific nation-building purposes; and in connection with which it has at the same time, to realise its responsibility to repay the same in full some day.

Thus the relationship between the individual investor and the State that accepts the money, becomes personal and friendly. It is the relationship of the banker with his constituent to mutual advantage; it is not the relationship of any supreme power that can levy a toll by force on its victim who cannot choose but pay. And then the investor here has also the great joy of knowing that the money that he is giving, will not only come back to him in full, but will in the meantime, be used for purposes of great public good. The depositor in a bank may not know how its directors will utilise his money, but here he knows that his money will be spent for such useful purposes as would enhance the nation's life and his own in the bargain.

SRI PRAKASA,
Governor of Madras

(*b*) *Sickness Benefit.*—A qualified insured person who is not fit to 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 six 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 one half of his wages for the period for which he is certified as unable to attend to work. In case of total permanent disablement, a life pension of roughly half the wages will be paid and for partial permanent disablement, a proportion thereof depending on the nature of the incapacity will be granted.

(*e*) *Dependants' Benefit.*—In the event of death of an insured person as a result of an employment injury, a pension roughly equal to one half of the average wages will be available to the widow and/or his children provided that the widow's pension will not exceed three-tenth of the wages and each child's one-fifth.

The dependants' benefit to the widows are payable until their death or the date of remarriage. The dependants' benefits to children are payable until they attain 15 years of age or until the age of 18, if they continue education to the satisfaction of the Corporation.

All these benefits come to the insured persons as a matter of right.

Choice of Doctor or Dispensary

One important aspect of the Scheme is that the workers have the option to choose their doctor or dispensary for receiving medical treatment and also a Local Office for receiving cash benefits. It is hoped that the choice of the worker would be from the angle of his convenience in times of sickness in that the place where he is to take medical treatment and receive his cash benefits should be near his place of residence.

Under the existing laws, workers have been hithertofore entitled to compensation in case of employment injuries and to maternity benefits in case of confinements. But the benefits under the Employees' State Insurance Scheme are a marked improvement on the above. Instead of

lump-sum compensation, which get quickly exhausted, pensions have been provided with a view to provide adequate relief to the disabled or to his dependants in case of death.

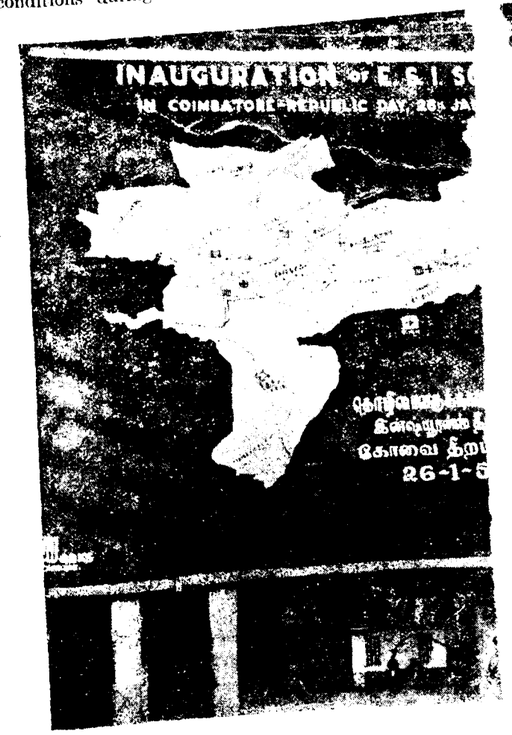
Maternity Benefits

The period of maternity benefits has been extended to 12 weeks and the amount of daily cash benefit is raised to about half the average earnings, subject to a minimum of twelve annas a day. Not only this—in respect of confinement a worker under the Scheme would be entitled to ante-natal and post-natal care and also medical attendance during confinement. This is also a big step forward.

I have only to add a small rider in respect of maternity benefits and it is this. A woman worker would be entitled to maternity benefit under the Scheme in Coimbatore from about October this year. Until then, the employers would continue to meet their liabilities as hitherto under the Maternity Benefit Act. This waiting for about nine months from the inauguration of the Scheme in respect of maternity benefit is principally due to the fact that the woman worker should become entitled to that benefit by virtue of satisfying certain contributory conditions during the nine months to come. There will be a similar waiting period for cash sickness benefit for a like reason.

Coming to the financial structure of the Scheme, under the Act, principally four parties are finding the finance for the Scheme. They are the Employers, Employees, the State Government and the Central Government. Roughly, two-thirds of the cost of all benefits is provided by the employer and about one-third by the worker. The State Government meets about 25 per cent of the cost of medical benefits only. The Central Government pays for the administrative expenses of the Employees' State Insurance Corporation to the extent of two-thirds for the first five years. Thus, broadly speaking, every worker under the Scheme would be getting, for every anna he contributes, about three annas return in the form of medical treatment and cash benefits.

Taking the cost of these benefits alone into consideration, the value of cash benefits is many times greater than the value of the medical benefits. All the same, the medical benefit would be keeping a worker healthy and the cash benefits would be keeping anxiety away from the doors of the worker during times of cessation or of reduced income due to any of the above mentioned contingencies.



Insurance Court and Medical Board

In order that any disputes under this Act may be settled expeditiously, the State Government is providing an Employees' Insurance Court at Coimbatore. At present, taking finance into consideration, it is proposed to attach this work to one of the senior judicial officers of the district, but in due course if experience warrants, the State would not hesitate to set up separate Courts exclusively for deciding these claims. I hope that in the administration of the Scheme, occasions would be far and few, when cases would be brought before these Courts for settlement. Disputes, I feel, should as far as possible be avoided and must, if not avoidable, be confined to the minimum.

To assess the extent of disability in cases of permanent disablements, Medical Boards have been set up consisting of Medical Officers of standing including specialists. In case of any dissatisfaction against the recommendations of a Medical Board, an insured person can prefer an appeal to an Appeal Tribunal in which Employees' representatives also will be acting as assessors to help the tribunal.

In the administration of the Scheme, representation has been given to employees, employer and the medical profession at every stage in th Corporation, the Standing Committee, the Medi Benefit Council, Regional Boards, Local Comm tees, etc., etc. In this important new venture are now launching, we are associating at all l from the Centre down to the local, represent of workers and employers too, to ensure efficient and easy administration.

First of Its Kind in South-East Asia

The Scheme is completely new to our and the first of its kind in the whole East Asia. In the programme of our Gov viz., the building up of a Social Welf the Scheme is like a banyan twig with tialities of the growth of a big ba provided experience gives us the encouragement and the economic favour. I am sure that with the co-op persons, this twig would definitely gigantic tree, covering at that stag cular class or group here and entire Nation.

The watchword of a socialistic one in the country should have the moment of his birth to death. In the joint family system of our ancient days w extent, provided this secur society's pattern as also th outlook have changed and rapidly. To meet these c and at the same time to security I hope that this new social welfare measure will prove very useful. To begin with, only a few lakhs of the population will be benefited, but ultimately the entire 350 millions will have to be provided not only with these elementary measures of security but also with full security against all risks whatsoever.

Provision for Families

It has been pointed out by some that the Scheme even as it is, is incomplete insofar as it does not provide medical care for families of workers. This is but true. I feel that a worker also would be happier—nay, would even insist on his wife and children being entitled to a reasonable amount of medical care and treatment comparable, if not superior to that he himself would be entitled under the Scheme. It is but natural that everyone should think of his wife and children first, then only about and for himself in such matters.

I may assure all that the Corporation is thinking seriously of extending the medical benefit as early as possible to the workers' families also. There is every hope that extension of medical benefits to the families of workers also would follow suit. Meanwhile, I hope the workers at Coimbatore would reap the benefits that the Scheme is conferring on them.

If there are any small points of detail here and there as to administration, the same can be brought to the notice of the Local Committees which would shortly be set up at Coimbatore. The objective of this Scheme is "The Welfare of Labour". The Government solicit the people's fullest co-operation in fulfilling the objective to the largest extent possible, ensuring thereby the building up of a "Welfare State".

(*A.I.R., Madras*).

Do You Know?

About 39 million bales of Indian cotton were consumed in India in 1953–54.

India's annual requirement of paints and varnishes amounts to 33,000 tons, all of which is met from indigenous production.

The estimated annual requirements of pesticides for Government use in India are 7,840 tons, including 7,590 tons of insecticides.

The known deposits of chrome in India are estimated at two million tons.

During 1953–54, 17,980 cwt. of vanaspati valued at Rs. 21,10,000 were exported from India.

The average per capita consumption of fish in India is only 3·98 lb., compared to 83·3 lb. in Japan, 70 lb. in Burma and 16 lb. in Ceylon.

The Periyar Hydr

By Sri V. P. APPADURAI, Ch

The Periyar Hydro-electric Scheme was inaugurated on 11th February 1955, by Sri K. Kamaraj Nadar, Chief Minister. The scheme when completed will be a major contribution to the Madras Grid, generating 140,000 KW from June to March and 37,000 KW from March to June.

The Periyar river has its origin near Kallimalai —a peak on the ridge between Travancore State and Sankaranayinarkoil Taluk on the Madras side. For the first 16 miles the river cuts its way through the hills covered with virgin forests in a northerly direction. About three or four miles below Thanikudi (where a Forest rest-house is in existence) it takes a turn to the west and flows for about eight miles where it was dammed 60 years ago, in 1893. Below the dam site the river flows generally in a north-westerly direction and finally empties itself into the Arabian Sea near Cranganur.

The total length of the river is about 130 miles, catchment area above the dam 239 square s and the average annual rainfall in this ment about 100 inches. From the early part nineteenth century, engineers were contem- g the diversion of the Periyar waters, which practically going to waste, into the Cumbam

proposed construction of the Vaigai Reservoir, which could be used for storing the tail race discharge from the Power Station during the non-irrigation period to be subsequently used for irrigation. By judicious regulation of the Periyar Lake and the proposed Vaigai Reservoir it is estimated that the minimum power draft can be increased from 50 cusecs to 300 cusecs.

The growing demand for power in the State required that the Periyar Hydro-electric Scheme should be included in the First Five-Year Plan and as no time could be lost, the old scheme was revised providing for utilising the maximum discharge from the Periyar Lake, and submitted to Government. Further field investigations were continued to see whether the scheme could be improved. The scheme is for the installation of three generating sets of 35 M.W. each in the first stage to be subsequently increased to four units of 35 M.W. after 10 years. Thus the total installed capacity in the ultimate stage envisaged will be 140 M.W.

Though the scheme was included in the First Five-Year programme, the work could not be proceeded with for want of agreement between the two States. After personal contacts and discussions by the Minister in the States' capitals and at Delhi and by the good offices of the Centre, an agreement was reached, in November 1954, acceptable to both the parties concerned. We are now in a position to commence work on the project.

Prosperity to Madurai

The Periyar Hydro-Electric Scheme will pro employment for a number of people of this during the construction stage and with completion, bring considerable prosperity not to Madurai District but to the whole State. cheap hydro power available, it is expected many industries, large and small, will spring u the vicinity of the scheme area. Power available for extension to a number of villa various purposes like irrigation and other tural operations as well as many small-s several major industries.

The railway line also may be extended scheme to Gudalur and probably up to the Power Station in the near future. Thus, mpletion of the Vaigai Reservoir and the Hydro-electric Projects, Madurai Dis become one of the most enviable par Madras State.

The present scheme provides for a continuous discharge of 1,000 cus irrigation seasons, i.e., from June to 300 cusecs from March to May during of irrigation closure. It is now possi this high discha of 300 cusecs of wa irrigation and store th

POWER

Vaigai Reservoir where it can be stored for irrigation purposes. It will incidentally help power development during non-irrigation periods. The cost of the Vaigai Reservoir is being suitably apportioned between the Public Works Department and the Electricity Department.

Improvements to the existing tunnel.—The capacity of the existing tunnel is only 1,300 cusecs and this will be increased to 1,699 cusecs by increasing the area of cross-section of the tunnel from 96 to 154 sq. ft. and lining it with concrete. The cost of this work will be shared suitably by the Electricity Department and the Public Works Department as by this improvement more discharge from the Periyar Lake into the Vaigai Reservoir is possible during irrigation period.

Tunnel pond and regulating reservoir.—Water from the above tunnel will discharge into a tunnel pond to be formed by a forebay dam which will be 93 feet high and will have a capacity of 3 million c.ft. Necessary surplussing arrangements and headworks for irrigation outlet and pressure tunnel for power-draft will be provided.

Pressure tunnel and surge shaft.—Water from the regulating reservoir will take off through a power tunnel to be drilled. This power tunnel will be of horse-shoe type and 4,188 feet long, the area of cross-section being 154 sq. ft. This tunnel will be capable of discharging a maximum of 1,600 cusecs.

The power tunnel will terminate into a surge tank of differential type which will be 180′ high and 40 feet in diameter. It will be entirely in rock excavation and will be concrete-lined.

The fall in the tunnel will be such that the outlet end at the surge shaft would be well below the minimum draw-down level in the surge shaft to give an effective water seal.

Penstock.—Two numbers low pressure pipelines 10 feet in diameter will take off from the surge tank. After 194 feet each low pressure pipe-line will branch off into two penstocks of 6 feet 6 inches diameter. Of these four high pressure pipes, one will be blank flanged for use at a later date and other three pipes will be connected to individual turbines. The pipe diameter in the three reaches are 78 inches, 72 inches, and 66 inches respectively before being connected to the turbine inlet valve.

The total length of the high pressure pipe is nearly 3,100 feet and each pipe is capable of discharging a maximum of 400 cusecs.

The penstock will roughly follow the line of shortest which runs from the surge shaft to the Power-house. A haulage track alongside the penstock will be constructed for conveying the construction equipment, etc., to the Power-house.

Powerhouse and power plants.—Power-house will be located in the Gh the main road from Cumbum to Th ma will be about 35 miles from Theni, a town in Madurai District in Madras State.

A gross head of about 1,260 feet from the surge tank to the Power-house site is available. The scheme provides for the utilisation of a continuous discharge of 1,000 cusecs during irrigation season for about nine months in the year and a minimum of 300 cusecs during the irrigation closure period, i.e., the balance three months.

There will be initially three numbers 50,000 H.P. turbines each directly coupled to 35,000 K.W. 0·85 P.F. 3 phase 50 cycles 11 K.V. generator and the fourth set will be installed at a later date.

Out-door transformer yard.—The transformer yard will be located by the side of the Power-house. The main structures will be of the double-deck type for carrying duplicate 110 KV. busbars with necessary disconnecting switches.

Three numbers step-up transformers 11 KV./110 KV. 42,000 KVA capacity will be installed initially and one more similar unit will be added later. Besides there will be two numbers 3,000 KVA. 110 KV. 22 KV. step-down transformers for the local supply.

Transmission system.—The power generated at Periyar-Powerhouse will be fed into the existing power grid through 110 KV. transmission lines and will be in parallel with the following systems :—

1. Papanasam Electricity System at Madurai.
2. Pykara Electricity System at Sembatti.
3. Mettur Electricity System at Tiruchirappalli.

For this purpose the following transmission lines will be constructed initially :—

1. Periyar-Theni-Madurai 110 KV. double circuit line—80 miles.
2. Theni-Sembatti-Tiruchirappalli single-circuit 110 KV. line—108 miles.
3. Sembatti-Karur single circuit 66 KV. line—53 miles.

In addition the following lines will constructed within a period of ten years from time Periyar Power-house commences op tion :—

1. Tanjore-Sivaganga 66 KV. single line via Karaikudi, Pudukkottai and Ga kottai—80 miles.
2. Sivaganga-Ramanathapuram

be about 80 miles of double circuit lines and about 350 miles of single circuit telephone lines to facilitate communication between the other stations. Power line carrier current communication will also be provided.

Sub-stations.—For distributing the Periyar power the existing sub-stations at Madurai, Tiruchirappalli, Karur, Sembatti and Sivaganga will be provided with adequate additional equipment and a new 110 KV. sub-station will be constructed at Theni and new 66 KV. sub-stations at Idayakottai, Aravankurichi, Pudukkottai, Gandarvakottai, Karaikudi and Ramanathapuram. There will also be a few new 33/11 KV. sub-stations for distribution purposes.

Camps and roads.—There will be two camps at Periyar, the upper camp being on the north of the ghat road near the 41st mile of the main road from Cumbum, and the lower camp being near the power-house site. Necessary roads and protected water-supply will be provided.

Estimated cost and financial results.—The estimated cost of the scheme as submitted to the Planning Commission was Rs. 10·47 crores. The scheme will be remunerative by more than just meeting the interest charges on capital outlay, depreciation charges, operation and maintenance charges and royalty to the Travancore-Cochin State.

Under the National Extension Service and Village Community Projects the State Government have laid greater emphasis on the progress of rural electrification during the First and Second Five-Year Plans. As such, power demand is expected to increase considerably in course of time.

The Department has already started the preliminary works and the civil works are in good progress. The scheme report contemplates a construction period of four years. Every endeavour is being made to bring the scheme to beneficial use in record time before 1958.

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Fostering Our Agro-Industries

By SRI G. VENKATACHALAPATHY, Director of Rural Welfare

S—is a village only a few miles from my own village. The village was prosperous, populated by well-doing Vanians, the oil-mongering class, as well as by the agricultural classes. There were a number of country oil ghanis or chekkus, all engaged in production for the better part of the year. When I was studying in the elementary school in S——, there being no school in my own village, the country ghani gave us boys a perpetual delight and we used to watch it, never tired of the monotonous and unceasing sound it used to make, interspersed only by the 'hey—hey' from the Vanian who was driving the bullocks round and round the ghani. Even to this day and living in the City as I am the sound sometimes seems to haunt my imagination.

After a long lapse of time during which pages had been written in the history of India and the world, I went to the village a few years ago. During that year, as in the preceding few years, the rains had failed. The village gave a sense of desolation, with all its old-time prosperity gone. There was not a ghani (chekku) in view and on their site other cutcha dwellings had arisen. I was told that some of the Vanians dismantled their ghanis in the village, went to the City and settled there. Others followed suit and most of them returned to the village insolvent and had no courage to reinstal the ghanis. How was this once prosperous village S—— come to decay ?

Nation of Villages

India, as we all know too well, is essentially a country with a pre-ponderant rural population. Out of every five Indians, four are in the villages. In the prosperity of the village, therefore, lies the prosperity of India and this means that agriculture and agro-industries which go with it, decide whether we should prosper or not. The Indian village has long been regarded as the most permanent institution and the self-sufficiency and community life of the village, our greatest heritage. It is in forgetting this that all our problems arise.

Agriculture alone can hardly maintain the village economy. Out of every four villagers, only three can be employed on the land and the fourth should be occupied otherwise. The typical village as it was in ancient times, was a balanced economic unit and was self-sufficient in the matter of food, clothing and other requirements, not excluding luxuries of various kinds. It consisted largely of farmers; but agriculture requires for its practice a certain number of artisans, besides others who carry on trades dependant upon the crops raised on the land, I mean the oil-pressers, cotton ginners, weavers, etc.

Thus a village should have a carpenter to make and repair the ploughs and other agricultural implements, besides supplying the woodwork for buildings, a blacksmith to forge and repair the iron parts of implements, a potter to supply earthware, a weaver to convert the yarn spun by the villagers into cloth both as a whole-time and spare-time job, and an oil-monger to crush oilseeds and supply oil to the villagers. These representative craftsmen practising agro-industries were an integral part of the village community and the well-being of the villages was the collective responsibility of all of them. This was as it should be, but not what it is now today. Why is it so ?

Foreign Exploitation

The opening of the Suez Canal
tion of a network of railways
the 19th Century had, no doubt, a
do with the destruction of the agr
The real factor was, as Mahatma Gand
"the free trade policy inaugurated by the
ment of India during the nineteenth c
which meant "food for Britain, but sac
been poison to India". This trade po
located the balanced economy of the
and led to the progressive decay of her
handicrafts.

The bulk of the raw materials produce
country were taken away, and the cour
given manufactured articles in exchar
was thus slowly but steadily explo
workers were compelled to give
occupations and to take to ag
adding to the pressure on land o
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then should be the remedy ?

Arresting Decay

Of the two mainstays of the land, agriculture and agro-industries, the latter has gone to decay and the country was depending only on agriculture. The shifting of the pressure solely on agriculture, led to its slow breakdown under the double pressure. The remedy seemed to lay only in challenging the exploitation and arresting decay and this remedy was offered by Mahatma Gandhi through his Constructive Programme. Under this programme the starting point is self-reliance. The people must help themselves if they want to redeem themselves.

As the next step, Gandhiji said that no one should wait for anything from outside to do what was necessary here and now. This is self-sufficiency. Every one was to use his or her own hands, get hold of the nearest materials and tools and make things which would be of use in the daily life of the village and which would give work to those who were without it. The lands of the people were their own, the raw materials were readily available, the skill in the fingers was inborn and not dead and inaction meant death.

Gandhiji therefore exhorted everyone to use his hands and the raw materials available and re-exercise his skill. This was *Swadeshi* and the basis for the Constructive Programme, on which even to this day the national economy is largely planned. The All-India Spinners' Association, the All-India Village Industries Association, etc., were all started with these fundamental principles in view and the organizations have beyond doubt achieved to a large measure what Gandhiji wanted should be done.

Economics of Machinery

the question whether industries can be encouraged side by side dustries. The economics of large-tion allows sale of articles at rates o the consumer. The raw materials o the villagers at rates favourable to the capitalist manufacturers returned to the villagers as cheap finished products, thus digging the grave for the agro-industries.

In large-scale production, the extent to which finances are made available determines the production. The production of agro-industries depends more on manpower and it is manpower which is ultimately the real source for the production of wealth. As we in Rural India lack finances but have abundant manpower, agro-industries should thrive and lead to the prosperity of the masses.

Role of Heavy Industries

Heavy industries require less of manpower, but none of finances, and they are for this reason unsuited to India, where the problem is how to meet the essential needs of the Indian, that is, food, clothing and consumer goods. We do not and need not dispute the development of heavy industries which satisfy needs other than those essential for the common Indian. If an article is made by hand and could go to satisfy the needs of the people, its production should be supported and it is a great blunder and retrograde step to encourage the production of similar goods by machinery.

The manufacture of cloth, hand-pounded rice, oils, etc., could be undertaken by hand and so in these fields, mills or factories using machinery should not be allowed to encroach. The development of machinery-using industries could be confined to industries such as Cement, Motor Cars, Steel, etc., which are not necessary to satisfy the essential needs of the common Indian.

Our Main Agro-Industries

What are the agro-industries widely practised in India? Hand-pounding of rice, spinning and weaving (khadi), oil-pressing, palm-gur making, bee-keeping, etc., are the important agro-industries. Palm-gur and bee-keeping industries have necessarily to remain as agro-industries and there can be no fear of their death by mill competition. Not so in the case of the other agro-industries. Heavy machinery have come into the field and these industries have a grim fight ahead.

Hand-pounding of rice, spinning and weaving and oil-pressing are those of the several village industries which are engaging the attention of the All-India Khadi and Village Industires Board set up by the Government of India. It would be worthwhile to study these industries.

Hand-pounding of Rice

The importance of hand-pounding of rice could be realised when it is recollected that India is one of the most important rice-producing countries of the world and that rice forms the staple food for a large section of the population in this country, including practically the whole of South India.

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NG of rice in villages

Nearly 75 million acres of land was under cultivation during 1952–53 and the crop of rice raised was of the order of 24 million tons (in terms of paddy, 36 million tons) nearly.

Within the last five years, acreage has increased by 10½ millions (14 per cent) and production by 3 million tons (12½ per cent). The all-out efforts at improving facilities for agriculture have no doubt been effective.

About half a century ago, the husking of paddy into rice was done traditionally by hand. Of late, machinery has invaded into the field. Though most of the rice-eating tracts have not given up the indigenous method of processing of rice by hand-pounding, unfortunately Madras, the largest rice consuming State, is letting down the agro-industry and has given a severe blow to it.

There are nearly 3,500 rice mills, small and large, in the whole of India, processing about 40 per cent of the paddy produced in India. Of these, 1,038 are in Madras (including Andhra) State and they have processed about 70 per cent of the paddy. It is worth noting that in Travancore-Cochin, milling of rice is completely banned. In Bihar, Orissa, West Bengal and Uttar Pradesh, the percentage of rice milled is less than 20 per cent, that in Bihar being as low as 5 per cent.

The encouragement of rice mills has led to the gradual unemployment in the villages and criminal waste of the spare time of women-folk in villages. If rice-mills which but employ about 50,000 women are completely banned as in Travancore-Cochin, more than 46 lakhs of villagers will find employment in hand-pounding of rice and thereby ensure the distribution of more than Rs. 69 crores per year among the villagers.

Loss in Nutrition

Apart from this important consideration, we have to consider the economic and nutritional factors also. Mill-polishing of rice reduces the percentage of recovery of rice. The statistics collected from the various States by the All-India Khadi and Village Industries Board, show that, while hand-pounding of rice yields 70 per cent rice, processing by the mills yields only 66 per cent. On an average, four per cent of rice is lost in the process of milling and this is not insignificant. This wastage could be avoided if hand-pounding of rice is made universal.

By milling of rice, we lose also a good deal of its nutritional value. Experiments in the field have proved that hand-pounded rice is definitely superior and has greater nutritional value. It, therefore, behoves the Government to encourage and the people to adopt hand-pounded rice. Towards this end, the Government should, on the negative side, completely ban the extension of the huller type of mills and prevent the expansion of the sheller type and on the positive side, help the expansion of co-operatives of hand-pounders.

The Livery of Freedom

About hand-spinning and weaving, much has been said and written. Khadi, spun and woven by the hand, has become the "Livery of Freedom". According to the Mill Owners' Association, "out of every rupee representing the income of the cotton mill company, wages and salaries amount to about four annas". On the other hand, in every rupee of khadi produced, wages alone come to ten annas six pies, and overhead charges (over purchase of cotton and its supply to spinners, collection of yarn and its supply to the weavers and gathering and marketing of cloth) come to three annas. These facts speak for themselves.

The universal adoption of khadi for the clothing needs of the Indian people will mean the introduction of the charka in every home and infuse into the life of the masses, a certain productive activity and help them to earn a supplementary income, besides the growing consciousness of the importance of productive activity in meeting their needs.

Oil Crushing

Oil crushing is one of the most important industries from the ancient days. It is still practised in Tanjore, Coimbatore and Malabar Districts. India is also one of the most important producers of oilseeds in the world and consequently a large producer of vegetable oils. Of the total world production of important oilseeds estimated at 35 million tons per annum, India produces nearly five million tons, that is one-seventh of the total production. A small percentage of the total production of oilseeds goes for direct consumption, exports and as seeds for cultivation and the remaining quantity can be taken to be crushed for the extraction of oils, either by mills or ghains.

More than one million tons of major oils are produced per year, the production during 1952–53 being 1·154 million tons. This figure does not

SPINNING: Making the Livery of Freedom

clude the oil crushed from coconuts which counted for 1·14 lakh tons. Taking into account the coconut oil also, about 1·0 to 1·1 million tons of oils are available for edible purposes.

Our Requirements

The *per capita* consumption of vegetable oils works out to 0·35 ounces as against the nutritional requirement of two ounces. Production of edible oils should be sufficiently raised to ensure the availability of seven million tons of oils.

Apart from the needs of human consumption, the requirement of oils for industrial purposes is also rising, and there is thus large scope for increasing the production of oilseeds and extraction of oils therefrom.

Use of Ghanis

The oil crushing industry is traditionally carried on in the villages through ghanis which are spread all over the country. Though a correct estimate of the number of ghanis is not available, it may roughly be placed at about four lakhs in the whole of India, having a total crushing capacity of 20 lakh tons of oilseeds per annum. In Madras alone (but including Andhra) we have nearly 2½ lakhs of ghanis capable of crushing 12 lakh tons of oilseeds. Though the capacity to produce is there, the ghanis do not actually reach up to it for various causes. Of late, there is a general tendency for the oil industry to drift to urban areas where oil-milling and oil consuming industries are developing.

There are about 1,000 registered oil mills concentrated in Uttar Pradesh, Madras, Bengal and Bombay, with a capacity to crush 30 to 40 lakh tons of seeds but actually crushing about 20 lakh tons. Estimates of extraction of oil by mills and ghani are not available except for 1949–50. In this year about 22·12 lakh tons of oilseeds were crushed by mills and 11·56 lakh tons by ghanis.

OIL-CRUSHING: Improved type of ghani

Ghani-oil Superior

As in the case of hand-pounded rice, the superiority of ghani-oil over mill-oil on nutritive grounds is now well recognised. The All-India Village Industries Association has been long devoting itself to evolving better types of ghanis and has succeeded in its efforts in this direction and in popularising the improved types of ghanis. Nevertheless, the controversy on the advantages and disadvantages of mills and ghanis is still carried on. The mills no doubt have higher efficiency in the extraction but the oils extracted by ghani has a better quality and is the means of providing employment to a large number of persons.

According to the latest Census, the total number of workers employed in the village oil industry is only two lakhs which figure does not possibly include agriculturists who are employed in the industry on a part-time basis. When we recollect that there are nearly two lakh ghanis in India, we are led to the conclusion that a large part of the ghanis are not actually working, and the bulk of the men who have thus been deprived of their traditional employment are workers from villages where unemployment and under employment already exist. Hence arises the need to invigorate the ghani-oil industry.

Quality of Oil-cake

The argument that mill-oil crushing is more efficient in extraction does not really carry us far. While ghani crushing produces 35 per cent of oil, the mills are able to extract 40 per cent. The quality of the oil-cake that is left after the extraction is definitely inferior in the case of the mill industry and it cannot be used as cattle-feed which is in short-supply. To this extent, therefore, the case for mill-oil is weakened.

Moreover, in the case of ghani oil, on account of its local character and limited production, possibilities of adulteration which is quite common in the case of the mill industry are practically remote.

Revival and Research

From the foregoing, it would be clear there are great possibilities and scope for the encouragement and fostering of agro-industries. There is evidence of growing consciousness in the people to the need for reviving the agro-industries which have till recently been on the decadence. Institutions like the All-India Spinners' Association and the All-India Village Industries Association, both started under the auspices of Gandhiji, and the All-India Khadi and Village Industries Board set up by the Government of India only recently, have done and are still doing very useful work in conducting research into the economic use of raw materials, the improvement of the implements and

tools, the improvement of the quality or finish of products, etc., arranging for training facilities and popularisation of the industries themselves and their products.

With their continued assistance it should be possible for the Union and State Governments to whip up the enthusiasm of the people and give the place that is due to the agro-industries in the economy of India.

Place in Agro-Economy

Any plan of agricultural development should go hand in hand with the progress of agro-industries in our country. Improved agriculture can only increase the production of raw materials, such as foodgrains and other commercial crops. The finished products cannot grow on land. They have to be manufactured with the aid of human skill. The farmer in the village cannot rest content with his efforts in increasing the output on land. He has to play his part in the development of agro-industries, which go to fetch him more income.

Whether the raw materials produced in rural areas are sent to the cities, or exported to other countries, is immaterial to the producer. Because in both the cases, he is a loser. As long as the producer sells away all his produce, without making efforts to convert some of them into finished products, he is not doing good either to himself or to his village.

For example, if a farmer sells away all his oilseeds, without making use of the village ghani, he has to necessarily spend more money on oil that is produced mostly in towns, with the help of oil mills, and the quality of groundnut cake he has to purchase will be very poor. Perhaps that is the penalty he is paying for his lack of care and plan in developing agro-industries.

Lesson of the Kural

Saint Tiruvalluvar, the political philosopher of Tamilnad, who lived nearly two thousand years ago, declared "No evil befalls the man whose expenditure does not outrun his income." Let not the farmer of free India forget this axiom. Will he continue to forego his additional income and increase his expenditure? The Indian villager, who is noted for his prudence, will not commit this blunder, if once he understands the economics of agro-industries in the proper perspective.

Especially, people in the National Extension Service and Community Project areas are bound to evince keen interest in the development of agro-industries and continue their vigorous march on the road to progress and prosperity.

VISITORS: An industrial delegation from Afghanistan, touring India to study the development of small-scale industries, called on the Chief Minister, Sri K. Kamaraj Nadar, at the Secretariat.

Social Service Training in Rural Welfare Work

In the era of the Welfare State the prime need is for trained social workers. Good intentions and enthusiasm may be desirable qualifications for social service, but they cannot supersede factors like planned thinking, imaginative approaches, rigorous and comprehensive training, practical grasp of the problems involved, co-ordination and discipline in the execution of the various measures decided upon to tackle the job undertaken.

In the light of this self-evident truth one realises the worth of social service training institutions, and the valuable work they do in turning out trained field workers for the innumerable social service programmes under way in New India.

A premier institution of this type in the City is the Madras School of Social Work, at Casa Major Road, Egmore, Madras City, conducted under the auspices of the Madras State Branch of the India Conference of Social Work and the Guild of Service (Central).

The School has been conducting short-term courses from time to time on various fields of social work. These include a course on Labour Welfare in 1952, on Social Welfare in 1953, on Correctional Administration in 1954 and another course on Labour Welfare in January 1955.

On February 16, 1955, Lieut.-General S. M. Srinagesh, C-in-C-designate of the India Army, inaugurated a short-term full-time six-week training course in Rural Welfare. This course was started by the School with the help of a grant of Rs. 5,000 received from the Central Social Welfare Board. About 50 persons of both sexes have been admitted to the course, which

FANCY SALE: Shri Sri Prakasa, Governor of Madras, at the Fancy Sale organised by the Gandhinagar Ladies Club at Adyar (Madras City)

THE INAUGURATION OF MEENKARA IRRIGATION PROJECT

SIGNAL TO START WORK

Pictures show: the project site, the Chief Minister waving the flag as a signal to start the blasting operations, and addressing those gathered at the pleasant function.

THE NATION MOVES TOWARDS LIGHT, MORE LIGHT

The historic city of Kancheepuram, famous for its glorious Gopurams, beautiful temples and fine textile designs, assumed prominence yet another way recently, because of the All-India Sarvodaya and Nai Talim Conference held there. The presence of Acharya Vinoba Bhave and Dr. Rajendra Prasad, the President of India, accorded additional significance, and saintly dignity to the occasion.

Acharya Kalelkar lighting the lamp, prior to the commencement of the Basic Education Conference.

Dr. Rajendra Prasad arriving at the Conference *Pandal*.

The President addressing the gathering.

Sri Dhebar, Congress President and Sri Subramaniyam, Minister for Education, speaking on the occasion.

The student-dancers from Santiniketan add poise, rhythm and movement to the conference programme by their performance.

Jayaprakash Narain who has dedicated his life to the cause of Bhoodan and Acharya Bhave, its founder have something concrete and constructive to impress on the audience.

consists of lectures, institutional visits, practical training and a camp in a rural development area. The course is intended primarily for persons who are either already engaged in Rural Welfare work or intend to devote themselves to such work.

Lectures are conducted on all working days excluding Saturdays, from 9 a.m. to 12 noon. There are institutional visits or practical work on all afternoons and Saturdays. The following subjects are covered by the lectures—Rural Sociology, Rural Economics, Rural Social Work. Community Organization, Rural Hygiene and Sanitation, Agronomy and Social Education.

Besides there are special lectures and demonstrations by experts. Practical training forms an important part of the short-term training course. The students are being trained in important and useful rural crafts, indigenous games, gardening and other activities. Arrangements have been made for the students to visit various social service institutions in and around Madras so that the students may acquire a comprehensive knowledge of institutional welfare services.

Altogether about 15 institutions are being visited, including the Ashok Vihar, correctional institutions and such others whose programmes are envisaged in the Welfare Extension Projects.

Examinations are to be conducted in all major subjects taught, at the end of the course. A candidate who secures the required number of marks in each subject and has satisfied the authorities in respect of practical work and general abilities will be awarded a certificate by the Madras School of Social Work.

Development Commissioner Appointed

The Government have appointed Sri T. N. S. Raghavan, I.C.S., as Development Commissioner and Secretary to Government in the Public (Planning and Development) Deparment.

The full-time post of Development Commissioner in the rank of a Secretary to Government has been created temporarily for a period of one year to start with. The entire work connected with planning and development will be entrusted to him. The planning work now dealt with in the Finance Department will be transferred to the Development Commissioner and he will function as the Secretary to Government in the Public (Planning and Development) Department. He will also be in overall charge of the work connected with Community Projects and National Extension Service. So far as this work is concerned he will be assisted by the Director of Community Development, who will also function as Deputy Development Commissioner.

The First Five-Year Plan is now drawing to a close and the time has come for framing the Second Five-Year Plan, which should be in operation from April 1956. It is the intention of the Government of Madras that this Plan should provide for meeting, to the extent practicable, certain elementary requirements of the people in all districts in the matter of primary education, drinking water-supply, rural sanitation, agricultural facilities, communications, medical assistance, village co-operatives, etc. The Government also hope to cover the entire State with the National Extension Services during this Plan period. As in the First Plan, there will be considerable emphasis on large irrigation, electricity and industrial works, which can ensure the rapid economic transformation of the country, but the basic needs of villages will also receive high priority.

Before the Plan is prepared on this basis, the wishes of the people in this respect and the extent to which they are willing to assist with money and voluntary labour, should be ascertained in a general way. The State is too large a unit for preparing a Plan of this detailed magnitude and, therefore, the Plan should be prepared for each district under the direction of the District Collector after consulting village opinion. Larger developmental works which cannot be planned at the district level, will be broken up into their component parts, according to the outlay in the districts to be benefited, and these parts will be added on to the Plan of the respective districts to make up the total Plan for each district. In areas served by Community Projects and National Extension Services, the machinery for ascertaining local opinion already exists, but that has to be built up in other areas.

The needs of the villages are many, but the Plan to be realistic should be kept within the resources which can be made available during the period. The preparation of the district plan should therefore be carefully guided and controlled by an officer of adequate seniority, who should be able to issue broad instructions and bring together the heads of nation-building departments and district planning bodies. It is with this view that the Government have decided to create the full-time post of Development Commissioner.

Annamalai University Celebrates Silver Jubilee

By SRI J. M. SOMASUNDARAM, B.A., B.L.

South India can rightly be proud of the manner in which the Silver Jubilee of the Annamalai University founded by the late Dr. Rajah Sir M. Annamalai Chettiar of Chettinad has been celebrated. The genius of a pious, generous and far-sighted educationist transformed what was an obsure village *nattam* into a growing township housing a great unitary residential University with an immense pile of imposing buildings, lecture halls, laboratories, offices, hostels, guest houses, clubs, stores, hostels, set in sylvan surroundings of imperishable charm.

These twenty-five years, 1929–54, have seen a progressive increase in the strength of its alumni, in the number of departments of teaching and faculties and in fruitful service in various directions to the people of Tamilnad, thus fulfilling in the largest measure the great purpose for which the institution was founded.

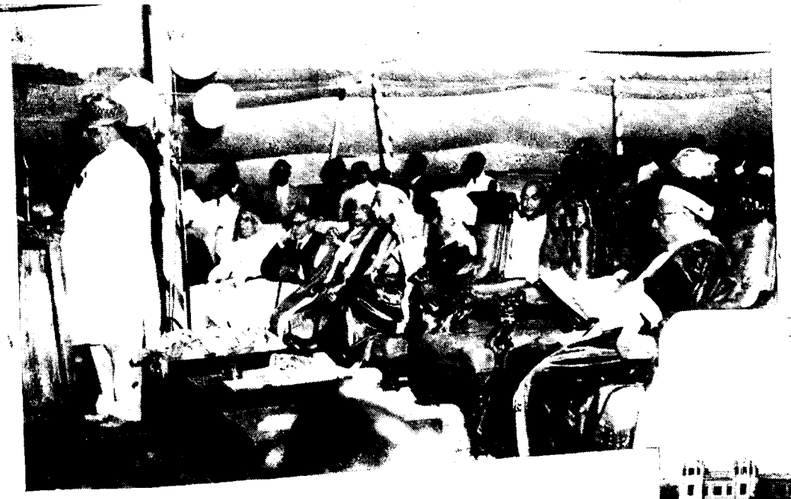
Stage Set for Celebrations

The unparalled interest taken by the people of Tamilnad in the Jubilee celebrations shows the pride of place Annamalai University holds in the hearts of all Tamils. For days together an endless stream of people, men, women and children, poured into the campus to view the progress of the arrangements, and on the great day itself, the 9th of February, a vast gathering of educationists, statesmen and lovers of Tamil collected there.

On the eve of the celebrations, Annamalainagar presented a scene of unprecedented bustle and stir, as the numerous distinguished guests pouring in by every train, were received and taken to their lodgings in the two large guest houses, the newly built hutments, the Engineering and Technology Hostels, the Rani Seethai Achi Hostel, the Music College, the Lady Students Hostel, the Rajah of Chettinad's choultries, the Ramaswami Chettiar Town High School and branches, all of which were filled to their capacity. The guests were received and looked after with the traditional lavish hospitality, which Tamilnad has come to associate with the Chettinad House.

As evening set in the whole campus glowed with thousands of electric lights, the guest pandal fully decorated and glowing, the administrative buildings and Sastri Hall, the Arts and Science Blocks, the Meenakshi College and the hostels all illuminated in outline, the Music College, the Guest House and the Engineering College floodlit in an effulgence of light and the trees all around bearing green, yellow and red lights. Brilliant fireworks lit up the sky and soft music relayed by many loudspeakers filled the whole atmosphere. The entire campus wore a festive look and presented a gala appearance.

LEATHER INSTITUTE: Shri Sri Prakasa, Governor of Madras, presided over the second anniversary of the Central Leather Institute at Guindy (Madras City)

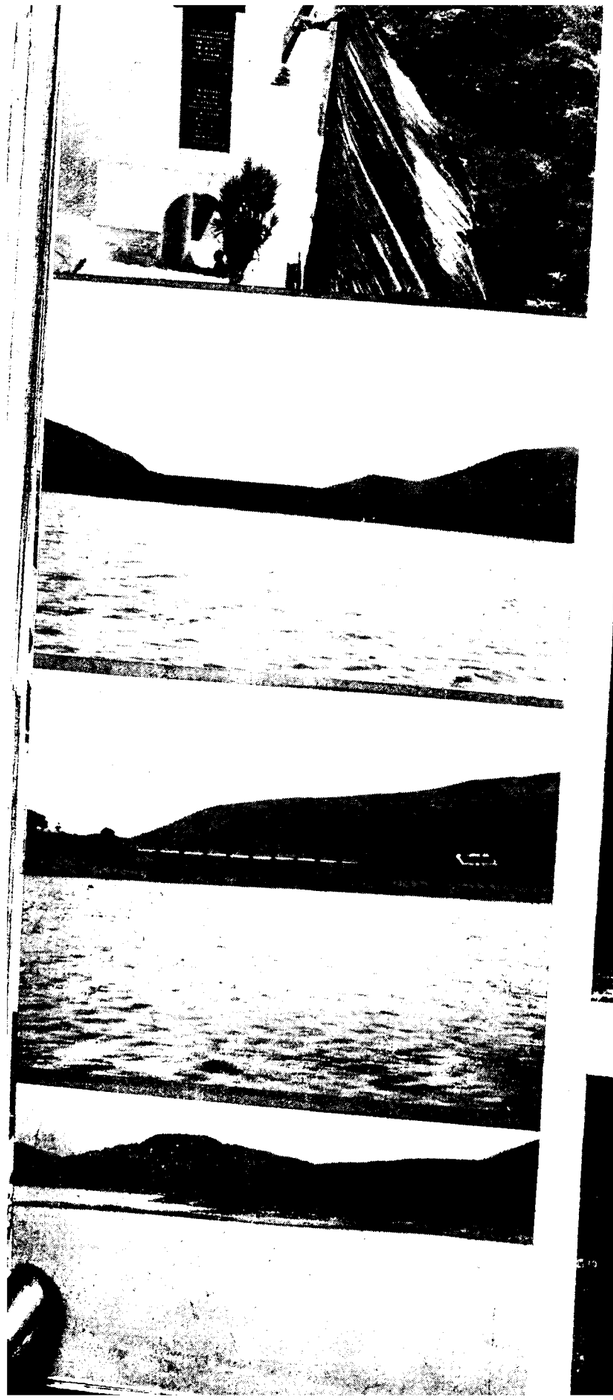


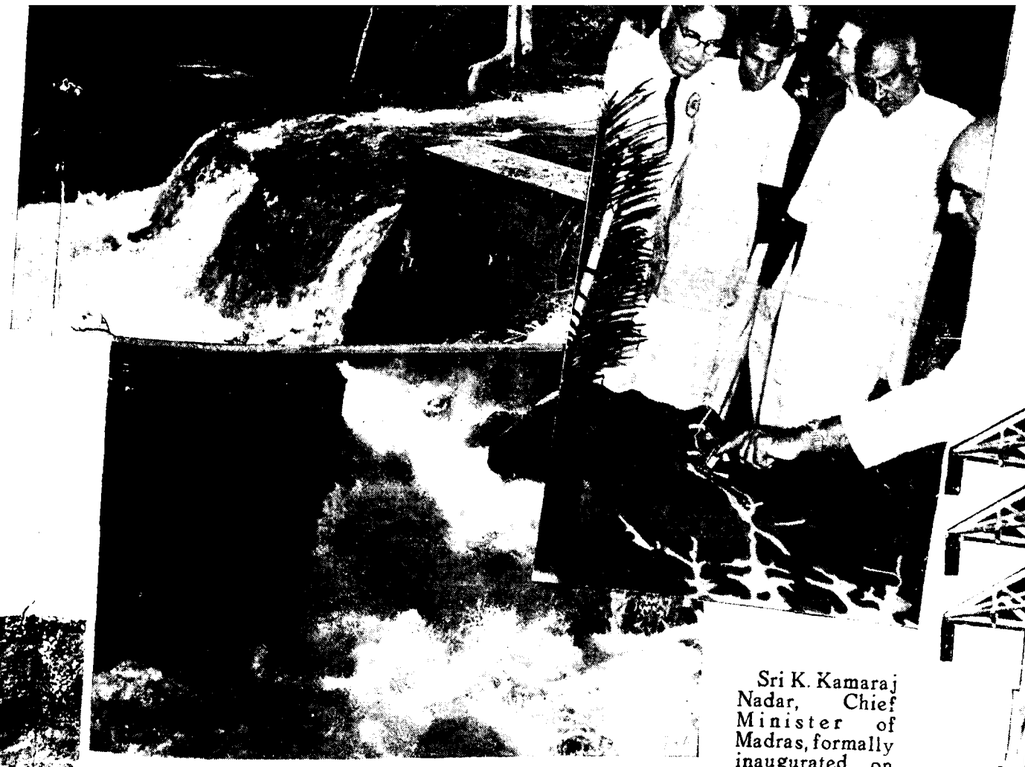
ANNAMALAI UNIVERSITY SILVER JUBILEE

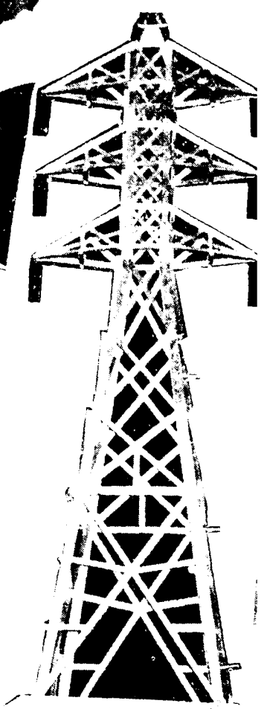
Twenty-five years of nobl service to the people of Tamilna were duly honoured, during th Silver Jubilee celebrations of th Annamalai University at Ann malainagar (Chidambaram) o February 9, 1955. This premie institution, a unitary residenti University township with facil ties in the Humanities, Science Fine Arts, Engineering Technology, was founded by R Dr. M. Annamalai Chettiar, a sighted philanthropist who h dear the cause of Education.

Pictures on this page show : Inau ration of the Silver Jubilee c brations by H.H. the Rajpram of Mysore; the opening of Rani Seethai Achi Hostel for E neering and Technology stud by Sri K. Kamaraj Nadar, C Minister of Madras; the g photo taken at the Special Co cation; the Srinivasa Sastri and Administrative Buil and the Engineering College.

PERIYAR HYDEL SCHEME



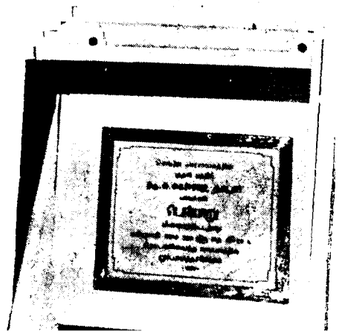




Sri K. Kamaraj Nadar, Chief Minister of Madras, formally inaugurated on February 11, 1955, work on the Periyar Hydro-Electric Project. The scheme when completed will be a major contribution to the Madras Grid, and will generate about 140,000 KW. (June to March) and 37,000 KW. (March to June).

The estimated cost of the scheme is Rs. 10·47 crores. Every endeavour is being made to bring the scheme to beneficial use in record time—before 1958.

Pictures show (left—top to bottom): The Periyar Dam in Travancore-Cochin State and the reservoir, in the upper reaches of the river. *Centre (top to bottom)*: The water of the Periyar Lake is diverted into the Vaigai basin in Madras State through a tunnel about 6,000 feet long. There is a drop of more than 1,000 feet between the exit of the tunnel and the Vaigai basin. *Right*: The Chief Minister examines a model of the Periyar Project, and presses the button to inaugurate the scheme.



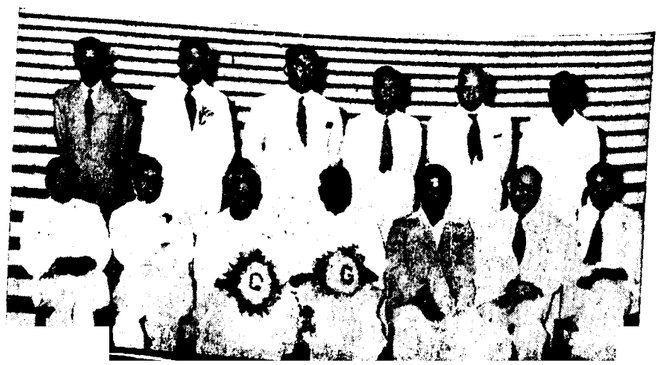
GOLD MEDAL FOR CHAMPION FARMER

Sri K. Kamaraj Nadar, Chief Minister, awarded the State Prize, Gold Medal, for 1953–54 in the Paddy Crop Yield Competition to Sri M. Achuthan Nair of Andathode in Wynaad Taluk (North Malabar) at a public function organised by the Agricultural Department at the Rajaji Hall (Madras City).

Sri Achuthan Nair won the Firka, Taluk and District prizes as well as the Regional and State prizes with 8,207 lb. of paddy per acre. In his 68-acre estate of coffee and pepper, he cultivates paddy only on 3 acres of single-crop wet land.

Pictures show the Chief Minister and Sri Achuthan Nair addressing the gathering, the Chief Minister pinning the Gold Medal (the State Prize) on Sri Nair's coat, and a group photo.

Sri Achuthan Nair's methods were as follows: He prepared ten cents of land for raising the nursery by ploughing and cross-ploughing 16 times. He used 700 lb. of green manure and 500 lb. of farmyard manure. For the nursery 21 lb. of sprouted seeds were used, and after three weeks ten pounds of ammonium sulphate were applied. The field for transplanting was ploughed 20 times and then puddled. For an acre of land 5,000 lb. of green manure, 10 cartloads of compost, 6 cartloads of old night soil, 3 cwt. of superphosphate, 5 bags ash. 150 lb. of ammonium sulphate and 320 lb. of groundnut cakes were applied. The seedlings were transplanted six inches apart.



Arrival of the Chief Guests

The great day dawned, with the glowing sun peering through morning clouds. Thousands of visitors, the men clad in their best and smartest clothes and the women in their multi-coloured garments, poured into the immense pandal from early in the morning and occupied their seats. The two thousand students of the University with their jubilant faces and their smart dresses on which the silver medal with the University Crest (a present on the occasion to each student by the Pro-Chancellor Rajah Sir Muthiah Chettiar of Chettinad) shone brightly, were an imposing spectacle. Elaborate arrangements had been made by the Reception Committee to receive and seat the guests with the help of a large number of student volunteers, Rover Scouts, and N.C.C. Cadets, whose uniform courtesy, tact and resourcefulness were much appreciated by the visitors.

The function began at 9 a.m. with nagaswaram by the two eminent artistes Rajaratnam Pillai and Veerusami Pillai. The Pro-Chancellor, the Vice-Chancellor and the University authorities were now gathered at the entrance to the tastefully decorated pandal waiting for the arrival of the chief guests of the day—Shri Sri Prakasa, Governor of Madras, Chancellor of the University, who was to preside on the occasion, and His Highness The Maharaja of Mysore who was to deliver the Inaugural Address and unveil the statue of the Founder of the University Dr. Rajah Sir Annamalai Chettiar, and Dr. A. Lakshmanaswami Mudaliar, who was to deliver the public address.

Sharp at ten the guests arrived. A Guard of Honour was presented by the Annamalai University N.C.C. Cadets. The Pro-Chancellor and the Vice-Chancellor received the chief guests. While the cameras clicked, they posed for a portrait. Then they were led into the grand pandal and taken to their seats on a raised platform under a gorgeous green silk canopy, where already the distinguished invitees, members of the Syndicate and the Senate of the University were gathered.

The Vice-Chancellor's Address

The proceedings now began with a prayer, the first few verses of the *Kural* sung by a chorus of girl students from the Music College. And immediately after stood up Dr. C. P. Ramaswami Ayyar, the Vice-Chancellor, to voice his welcome address extempore. It was in a momentous address he referred to his "obligation and pleasant duty" to extend his cordial welcome to the Rajpramukh as a 'Ruler born to the *Gadi*', referring to Rajpramukh's regal personality, his world-wide travel, his personal scholarship, researches in Sanskrit and in the fine arts, as a distinguished philosopher and author, and as having secured a recognised place in the world of scholars; to the Chancellor, ever alertful to give his best assistance from time to time to the University, to Dr. A. Lakshmanaswami Mudaliar of indefatigable energy, a progressive educationist and a foster-parent of this University. The Vice-Chancellor mentioned besides in glowing terms of the genius of the Pro-Chancellor and his noble parent—the self-made architect of his fortunes, who followed his own advice to be frugal to be generous, and his far-sighted idea in bringing into fruition a Tamil University and lived to have his dreams fulfilled, and how the present Pro-Chancellor lived strenuously and indefatigably for the good of the University, referring also at length to the bountiful grace of Lord Nataraja and Govindaraja and the rich heritage that has been the University's to gain.

The welcome address was listened to with rapt attention, and at its conclusion, the chief guests were garlanded. Next, Prof. R. Ramanujachariar read the messages wishing the celebration every success, received from the President of the Republic, the Prime Minister, the Vice-President and other dignitories who were unable to be present.

The Inauguration

Now the Rajapramukh of Mysore rose and gave his Inaugural Address in sonorous cadences which was listened to with reverential attention. The Chancellor, Shri Sri Prakasa, rising next, gave his special tributes of admiration to the Pro-Chancellor, and the Vice-Chancellor, and of his thoughts "on intellectual work with other cultural training of physical education, and how the University should simultaneously with the training of the mind, should also train the body and the soul, so as to play a proper part in the days to come".

As the Chancellor concluded, the Vice-Chancellor requested the H.H. Rajpramukh to unveil the statue of the founder—Dr. Rajah Sir Annamalai Chettiar of Chettinad (about nine feet in height and mounted on a pedestal about fifteen feet in height, standing majestically), which he did to the acclamation of the mighty gathering. Isai Arasu M. M. Dandapani Desikar now sang a few songs composed for the occasion by Yogi Suddhananda Bharathiar. The Vice-Chancellor then requested Sri K. Kamaraj Nadar, Chief Minister of Madras, to declare open the newly built Rani Seethai Achi Hostel for Engineering and Technology students. Rising in the midst of a great ovation the Chief Minister performed the delightful task with a very short speech.

Sri Kanagaratnam, former Minister of Education in Ceylon, now came forward and presented an address to the authorities of the University, on behalf of the students of Ceylon (சிலந்தி மாணவர்), thanking the authorities for

many acts of grace meted out to more than 300 Ceylonese students, both men and women, who had passed through the portals of the University in the last twenty-five years. The audience were thrilled with delight, because the sentiments of gratitude expressed in the address, found an answering echo in the hearts of everyone present.

The Jubilee Address was then delivered by Dr. A. Lakshmanaswami Mudaliar, Vice-Chancellor, Madras University. The address was followed by the presentation of the Silver Jubilee Souvenir Volumes to H.H. the Rajpramukh and the Chancellor by Sri A. Ramanatham Pillai, Deputy Vice-Chancellor, and followed next by the distribution of prizes by His Highness, to the recipients of prizes at the special sports competitions.

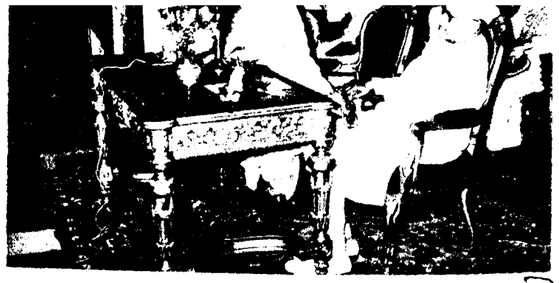
Vote of Thanks

The morning's function had now come to a close, and now Rajah Sir Muthiah Chettiar stood up to propose a hearty vote of thanks. He characterised the day as a memorable occassion for the University to get the blessings of all assembled, in particular that of the Rajpramukh of Mysore, whose gracing the function was an act of great condescension which would always be cherished by the University with gratitude. He paid a compliment to the literary and cultural graces that emanated from the State of Mysore, and benefited the whole of our land. The Rajah spoke with feeling of the fostering care of the Chancellor, Shri Sri Prakasa, and the resolute spirit of service of Sri Kamaraj Nadar. He expressed his profound sense of gratitude to Dr. A. L. Mudaliar, who right from the inception had taken parental care of the University. He mentioned gratefully the great services rendered by the galaxy of Vice-Chancellors who had guided the destinies of the University, of the long, faithful and devoted service of Rao Bahadur N. Viswanathier, for twenty years Registrar of the University. He thanked Sri C. Subramanyam, for his very keen interest in the cause of Education, Sri Kanagarathnam for the address he had presented, and in particular he mentioned his sense of gratitude to the professors and old students of the University.

He concluded by paying a tribute to the people of Tamilnad who had wholeheartedly supported the institution all these years and the many generation of students for their co-operation and loyalty to the alma mater. The Rajah Saheb's voice shook with emotion as he spoke these words, whose warmth and ring of sincerity

PLANNING : Sri V. T. Krishnamachari, Deputy Chairman of the Planning Commission, had discussions with the officials of the Madras Government at the Secretariat recently.

NAI TALIM CONFERENCE IN SESSION



The Art Exhibition opened by the Rastrapathi, was one of the highlights of the Buddha Jayanti Celebration in the City. Ministers, distinguished visitors and art-lovers witnessed the beautiful mural paintings and sculptures, relics and replicas of Buddhist art and architecture exhibited at the Museum Centenary Hall.

captivated everyone present. With the singing of வாழ்க செந்தமிழ் and the National Anthem, the great assembly stood up, having gone through an eventful function.

In the afternoon the Chancellor Shri Sri Prakasa laid the foundation stone of the Dr. C. P. Ramaswami Ayyar Library in the grounds opposite the Chemistry block.

The Special Convocation

The Special Convocation at 4 p.m. was a colourful and magnificent scene never to be forgotton. Hours before the appointed time the Srinivasa Sastri Hall was packed full with a select gathering of invitees. As the clock struck four, the Senate met and the Convocation procession started from the Senate Room headed by the Registrar, the members of the Senate in rows of two and followed by the recipients of the honour with H.H. Rajpramukh of Mysore leading, all clad in their crimson robes. As they reached the dais and were seated, the Chancellor declared the Convocation open, and the Vice-Chancellor read the Citations for the conferring of the degrees of Doctor of Letters, *honoris causa*.

The Rajpramukh of Mysore was the first to be called upon and he stood long at attention for all the encomiums showered on him, and when the Chancellor ultimately bestowed on him the degree and handed him with the diploma, the Maharajah bowed and took his seat. The next was the Pro-Chancellor Rajah Sir M. A. Muthiah Chettiar of Chettinad, who with a distinct grace accepted the encomiums showered on him by the Chancellor and the degree of the doctorate. Next was the turn of Dr. C. P. Ramaswami Ayyar and he was presented to the Chancellor by the Pro-Chancellor, Dr. Rajah Sir M. A. Muthiah Chettiar himself.

Then the Vice-Chancellor stood the ordeal of the encomiums by the Pro-Chancellor, as well as the Chancellor, and invested with the degree, he resumed his seat. It was now the Vice-Chancellor's turn to present the other candidates for the honour, Sir Samuel Ranganathan, Dr. A. Lakshmanaswami Mudaliar and Professor S. Somasundara Bharathiar and lastly Dr. Sarvepalli Radhakrishnan, the Vice-President of India, *in absentia*. The Chancellor now dissolved the Special Convocation, and the august assembly stood and passed, as they came in, in procession to the Senate Room, where they disbursed.

The Silver Jubilee Celebrations and the Special Convocation were now concluded and the great enthusiasm which they evoked in the heart of Tamilakam is significant of the place the University occupies for the greater and nobler purposes envisaged by the institution in the future.

History of the Institution

Men cast in the great mould, it is said, build greater even than their dreams. There are better dreams than "success" and the great-visioned Rajah Sir Annamalai Chettiar of Chettinad, guided by his own light and motto of "*Strive, Save* and *Serve*," divested himself of a good slice of his princely fortune in the high cause of educational synthesis by founding, in 1928, the Annamalai University, which is today the pride of South India.

Twenty-five years have elapsed since the inauguration of the Annamalai University, but within this period—a short duration in the life of institutions—it has consolidated its position as a Unitary and Residential University with more than twenty departments of study and over one hundred and seventy-five members on its teaching staff. The University Campus will strike a visitor today with its beautiful rural setting, situated as it is in the midst of beautiful nature all round.

The Rajah Saheb conceived the plan of founding a College at the place hallowed by religious tradition. With the Rajah Saheb, to *think* was to *act*; and so he established the Sri Meenakshi College in 1920—which was to become the nucleus of the Annamalai University. It was housed in the beginning in the high school premises at Chidambaram.

The Sri Meenakshi College moved to its buildings at Annamalainagar in 1923. The College began to expand fast, and as new courses were instituted, more buildings sprang up, almost every year. The Rajah Saheb made a large endowment to the College.

It was evident that the Rajah Saheb had almost from the beginning visualised the ideal of locating such a university in rural setting, far removed from urban environment, with ample scope for undisturbed academic pursuits and research, which is after all what distinguishes university education from utilitarian aims.

His dream was realised in 1929. In 1928, the Rajah Saheb offered to give to the Madras Government twenty lakhs of rupees, besides three hundred acres of land and the many buildings of the Colleges and the hostels and professors' quarters, valued at another twenty lakhs of rupees, for the realisation of the object.

The Government accepted the magnanimous offer and took all necessary steps to introduce the Annamalai University Bill in the Madras Legislative Council. The Bill was passed in record time. The Annamalai University was duly inaugurated in July 1929.

Cashew Oil Factory for South Arcot

Cashewnut growers in South Arcot District met at Marungur on 9th January 1955 under the presidency of Sri M. Bhaktavatsalam, Minister for Agriculture, to concert measures for the establishment of a factory on a co-operative basis for the manufacture of cashew oil and marketing of cashewnut. The cashewnut factory will be owned and run by a co-operative organisation composed of growers. It is expected that the factory will handle about 1,200 tons of cashewnuts which works out to nearly one-third of the total production in the district. The capital cost for the establishment of the factory is estimated at a lakh of rupees and funds for purchase of nuts and for marketing will be provided by the South Arcot Co-operative Central Bank.

The Minister for Agriculture referred to the several ways in which the agriculturists were helped by Government and suggested that the co-operative method of doing business was the best way of improving their economic conditions. He exhorted the cashewnut growers to join together, establish a co-operative cashewnut factory and work it successfully. A committee consisting of 12 persons representing growers and co-operators interested in the scheme was constituted with the Deputy Registrar of Co-operative Societies, Cuddalore, as its Secretary. The committee will take steps to finalise the scheme, decide the financial and other assistance to be secured from Government and other details connected with the establishment of the factory.

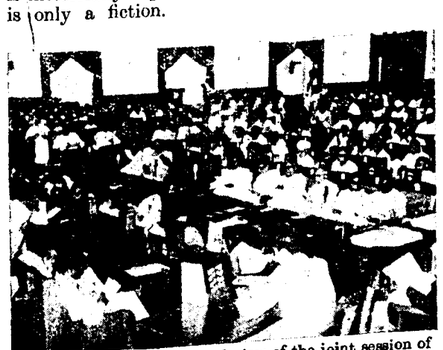
CO-OPERATIVE FACTORY: The Minister for Agriculture addresses the cashewnut growers of South Arcot District at a meeting held at Marungur to discuss the establishment of a co-operative cashew oil factory.

Procedural Rights of Minorities in the Madras Legislature

By SRI R. V. KRISHNA AYYAR, B.A., B.L., Secretary to the Madras Legislature

THE rule that in a legislative body the will of the majority should prevail has been accepted so long as an axiomatic proposition that few realise its implication or ask for its *raison d'etre*. The Madras Legislative Assembly consists of 231 members. Under Article 189 (3) of the Constitution of India, ten per cent of that number, that is to say 24, constitutes a quorum. At a meeting at which only a quorum is present, and all vote, a proposition can thus be carried by the votes of only 13 members. If some of the members abstained from voting, the number in favour of a successful proposition may be even less.

Mr. Justice Stephen is said to have declared that "we count heads to save the trouble of breaking them". The assumption underlying this statement is that if you do not 'count', you would have to fight, which means that the adoption of the majority rule is in its ultimate analysis the result of a fear of physical force. As against this, there is the contract theory according to which each individual member of a society has or must be deemed to have agreed firstly to merge his individuality in the general will of the community and secondly to have accepted the will of the majority as the general will of the community. It is needless to point out that this double contract is historically unproved and the so-called contract is only a fiction.



LEGISLATORS: A general view of the joint session of the Madras Legislature.

Will of the Majority

Again, to say that a majority is likely to have more of wisdom and knowledge than a minority and that the will and interest of the majority are more likely to be consistent with equity than those of a minority are mere attempts at justification of an existing fact than a proof of the origin of the fact. Nor is the statement itself always correct. For, the will of the majority is very often unjust, especially in matters relating to property, and political writers have from the time of Aristotle pointed out that "if justice is the will of the majority, they will unjustly confiscate the property of the wealthy minority".

And even from the point of view of self-interest it may happen on occasions that the majority may not realise their own interests. The fact is that the principle of majority is a natural or historical growth due to political necessity or expediency. The Government of the country must somehow be carried on; in doing so, it is not always possible to obtain unanimity among the members of the community. The only way in which their will can be ascertained is by the principle of "numbers".

Moral Binding of Majority Rule

In modern democracies the majority rule has become part of the Constitution, either tacitly or by express enactment. Articles 100 and 189 of the Constitution of India for instance provide for it. The majority rule has therefore now acquired the character of a binding legal rule. It is open to the Legislature to deny it a legal binding. For instance, in regard to certain fundamental rights, even laws passed by majorities are not binding, if in violation of such rights. As regards certain kinds of amendments to the Constitution, ordinary majorities are of no avail.

The moral binding of the majority rule however rests not on the fact that a decision is the emanation of the will of a larger number, but one acceptable to the body as a whole, though not unanimously. To make this moral binding effective, it is necessary that the minority should have satisfaction that they have taken their due share in

One of the rules of the House is that a member cannot use his right of speech for the purpose of obstructing the business of the Assembly. The object of parliamentary debate is "action" and not "stoppage of action". Therefore, if any member or set of members undertakes to abuse the orderly progress of business even by the use of the well-recognised parliamentary methods or motions, it is the right of a majority to prevent those motions and methods and to cause public business to proceed. In the British House of Commons obstruction is a parliamentary offence as it is, as Speaker Brand put it, "the abuse of the privilege of freedom of debate for the purpose of defeating the will of Parliament".

A responsible Opposition never obstructs; it has common sense, political prudence and patriotism enough to cease fighting as soon as it becomes purposeless or opposed to the general welfare. It is only by a minority which has not the same ultimate object as the majority or is divided from it by cleavage on a fundamental issue that obstruction is practised, as in such a contingency, it denies the moral right of the majority to bind it and appeals to its obligation to a higher morality on conscientious grounds for resisting the majority.

Irish Filibustering

English parliamentary history during Parnell's leadership of the Irish Party affords numerous instances of obstruction by a minority. An idea of the extent to which such obstruction was practised by the Irish members can be obtained from the following figures collected from Parnell's biography.

In 1881 the House of Commons sat on 154 days for 1,400 hours; of these 1,400 hours, 240 hours were after midnight on the Irish Coercion Bill. The House once sat for 22 hours continuously and on another occasion for 26 hours continuously and on a third occasion for 41 hours continuously. The debate on the Irish Coercion Bill, took 42 sittings. Another Bill, the Irish Land Bill, took 88 sittings. The number of speeches delivered in the year was 14,836 of which 6,315 were by Irish Members. About 2,000 points of order were raised.

On the day on which the House had to sit for 41 hours continuously, the Speaker of the House by a *coup d'etat* had to close the debate on his own responsibility. He said: "A crisis has . . . arisen which demands the prompt interposition of the Chair and of the House. The usual rules have proved powerless to ensure orderly and effective debate . . . The dignity, the credit and the authority of this House are seriously threatened and it is necessary that they should be vindicated. Under the operation of the normal rules and methods of procedure, the legislative business of the House are paralysed and a new and exceptional course is imperatively demanded . . . ."

Members "Named"

On the next day, there was an announcement about Michael Davitt's arrest. In connexion with it, Mr. Dillon rose to speak and refused to give way to Mr. Gladstone though the latter had been called upon by the Speaker. Thereupon, Mr. Dillon was named and suspended. Later Mr. Parnell moved that the Right Hon'ble Gentleman be no longer heard. This led eventually to Mr. Parnell's own suspension. Then 32 members were in succession named and suspended for similar conduct.

In the meantime, other members of the party were sent for and each of them made the motion above mentioned and had also to be suspended. It was thus that parliamentary business was obstructed and thus the House of Commons was compelled to make obstruction a parliamentary offence. Obstruction or filibustering as it is called, is practically a denial of the right of a Legislature to decide by a majority and in that sense, a repudiation of the Constitution. It is a physical and not a moral or rational test and depends purely on powers of physical endurance.

One of the main problems of parliamentary procedure is how to reconcile the legitimate demands of the Government with the legitimate rights of the minority, how to bring about an expeditious despatch of business while preserving Parliament as the Grand Inquest of the Nation. The rules are therefore so framed that while they protect the rights of minorities, they make it impossible for them to thwart the will of the majority.

Closure Motion

One of the methods by which minorities are prevented from obstructing the business of the majority is by means of "closure motions". These motions may be said to have completely sterilised the tireless speaker and the dilatory motion. In England closure is of three or four kinds. Sometimes, it is "Closure *simpliciter*", that is, where the motion is that question be now put. Or, it is "Guillotine closure". This consists in fixing through a resolution of the House a time-limit for the conclusion of a particular item of business.

This kind of closure has the disadvantage that the whole time may be wasted in the consideration of a few first provisions of a Bill while later important clauses may get no opportunity of being considered. So another kind of closure was devised, called the "Closure by Compartments", by which a time limit is fixed by a resolution of the House for each part, or particular clauses, of a Bill.

In addition, the Speaker is also empowered to select amendments. This last is known as "Kangaroo Closure". In the British Parliament

where the simple closure is carried, it is open to any member to move with the consent of the Speaker that all the connected questions previously proposed from the Chair may also be put.

In our Legislature, these technicalities and varieties do not obtain. There is only the simple closure under which a member may move that the question be now put. There is also power given to the Speaker to select amendments. Except as regards the Budget, there is no guillotine. But the guillotine as applied to the Budget as a whole consists of a statutory time-limit to the discussion, not a time limit imposed by a vote of the majority. Even as regards the Speaker's power to select amendments, it is limited only to a power to select one out of identical or substantially identical amendments.

Freedom of Debate

It is obvious that the closure sets a limitation on the right and freedom of debate. To protect minorities against this misapplication, it is expressly provided that before it can be allowed to be moved, the Speaker must be satisfied that it is not "an abuse of the rules or an infringement of rights of reasonable debate". Nothing proves in a more striking manner the confidence reposed by the House in the Speaker as the guardian of the rights of minorities, than his power to accept a closure or not.

Naturally, the question of accepting a closure is always a source of great anxiety to the Speaker. Have the Opposition had a full opportunity of stating their case? Have they made the best use of that opportunity? Has the subject-matter of the motion received full discussion? These are some of the problems which he has to decide mentally before he accepts a closure motion. He is always liable to be misunderstood if his judgment is used either on one side or another. The difficulty of deciding the admissibility of a closure motion is in fact so great that the House of Commons in England has provided a safeguard against its misuse by providing that at least one hundred members should vote in the majority in support of it.

Co-operative Understanding

By cautious handling of the situation, the Speaker is able generally not to drive a majority to the necessity of moving a closure motion. He generally makes arrangements for the maintenance of co-operative understanding between the majority party and the rest for common work in the Legislature in the interests of safe despatch of business. Though not provided for in the Rules, he, at the commencement of a meeting or from time to time, calls together leaders of parties in the House for the purpose of arriving at some agreement on all important matters of procedure, such as the days and hours of sitting, the speed at which and order in which the chief measures of the session shall be taken up and the distribution of the time among them and so on.

The result has been that since the year 1946, there have been only two occasions when a closure motion was moved in the House. As regards the Kangaroo closure, on the only occasion when it had to be used, namely, in connexion with the Abolition of the Estates Bill, the Speaker consulted all the Leaders of Parties before selecting amendments.

As regards the statutory guillotine on the duration of the Budget discussions, in recent years the Government have, on the intervention of the Speaker, themselves conceded to the Opposition the right to choose the demands for grants which they wish to discuss and to determine the order in which they should be discussed and the period of time during which each should be discussed. The days allotted for financial discussion are thus virtually Opposition time and can be utilised by them to their best advantage according to their own desires.

Speech and Voting

Parnell objected to closure not only because it was an encroachment on the liberty of speech of minorities, but because it was an entire rejection of debate as the legal means of parliamentary procedure in the House of Commons. Mature deliberation by those who participate in a decision is an essential condition of the binding force of a decision.

Mere voting may be sufficient to obtain opinion, but it will carry no persuasive force. Sometimes word is passed round "Don't speak; vote for or against the motion." This deprives the Legislature of its deliberative function. To quote Finer, it makes a Legislature a "will-organization and not a thought-organization". It shows that judgment precedes debate and that debate is useless. Members become sullen and discontented and the value of the Legislature as an effective body suffers. Such a procedure is an infringement of the right of a minority to be convinced and leaves them unconvinced.

Moral Force of Walk-outs

If a majority refrain from debate during a discussion it is also open to a minority to register its protest against a breach of rules or conventions by the majority by staging a walk-out. A walk-out is therefore a striking method of demonstrating that a decision is not made by the House as a whole but by the party only and that it has therefore [illegible] under conditions which deprive it of its [illegible]

The Speaker of the Madras [illegible] has pointed out on one or two occasions that while it is open to a minority to [illegible] walk-out as

the framing of the decision and that the decision is not one imposed on them by force.

The recognition by a minority of the right of the majority to decide and the protection by the majority of the right of a minority to be heard are reciprocal, and if one part fails, there is danger of the other part failing also. The minority becomes sullen and in extreme cases is driven to the use of force.

Role of the Opposition

Luckily in parliamentary democracies the respective rights of the parties are mutually recognised and fully respected. The reason is obvious. The parties represent a homogenuity, the nation as a whole, and they are, in the words of Lord Balfour, "so fundamentally at one that they can well afford to bicker". The Opposition is as much part of the legislative machinery by which the State is governed as the Government itself and the element which binds the Opposition and the Government is the achievement of the common good of the State through the agency of the Legislature.

If the Government fails, the Opposition is willing and prepared to undertake the responsibility of the Government. What today is a majority may tomorrow become a minority and the majority has, therefore, no interest in weakening the rights of the minority. Moreover, the party in power recognises that the Opposition is performing an essential function. It knows or ought to know that it is not infallible and it therefore welcomes the criticisms and suggestions of the Opposition. The nation is anxious to safeguard itself against the error of a majority which may be injurious to it as a whole or affect the fundamental rights of its citizens. As Ilbert says in his book *Parliament*: "The arguments and attitude of minorities and individual members are factors of the greatest importance in determining the action of the Government."

The Right to Criticise

All parties know that the nation is interested in good government and is carefully watching whether the majority or the minority has the best of the arguments and whether the majority is able to maintain itself against an able and convincing minority. The protection of a minority in the Legislature is, therefore, not a privilege of the minority alone, but is a national interest and a vital part of parliamentary democracy which implies a combination of responsible leadership and responsible criticism.

The majority is expected to decide, but it is expected to decide calmly and after weighing both sides of a question. The minority is expected to criticise. But it is expected to criticise fairly and reasonably. Lowell in his *Government of England* has declared that the expression 'H.M.'s Opposition' embodies the greatest contribution of the 19th Century to the theory of government—that of a party out of power which is recognised as perfectly loyal to the institutions of the State and ready to come into office without shock to the political institutions of the nation. Parliamentary government is an adventure involving the participation of two parties, the Government and the Opposition.

Experience has shown that a strong Opposition has the effect of strengthening the majority party, and that if an Opposition is too weak, there is a tendency for rifts to appear in the ministerialist party.

Gentlemen's Agreement

In the old days when the Crown was autocratic, the whole Parliament was a kind of Opposition. Now, however, when Parliament has become supreme, the party in power takes the position of the Crown and it is the Opposition that is expected to act as the guardian of the nation. Lord Acton is therefore justified in saying that "the certain test by which we judge whether a country is really free is the amount of security enjoyed by minorities".

The rules and formalities of the Legislature are therefore generally so arranged as to secure to the minority the power of stating its objections both to the principles and to the details of every motion or measure proposed for adoption by the majority and of retarding the progress of Government work by adverse criticism and by the moving of amendments. Their aim is to impose checks on arbitrary or hasty action by majorities while ensuring that their definitely expressed will is not thwarted.

These Rules are a kind of gentlemen's agreement for freedom and fairplay in debate and no party in power, therefore, attempts to alter them so as to deprive the minority of its rights. They are regarded as a kind of fundamental law of Parliamentary institutions.

JOINT SESSION: The Governor of Madras addressing the joint session.

The Impartial Speaker

The whole responsibility of applying the Rules and forms of procedure is vested in the Speaker (which term is used as including a Chairman) and it is therefore in his hands that the rights of minorities lie. In applying the rules he is in theory an autocrat; his rulings are final and cannot be questioned even by Courts of Law; he has all the powers necessary to enforce them, including the power to exclude a member or suspend a sitting; he is fully protected from contempt committed against him by members or non-members. The result is that a bad Speaker is in a position to ride roughshod over the rights of members, whether in a minority or in a majority.

The most powerful insurance of the rights of members and particularly of minorities is, therefore, the absolute integrity and impartiality of the Speaker. The integrity and impartiality are on the one hand the foundation of the confidence placed by the parties in him and on the other the bedrock on which his authority and usefulness depend. The Speaker should not only be impartial, but should be believed by the parties to be impartial. This impartiality and appearance of impartiality are achieved (1) by securing his independence of all parties in the House by a reasonable salary when in office, by immunity from criticism except on a substantive resolution for his removal and in England and elsewhere by a reasonable pension on retirement and (2) by his voluntarily ceasing to be a member of any political party and isolating himself from all political or partisan activities during the period of his Speakership.

He does not take part in debates nor, except in the case of an equality of votes, can he give his vote and even then he can, according to Parliamentary traditions, exercise his vote only in such a manner as not to make the decision of the House final, while he should also assign his reason for voting in the manner he does.

Custodian of Rights and Privileges

The Rules therefore regard the Speaker as the custodian of the rights and privileges of minorities. In applying the Rules, the Speaker makes no distinction between parties or members. As the House is a deliberative assembly, freedom of speech and debate is a most important right of individual members and of minorities, especially as under the modern set-up, the right of a minority in a parliamentary body is no longer only to persuade the House.

They are speaking to the nation, striving to convince the voters of the righteousness and value of their policies and methods, and of the earnestness, devotion and tenacity of purpose with which they are urging them. They are therefore entitled to take advantage of every opportunity of criticism and resistance afforded by the Rules, with a view to make it awkward, if not impossible, for the Government to do bad things.

In the old days in the House of Commons the decision between two members who claimed the floor of the House was left to the vote of the House. It was about 1781 that the responsibility was put on the Presiding Officer. When calling members to speak, he now generally calls them alternately from different parties and follows the order of speakers furnished to him by the whips. Even so, some members are disappointed at not being called and in their frenzy of disappointment feel that Speaker has discriminated against them. They rarely realise that even if the House sat all the year round, it would not be possible to give every member who wishes to speak a chance to do so on each occasion.

Rules of Procedure.

Apart from the equal treatment accorded to minorities in respect of all the proceedings of the House, there are various rules of procedure which are intended specially to favour minorities and give them opportunities of making their position felt. The right of members to put questions to Ministers to show up their shortcomings and blunders is naturally availed of by them. If the answers are unsatisfactory, they can ask for a half-hour debate at the end of the day. On matters of urgent public importance, they can, after question-time, ask for leave to move for an adjournment of the business of the House to discuss the same.

When legislative measures are brought up by Government, provision exists for reasonable notice to them and they are given not one, but two or three opportunities for criticising or amending the measures. They can move for the appointment of Select Committees on Bills or for their circulation for public opinion. Of course, they can suggest amendments to them. Whenever a business is before the House, they can make a dilatory motion for the adjournment of the meeting or the adjournment or postponement of the business pending before it or to pass over that business. Of course they can exercise their constitutional right of moving a vote of no-confidence against the Ministers and thereby try to displace them altogether.

Preventing Obstructive Tactics

If the rights of minorities to speak, and thereby prolong debates, to raise points of order, to offer amendments, to make dilatory and other motions and to demand divisions are pressed to the extreme, the minority may be able, by a process of filibustering or obstruction, to bring the business of the House to a standstill and make it impossible for the will of the majority to prevail.

a protest against a measure of Government or a decision of the majority, it is not open to them to do so as a protest against a decision by the Chair on a point of order. Such a walk-out would be a reflection upon the Speaker's authority.

Obligation to Vote

A minority may also refrain from voting. One of the old rules of the House of Commons was that every member was bound to vote one way or the other. But this rule is no longer in force, as there is now a definite standing order which says that a member is not obliged to vote. This right of a minority is of particular importance where there are more than two parties in the Chamber and a certain group retains its independence and seeks to enhance its own weight by sometimes joining with one and at other times with the other of the parties.

In 1885 to 1887 the Irish Party in the House of Commons defeated both the Liberal and the Conservative Governments alike by their votes and in the Central Legislative Assembly in this country, Mr. Jinnah's Muslim League Party kept the balance between the Government and the Swarajya Party in the years 1935 to 1939.

Select Committees

The rights of minorities are also preserved in the constitution of several committees of the House. There is a kind of convention that a Select Committee appointed over a legislative measure should be a replica of the House and reflect all the interests represented in it, more or less in the proportion in which they are represented there. So, in appointing members of Select Committees, the leaders or whips of parties act in consultation with one another. In regard to various other committees appointed under the Rules, such as the Public Accounts Committee, the House Committee, the Privileges Committee, etc., the rules expressly provide that the selection of members should be by means of the single transferable vote.

Secret Ballots

In the election of representatives on these Committees, or of the election of the Speaker and the Deputy Speaker, the method employed is the secret ballot. The value of the ballot system in preserving the rights of minorities cannot be over-emphasised. While coercion of voters is possible in a system of public voting, freedom is ensured in a system of secret voting. It is true that in secret voting, fear of public opinion, of shame and of loyalty to party is abolished but in open voting many regard only reputation but few conscience.

Therefore the ballot has now been accepted as the more desirable method. In some of the elections in the Legislature, the results showed that members of parties did not always vote on party lines and this would not have been possible but for the system of secret voting.

Language

The language in which a member can speak in the House is an important element in his ability to assert his freedom of debate. The Constitution of India and the Rules therefore enable a member to address the House in his mother-tongue if he is not sufficiently proficient in English. And for the purpose of enabling minorities to appreciate the views of persons who can speak well in English, the Speaker has often allowed them even to address the House in other languages so as to make themselves fully understood by non-English knowing members.

These are some of the more important rules and conventions which are intended to secure the rights of minorities in the Madras Legislature, and by which such rights are actually secured. It is not therefore surprising that the Legislature is becoming more and more popular with the minorities, as by entering the Legislature they hope to obtain not only a good forum for the ventilation of their grievances but full publicity for them.

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KANGAYAM BREED: Some of the young Kangayam bulls that competed in the Cattle Show and Calf Rally held at the Key Farm Centre attached to the Private Livestock Farm, Idaiyakottai

Livestock Improvement

During his visit to Idaiyakkottai to preside over the Provincial Livestock Improvement Board Meeting on 2nd February 1955 Sri M. Bhaktavatsalam, Minister for Agriculture, presided over the Cattle Show and Calf Rally held at the Key Farm Centre attached to the Private Livestock Farm, Idaiyakottai, and distributed the prizes. The Minister also paid a visit to the Key Farm Centre attached to the Narendra Dairy Farm, Neikarapatty. A Cattle Show and Calf Rally was also held at the Key Farm Centre, Neikarapatty, on 3rd February 1955, when Sri N. Murugesa Mudaliar, Deputy Secretary, Agriculture Department, presided and distributed the prizes. The striking progress of livestock improvement work at the two centres was much appreciated by the Minister and the distinguished visitors of the State Livestock Improvement Board.

MURRAH buffaloes exhibited at Neikarapatty. The Deputy Secretary of the Agriculture Department is seen examining the graded stock.

Export of Books

In 1953–54 India exported books worth Rs. 63,12,006. During April to September 1954 the exports were valued at Rs. 28,63,019.

Glide of the Hamsa

One of the finest views in New Delhi presents itself when one stands under the arch of the India Gate. This monument—simple yet superb—commands acres of cool green lawns and bubbling fountains at the junction of many roads. Shahjehan, Ashoka, Curzon .... it strides Kingsway like a colossus, and the mathematical precision of the broad tarred highway leads straight to the noble edifices of the North and South Blocks of the Union Secretariat and the dome of Rashtrapathi Bhavan peeping over broad flights of stone steps.

So perfect is the design and layout conceived and created by the master architect Lutyens that the miles that separate India Gate from the *burra daftar* seem to dwindle to yards. And as one turns around, in the opposite direction, there is the breath-taking spectacle of the Purana Qila skyline, the ruins of the old Moghul Fort—earlier Indraprastha, the seat of the Pandavas—etched against the blue of the sky.

However, on a certain wintry morn in January, one would scarcely have had the opportunity to stand under India Gate to savour the Old and the New. Kingsway bridging the past and the present is agog with excitement, and thousands of eager spectators are milling on the sidewalks to witness a magnificent pageant that will recreate the glory that is Ind.

The date is January 26, 1955; the occasion, the Republic Day celebrations.

HAMSA glides along in the Republic Day Pageant

The time is 9 a.m. The President of India, the Governor-General of Pakistan and other important personages have taken their seats at a special stand midway between the Secretariat and the India Gate. The pageant starts.

* * *

The ceremonial military parade and cultural pageant included marches by personnel from the three Services, elephants, camel corps, lancers, tanks, armoured cars and artillery units, school children, folk dancers, formation flights of Liberators, Vampires and Toofanis, and decorated floats representing facets of the different cultures prevailing in the States of the Union.

One of the floats that attracted particular attention was a huge Hamsa—swan—designed in the traditional Indian style which glided gracefully along the route, presenting a tableaux that had not only historic significance in the context of Southern culture but also political bearing in the tension-torn world of today.

With pride the State of Madras presented the float and the Avvai tableaux, a scene which depicts the Grand Old Dame of Tamil Nad counselling peace to the Grand Alliance of the Chera, Chola and Pandya Kings. This powerful triumvirate had launched on a punitive expedition to quell a minor chieftan, but Avvai, friend of the under-dog, steps in to preach the message of poace.

All along the procession route Hamsa was cheered by thousands of spectators, from the Union Secretariat to India Gate, through Connaught Place to the Red Fort.

This is the first time Madras State has participated in the Republic Day celebrations at the capital. It may be said that the State met with signal approval even in its maiden attempt, for the display was novel and popular, carefully planned and neatly executed.

A vast amount of preparation and staff work went into the presentation. A State contingent of 34 persons consisting of folk-song dancers and tableaux artistes were sent to Delhi with Sri S. J. Acharya, Librarian of the Madras Secretariat, as officer-in-charge of the contingent. The model of Hamsa for the 'Avvai Peace Mission' tableaux was also sent.

The contingent reached Delhi on the evening of January 19, and took up quarters at the Talkatora Camp in specially erected tents.

Then started a trying time. Heavy rains set in from January 20 and continued till the 25th. But in spite of the biting cold and the pouring rains, the contingent worked cheerfully and steadfastly, rehearsing throughout the day. Work proceeded apace on the assembly of the Hamsa under a special shamiana. At midnight, January 25, Hamsa was ready. The final rehearsal of the parade on January 24 took place in a heavy downpour, and the artistes were drenched, but being real troupers, they never let the weather get them dispirited.

FOLK DANCES at the India Gate

Strict to the schedule, the various units of the Talkatora Camp moved out in the dark, in the freezing cold of 4 a.m. of a winter morning on Republic Day. They assembled at Kingsway, and waited for the signals.

The sun came up at last after days of murky weather, bright and shining: the bands struck up and the floats moved forward, Hamsa gliding along with true swan-like grace.

On the evening of January 27, there was a programme of folk dances at the National Stadium. At the express desire of the Prime Minister, Madras State presented the Harvest Dance. This item was highly applauded by the huge audience and specially praised by the Prime Minister when he personally met the contingents.

The next day also there was a programme of folk dances, this time in the presence of the President. Pinnal Kolattam—a kind of Maypole dance—presented by Madras State was the highlight of the show.

Community Radio Listening

By SRI M. N. PARTHASARATHY. Radio Engineer, State Broadcasting Department

Large-scale community radio listening in India may be said to have started with the enforcement of total Prohibition in the State of Madras. When drinking was prohibited the addict had to be provided with a counter-attraction. What could be better than the radio as a counter-attraction to the confirmed addict? In the year 1938 the first popular Ministry under Sri C. Rajagopalachari as a consequence of their Prohibition policy, started installing out of their general revenues radio receivers in the villages affected by Prohibition. These were the first community radio receivers in Madras State.

Since then villagers in Madras State have greatly cultivated the habit of listening to the community radio receivers to such an extent that they are now prepared rather to miss a meal than the village hour on the radio. Village panchayats and urban municipalities are vying with each other in getting this amenity and the demand for community receivers outnumbers supply.

Proved Quite Popular

The State Broadcasting Department was created in 1938 to install community radio receivers in the Prohibition-affected villages and maintain the sets so installed. The installation of the first hundred receivers in villages at Government expense proved quite popular and demand for such installations began to pour in from more and more villages.

The Government thereupon decided that community receivers would no longer be installed out of the general revenues of the Government but would be installed only if contributions were received from village panchayats towards their cost of installation and towards their subsequent maintenance. The response from the villages was still very encouraging and the Government began to enlarge community listening facilities by installing receivers in places from which the full cost of the receiver was contributed.

Commercial Receivers Modified

Domestic type commercial receivers were purchased in the market. They were then suitably modified for installation in the villages. The internal mechanism was made secure from meddling by the villagers. The tuning of the receiver was arrested to the regional transmitting station. The listening hours were restricted to two hours in the evening. Each battery-operated receiver is provided with two six-volt storage batteries, one of which will be working at the centre while the other will be on charge at the nearest charging station.

The receivers are mostly of the six-volt wet battery-operated type while there are some of 230 volt A.C. mains-operated type also. These precautions and restrictions are quite necessary as it is proposed to provide only community listening facilities and not individual or personal listening facilities. The receivers were tested for quality and performance and the modifications were carried out in the departmental laboratory and workshop.

The loudspeaker inside the receiver was removed and housed in a separate aluminium horn or a wooden cabinet and provided with an extension cable about five yards in length so that the receiver may be kept safely inside a room in the village and the loudspeaker alone kept outside in the open place in order to enable the listeners to gather and listen comfortably. These community receivers were left in the custody of the village panchayats who undertook to operate it daily for two hours in the evenings.

Maintenance of Sets

The installation of community receivers on a large scale left on the Government the responsibility of maintaining them also properly so that all the receivers work continuously without breakdown. In order to maintain efficiently these sets, departmental service stations were established in the heart of each district. Every service station is in the charge of a Radio Supervisor. He has a battery-charging plant and test equipment and tools to attend to minor defects in receivers either on the spot or at his headquarters.

Periodically once in 15 days or 22 days depending upon the battery drain of the set, he will send through his peon charged batteries to centres in replacement of discharged batteries at the centres

which will be collected back by the peon to the service station for charging.

In addition, whenever a breakdown of a receiver is intimated to him by the centre, the supervisor rushes to the place, services the receiver and restores it to proper working condition. In case he is unable to restore the receiver within a day or two, he installs at the centre a standby receiver which will work till the original set is serviced completely and reinstalled at the centre. All these efforts are taken to see that every centre gets unbroken community listening facilities.

The jurisdiction of a supervisor is determined by the density of sets in the area. A number of such supervisors is put under the control of an Assistant Radio Engineer. The Assistant Radio Engineer has adequate facilities for attending to all types of the major repairs of radio receivers and any receiver received by him from a supervisor for major servicing is serviced, restored to proper working order and returned to the supervisor for re-installation at the centre.

It is the primary duty of the Assistant Radio Engineer to see that the Radio Supervisor does his work properly and provides continuous unbroken service at the villages.

Need for Standardised Type

As more and more community receivers are being put in the field the demand for sets became greater. At the same time during the middle of last war, an acute shortage of domestic type commercial radio receivers, particularly of the battery operated type, was experienced. Besides, certain practical difficulties were experienced in the purchase and the maintenance of commercial receivers. More than two dozen types of sets were working in the field and it was found that the cost of storing essential spares was high.

It therefore became necessary to standardise the type of receiver that was to be installed in the field. With this end in view the State Broadcasting Department has, after persistent research and hard work, evolved a special design for a community radio receiver. The characteristics of this receiver apart from its low cost are:

(i) The components used are of standard type and are quite easily replaceable. Many of the essential parts are made in the departmental workshop. Raw and finished products of indigenous manufacture are used to the maximum extent possible.

(ii) The construction is such that servicing can be carried out with the greatest facility on the spot.

(iii) The receiver can be easily converted from operation on six volt wet battery to operation on 230 volt A.C. mains by a mere change of the power pack on the receiver.

(iv) The tuning is pre-set to particular frequency bends to enable listening to the regional and national transmitters.

(v) It has a very attractive cabinet of lacquered wood with the emblem of the State of Madras embodied on it.

(vi) The loudspeaker is removed from the set and housed in a high efficiency aluminium horn with an extension cable. This enables the receiver being kept inside any room and the loudspeaker being kept in the open amidst the listeners.

(vii) The operation of the receiver is made fool proof.

Aesembling the Sets

In view of its particular suitability for installation in Indian villages and its low cost, the Government of Madras sanctioned the assembly of such sets in small quantities at first as an experimental measure. As these sets proved good and popular and greater experience was gained, the assembly of such sets on a large scale has been undertaken. Till now, 1,200 sets of this type have been assembled and sent out for installation in the States of Madras and Andhra and a scheme of assembling 600 receivers to satisfy the immediate needs of the Madras State is in progress.

The departmental laboratory and workshop have a capacity of manufacturing 50 to 75 sets per month at present. This capacity can be stepped up to 100 per month by using additional capital equipment to the value of nearly Rs. 7,500 and to a maximum of 150 sets per month with capital equipment worth Rs. 25,000. It goes without saying that the production on the maximum capacity will further reduce the cost of the community receiver.

Production and Servicing Costs

The cost of the set assembled departmentally is found to be considerably lower than commercial receivers purchased in the market. The cost of 6 volt. battery operated community receivers work out to approximately Rs. 220 and that of a mains operated set to Rs. 180 only. The local body has got to meet this cost fully. In addition, each set is supplied with accessories like batteries (2 numbers) in case of battery operated set, an aluminium horn, aerial installation materials, etc., at an estimated cost of Rs. 300 including the actual expenditure incurred by the departmental staff on the installation of the set at the centre.

The maintenance of these sets leaves a large burden on the State. The average cost of maintenance of a set works out to Rs. 292 in the case of a battery set and Rs. 120 in the case of a mains set. But in fact only a sum of Rs. 90 per year is

being recovered from the local bodies towards the cost of maintenance. The department attends to all kinds of servicing and replacement components including batteries, loudspeakers, valves, etc., at no further cost to the local body. This is being done by the Government in order to provide easy community listening facilities in the State.

Remote Areas Covered

The set-up of the State Broadcasting Department has enabled a high standard of efficiency to be reached in the maintenance of the community receivers in the State. The aim of the Department is to see that even the remotest and most inaccessible of places are provided with community radio receivers as they are the places which require them most, and that every set installed works for all the 365 days of the year.

No labour or expenditure is spared in maintaining the community receivers even in such places as remote islands in the Arabian Sea, a hundred miles off the West Coast or in the higher attitudes of the Nilgiris and Kodaikanal which can be reached only by walking as far as 15 miles.

Listening Facilities

In addition to providing such facilities in the State, the Department has been providing considerable listening facilities in urban and municipal towns. High-power radio receivers capable of loading a number of loudspeakers are being installed in parks and places of public resorts and schools. Wire broadcasting installations have been carried out in a number of places wherein broadcast programmes are received at a central control room, fed to higher power amplifiers and then carried to long distances by overhead wires to individual loudspeakers located at various parts of the city.

Of late, such installations are proving quite popular in municipal towns and cities. Community listening in schools has been widely resorted to in this State. Educational broadcasts of particular interest to the school children are broadcast from the regional transmitting stations. Schools are equipped with community radio receivers. Children gather in their classrooms or in the playgrounds to listen such programmes. There are at present nearly 1,700 community receivers of all types in the State of Madras.

Propaganda Vans

The Government of Madras have provided a further amenity to the villages in the form of propaganda vans. There are nine such vans in the State under the administrative control of the Registrar of Co-operative Societies. Each van has in it a 16 mm. sound film projector, an amplifier a microphone, a record player, a radio receiver and a 1·5 KVA petrol driven generator.

Each van has a jurisdiction of one or two districts and has to tour its jurisdiction. There are an operator, a driver and a cleaner for each van who go to the villages, exhibit films and do propaganda and publicity work. All the equipment in these vans are maintained by the State Broadcasting Department. There is a special staff to examine the condition of the equipment in the vans and see that they give good and continuous service.

Research and Design

Apart from all its work in regard to community listening facilities the Department has under its maintenance the equipment in the two Houses of the Legislature. There is a research section attached to the department where very useful work is being carried out. The design of the community receiver has been one of its achievements. Two hundred loudspeakers have also been assembled in the research section. All components of the loudspeaker excepting the magnet steel have been made in the departmental workshop.

Two hundred I.F. transformers have been manufactured in the research section. These loudspeakers and I.F. transformers are put into service in the field and if they are found to be satisfactory, they will give very valuable results for their manufacture in large scale. The Department is at present engaged in the design and assembly of a high fidelity high-power amplifier and column loudspeakers.

This Department is in special charge of providing public address arrangements for meetings addressed by high personages as the President, the Prime Minister, the Governor and the Chief Minister of the State. Special equipments have been purchased for this purpose.

Greater Transmission Service

It is sure as anything that for quite some time to come the facilities which have so far been extended in the matter of community listening should continue to be extended. The commercial radio receiver is at present beyond the reach of the average Indian. Its cost is not likely to come within reach unless production of receivers in India increases considerably, and this is not likely to happen until greater transmission service is provided.

The Central Government are no doubt doing all they can in this regard; but as providing greater transmission service involves much finance and time, community listening facilities have to be provided by the State Government in a large measure as a sure means of national reconstruction. And towards this end the State Broadcasting Department, Government of Madras, is sparing no effort.

Rural Broadcasts for March 1955

Rural programmes as scheduled for broadcast from All-India Radio, Tiruchirappalli, in the month of March 1955, are given below:—

Tuesday, 1st March 1955—
Farm Forum : Discussion.
Grama Pattum Katchiyum.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Wednesday, 2nd March 1955—
Nattu Nalam : Discussion on the Working of The National Extension Service.
Attam Parkka Vareer ! Theru Koothu.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Thursday, 3rd March 1955—
Farm Forum : Discussion.
Have You Heard This Song ?
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Friday, 4th March 1955—
Grama Chiruvargal.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Saturday, 5th March 1955—
Talk in Tamil arranged by the Department of Rural Welfare, Government of Madras.
Ennai Enra : Song.
The Adult Literacy Class.
Weekly Review of Market Rates and Water-level Readings.
Topical Discussion : Weather Report.

Sunday, 6th March 1955—
Reclamation of Alkaline Soil : Discussion.
Kani Idai Eria : Song.
The Village Welfare Association.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Monday, 7th March 1955—
Oilcakes for Cattle : Discussion.
Sathya Jothiyai : Song.
Irulil Oli : Feature.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Tuesday, 8th March 1955—
Farm Forum : Discussion.
Naiyandi Melam.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Wednesday, 9th March 1955—
Scabies : Discussion.
Vellai Tamarai : Song.
Listeners' Letters.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Thursday, 10th March 1955—
Farm Forum : Discussion.
Musical Bouquet.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Friday, 11th March 1955—
In the Village Panchayat : Kozhi Tiruttu Vazhakku.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Saturday, 12th March 1955—
Life and Manners in Kashmir : Discussion.
Marundillai : Song.
The Adult Literacy Class.
Weekly Review of Market Rates and Water-level Readings.
Topical Discussion : Weather Report.

Sunday, 13th March 1955—
Field Rats and their Control : Discussion.
Kalam Ilam Parudhi : Song.
Promissory Note : Play.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Monday, 14th March 1955—
Pig Rearing : Discussion.
Ettanai Kodi Inbam : Song.
The Village Women's Forum.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Tuesday, 15th March 1955—
Farm Forum : Discussion.
Lavani.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Wednesday, 16th March 1955—
Nattu Nalam : Discussion on the Working of the National Extension Service.
Pudu Natakam : Play.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Thursday, 17th March 1955—
Farm Forum : Discussion.
Pattai Kelungal.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

BROADCASTING

Friday, 18*th March* 1955—
In the Village Dramatic Association.
Silambu Potti : Play.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Saturday, 19*th March* 1955—
Talk in Tamil arranged by the Department of Animal Husbandry, Government of Madras.
Uyariya Kalaigalai : Song.
The Adult Literacy Class.
Weekly Review of Market Rates: Water-level Readings.
Topical Discussion : Weather Report.

Sunday, 20*th March* 1955—
Lac Cultivation : Discussiou.
Tannai Marandu : Song.
The Pial School of Political Science.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Monday, 21*st March* 1955—
Paralysis in Calves : Discussion.
Sathya Jothiyai : Song.
Irulil Oli : Feature.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Tuesday, 22*nd March* 1955—
Farm Forum : Discussion.
Grama Kathai.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Wednesday, 23*rd March* 1955—
Whooping Cough : Discussion.
Enniladha Porul : Song.
Listeners' Letters.
Market Rates: Water-level Readings.
Topical Discussion: Weather Report.

Thursday, 24*th March* 1955—
Farm Forum : Discussion.
Musical Bouquet.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Memoirs of the Agricultural Department

The Agriculture Department have brought out a book entitled *Memoirs of the Agricultural Department*, containing detailed information on the work done by the Agriculture Department from its inception in all the fields of activities. The book, which is priced at Rs. 22-8-0 per copy, will be shortly available for sale at the Publication Branch of the Government Press, Madras.

MAHARAJKUMAR of Sikkim recently visited Madras, and during his stay called on the Chief Minister.

Friday, 25*th March* 1955—
Veedum Vasalum: Play dealing with the Housing Policy under the Five-Year Plan.
Market Rates: Water-level Readings.
Topical Discussion: Weather Report.

Saturday, 26*th March* 1955—
Kudisai Tozhilali : Soap Making : Discussion.
Pudiador Ulagu : Song.
The Adult Literacy Class.
Weekly Review of Market Rates and Water-level Readings.
Topical Discussion : Weather Report.

Sunday, 27*th March* 1955—
Indigenous Sources of Manure : Discussion.
Suttum Vizhichudar : Song.
The Village Welfare Association.
Market Rates: Water-level Readings.
Topical Discussion : Weather Report.

Monday, 28*th March* 1955—
Fowl Malaria : Discussion.
Tunbamilladha nilai : Song.
Aandi Madam : Serial Feature.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Tuesday, 29*th March* 1955—
Farm Forum : Discussion.
Kuravan Kurathi Tarkkam.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Wednesday, 30*th March* 1955—
Care of the Nails : Discussion.
Sentamizhnadu : Song.
Makkal Tiruppani.
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

Thursday, 31*st March* 1955—
Farm Forum : Discussion.
Have You Heard This Song ?
Market Rates : Water-level Readings.
Topical Discussion : Weather Report.

N.C.C. SPORTS RALLY

Shri Sri Prakasa, Governor of Madras, presided over the Inter-Unit Sports Rally of the No. 2 Circle of the National Cadet Corps, comprising Andhra and Madras States, on February 7, 1955, at the Rajendrasinhji Stadium (Madras City). Pictures show the Governor inspecting the Guard of Honour, some of the sports events, including 4×400 metres relay, 100 metres race (women) and the tug-of-war; the Governor presenting prizes to the outstanding athletes of the Rally.

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STATE LEGISLATURE

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Pension Scheme for Elementary School Teachers

By SRI C. SUBRAMANIAM, Minister for Education

Government have been considering for some time the various suggestions made from time to time to better the lot of teachers in aided elementary schools. It was suggested that the introduction of the compulsory insurance scheme would be of great help to them. Even now the teachers, both in aided and local bodies services, have the option to take insurance policies and pay the premia from the provident fund amount standing to their credit.

But many do not seem to use this provision and insure their lives. Presumably it is due to the fact that if the insurance premia are paid out of their provident fund accumulations, they may be left with very little balance from which they can draw advances for meeting inevitable personal commitments for which they may not have other sources to draw upon.

It is also found that a compulsory insurance scheme may not give them much monetary advantage by extra accumulations at the time of retirement. Besides, there is the risk of the policy lapsing if premium on it is not paid during the break in service of the teachers. However, the security against death will be a great advantage to the families of the unfortunate teachers who may die in harness.

Hence Government are considering the possibility of a compulsory insurance scheme to be financed out of the provident fund accumulations without detriment to the availability of funds for temporary advances. Teachers within the age of 30 who would have put in five years of service may come within that purview of this consideration as the accumulation in the teachers provident fund by this time would help to pay the insurance premium in case the teachers are without employment for short spells of time.

Security of Service

Though sufficient security of service is secured under the existing rules still the breaks in service cannot be completely eliminated from consideration. This compulsory insurance by itself does not help the teachers very far, except that it is a protection for the family against untimely death of the teacher. Hence it was suggested that they may be given the benefit of pension instead of the present system of Government contributing one-third of the total accumulation in the account of the teacher in an aided elementary school.

On closer examination, it is found that such pension in lieu of Government contribution will not really benefit such teachers in aided elementary schools, as they will be in service up to the age of 60 as against their colleagues in the other schools who retire at the age of 55 itself. In addition, if the teachers were to die prematurely, they will not even get the proportionate contribution that they should otherwise be entitled to under the existing rules.

Benefit of Pension

After careful consideration the Government have decided that teachers should be given, in addition to the existing scheme of provident fund, pension equal to one-fourth of their pay as per the present rules applicable to pensionable service under the Government and to make it operative with effect from 1st April 1955. The intention is to give the benefit of pension to all those who retire from 1st April 1955. Government have also considered the extension of this benefit to teachers of similar grades employed in elementary and secondary schools under local bodies as well as in aided secondary schools.

As elementary and secondary grade teachers employed in Board and Municipal elementary schools, secondary grade teachers and similar group of teachers like second grade pandits, music teachers, drawing masters, craft instructors, and physical training instructors (second grade) in secondary schools, whether under local body or aided management, are not better off economically and have not greater means than their colleagues in aided elementary schools, Government have decided that the benefit of the pension scheme in addition to the existing provisions for provident fund scheme, should be extended to the latter category also.

Government would bear the entire extra cost on this pension scheme, both in respect of aided elementary and secondary schools and elementary and secondary schools of local bodies. It is expected that one per cent of the teachers in service will be retiring year after year and on that basis, this scheme is expected to cost in 1955–56, Rs. 1,18,390. It is expected that the ultimate cost to Government on the basis of the present number of retirement of teachers would be Rs. 8,56,950 in 1976.

[*From the speech of Sri C. Subramaniam, Minister for Finance and Education in the Madras Legislative Assembly, replying to the debate on the Education Demand.*]

More Scholarships for Backward Classes

The Government have sanctioned additional allotments of Rs. 1,00,000 and Rs. 50,000 towards the grant of scholarships during the year 1954–55 to students, belonging to eligible communities and backward classes, respectively.

Dr. (Miss) HELEN KELLER IN THE CITY

1. Dr. Helen Keller being received by the Governor Shri Sri Prakasa at the Meenambakkam aerodrome on 9th March 1955.

2. Dr. Helen Keller meeting the inmates of the various schools for the Blind and Deaf in the City who had come to receive her at the aerodrome.

3. Press Conference at Raj Bhavan.

4. Dr. Helen Keller "feeling the personality" of the only woman representative at the Press Conference.

5. Speaking at the reception by the Guild of Service at Raj Bhavan.

6. The little boy—an inmate of a City School for the Blind and Deaf—presented a flower to Dr. Helen Keller. The great friend of all the handicapped is feeling knowing and thanking him.

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COVER PAGE: Why has the subconscious of the tiny little Chamkur Siri Devi (aged 5) prompted her to draw a man like this? She seems to have given more prominence to the machine in the man. Is it a symbol of the age in which machine, created by man, is almost threatening to destroy him? Or is it a suggestion through this almost mystic medium of the ascendancy of the "nuts and bolts" in man over the human senses?

Education of Handicapped Children

The number of institutions for the education of the Blind and the Deaf-mute in Madras State is eleven with a total strength of 592 boys and 367 girls, as shown below,* at the end of 1953–54.

Of the three aided schools for the Deaf-mute, one has a section for the Blind also (i.e., school for the Deaf and the Blind, Teynampet), with 27 boys and 40 girls.

In this State, prior to 1950, the education of the Physically handicapped children was largely provided for in the non-Government institutions. In 1950, the State Government began to take a direct interest in the education of the Blind and the Deaf, when they decided to take over the management of the school for the Blind, Poonamallee, from a private association. Government have also opened three schools since (two for the Blind and one for the Deaf) specially intended for handicapped children.

Schools for the Blind.

The School for the Blind, Poonamallee, which was formerly run by the Madras Association for the Blind, was actually taken over by Government from 1st July 1950. The two other Government schools for the Blind were opened at Salem and Kasargod on 9th January 1950 and 7th October 1950 respectively. The Government School for the Deaf, Chunangad, was opened on 20th July 1950.

In order to improve the education and welfare of the handicapped children on modern methods, two officers of the department were deputed to the United Kingdom, one for studies and training in the Education of the Blind, and in the Blind Welfare Administration and the other in the Education of the deaf. Both of them have come back and have taken up work as Principals of the Government School for the Blind, Poonamallee, and the Government School for the Deaf, Chunangad.

Teaching the Mentally Defective.

The starting of a school for Mentally Deficient children has also been under consideration, and, with that in view, the State Government deputed one teacher of this State for undergoing the Diploma course for teaching the mentally defective children conducted by the Society for the care, treatment and training of children in need of special care, Bombay. The teacher has come back from training, and the question of starting the school is engaging consideration.

General education at least up to the fifth standard is imparted in all the schools, while a few of them provide for education upto the eighth standard, with the use of text books prepared according to the Braille Code in the case of blind schools. Besides general education, the handicapped children are given vocational training in crafts like rattan work, cloth-weaving, mat-weaving, gardening, etc. Instruction in Music, vocal and instrumental, is also imparted in the schools for the Blind.

There is an industrial section in the Government School for the Blind, Poonamallee, where rattan work and cloth-weaving are the principal crafts. The section is mainly intended for providing gainful occupation for such of the inmates as have completed their course of education in the school or are too old for the educational course.

Hostels and Grants.

Instruction in all the schools is free. Hostels are attached to the four Government Schools, the student-inmates being given free boarding, lodging and clothing. Provision is also made for medical attendance on the inmates. Most of the aided schools are also predominantly residential ones, providing boarding, lodging, etc., to the pupils, either free of cost or for a reasonable fee. Besides the usual teaching grant which is based on two-thirds of the approved net cost of maintenance, these schools are also given boarding grants in respect of the destitute pupils.

In the Government School for the Blind, Poonamallee, besides free board, lodging and clothing, the pupils of the educational section are paid pocket-money at rates varying from anna one to annas six a month, while the workers of the Industrial section are given stipends ranging from Rs. 4 to Rs. 7–4–0 a month. Some workers to be discharged from the Industrial section of the school, after a fairly long service, have also been granted a pension of Rs. 10 a month.

The State Government have also taken a hand in and encouraged the post-primary education of deserving and poor handicapped students by, among other things, participating in the scheme of post-school scholarships for the Blind instituted by the Government of India. Two promising blind students have been given help in this manner for pursuing University courses of studies. Sri T. P. Jesudass Subramaniam, a blind student has completed the B.A. course with the financial assistance given by the Government of India and the State Government. He has passed Parts I and III of the B.A. degree examination. Another blind student, Sri E. V. Joseph, is studying in the Senior Intermediate class, and he has been granted a post-school scholarship for the Blind and a lump sum of Rs. 500 for the purchase of books, etc.

Two blind boys who completed their studies in the Government School for the Blind, Poonamallee, have been given facilities to pursue their studies in the Board High School, Poonamallee,

* Number of institutions.

	Government.	Municipal.	Aided.	Total.	Number of scholars. Boys.	Girls.
Blind ..	3	..	2	5	203	92
Deaf-mute ..	1	2	3	6	389	275

the expenditure on fees, etc., being borne by Government.

Teacher-Training.

The fundamental importance of teacher-training in the organization of education for the handicapped has been recognized, and, accordingly, measures have been undertaken for organizing the training of teachers for the Blind and the Deaf and improving the status of these teachers.

(*a*) A diploma in teaching the Blind and the Deaf has been instituted, and a scheme for the diploma examination has been brought into force. 'The aim of the scheme is to raise the teaching of the Blind and the Deaf to a recognized position, to give the teachers of the Blind and the Deaf a status commensurate with the special nature of the work by giving them an opportunity to equip themselves with full information relating to the problems of the Blind and the Deaf and with up-to-date methods of teaching them through an approved course of training.' There are two grades of Diploma—Senior for B.T. candidates and Junior for Secondary Grade teachers. The course of training is for ten months.

(*b*) Recognizing the special nature of the work of teachers of the Blind and the Deaf and the need to attract well-qualified teachers for the work, Government have sanctioned the payment of special pay at the following rates to such of them as possess an ordinary teachers' certificate in addition to the certificates of competency to teach (or a diploma for teaching) the Blind or the Deaf—B.T Assistants Rs. 15 a month; Secondary Grade teachers Rs. 10 a month; Higher Elementary Grade teachers and Specialist teachers Rs. 7–8–0 a month. The Secondary grade teachers are also allowed a higher starting pay of Rs. 60 in the scale of Rs. 45—3—60—2—90.

(*c*) About 15 teachers for the Blind have been trained since 1949–50 in the training sections conducted in the Government School for the Blind, Poonamalle, and the T.D.T.A. School for the Blind, Palayamkottai. A few teachers for the Deaf have also been trained in the School for the Deaf, Teynampet. It may be possible to attach, in due course, teacher-training sections to the Government Schools for the Blind and the Deaf at Poonamalle and Chunangad.

The total expenditure annually incurred by the State Government on the education and care of the handicapped is roughly as follows: (1) Expenditure on 4 Government Schools—Rs. 1,13,000, (2) Grants-in-aid to Non-Government Schools—Rs. 80,000; Total Rs. 1,93,000.

—

Best Books in Kannada

The Government have approved the proposals of the Karnataka Sangh for the award of three prizes for the following best books in Kannada for the year 1953–54: (1) Short Stories: *Hathu Munisifa Mattu Itara Kathegalu* by Sri Baglody Deva Rao, South Kanara district. (2) Drama: (*a*) *Darpaka Vijaya* (manuscript) by Sri M. Shankaranarayana Bhat, Mangalore. (*b*) *Mahatyagi Purandaradas* (manuscript) by Sri P. K. Narayana Vidwan, Mangalore. (3) Children's literature: *Makkala Muddu, Kiriyara Kannari, Chinnara Haduyalu* by Sri Palakala Sitarama Bhat, South Kanara district.

Each prize will be of the value of Rs. 500. The prize for drama will be shared equally by two authors.

Wakf Act comes into Force

The Wakf Act, 1954 (Central Act 29 of 1954) has come into force in this State on and from the 15th January 1955. The object of the Act is to provide for the better administration and supervision of Wakfs. In order to gather necessary particulars regarding the existence of the Wakf properties, a survey has been undertaken. Under section 4 (1) of the said Act, the Government, have appointed a Commissioner of Wakfs for the State and Assistant Commissioners of Wakfs, one for each district, for making the survey.

In order to enable them to conduct and complete the survey as expeditiously as possible, persons interested in the Wakf and the public are requested to bring to the notice of the Commissioner of Wakfs, Office of the Board of Revenue, Madras, or the Assistant Commissioners of Wakfs concerned in the District Collectors' Offices the existence of Wakfs with details regarding their nature and objects, the value of their properties, their gross income, expenditure, etc., and to render assistance to them in the course of their survey and furnish any other useful information which will facilitate their enquiries.

Books for Neo-Literates

The Ministry of Education, Government of India have announced five prizes of Rs. 1,000 each and 30 prizes of Rs. 500 each in all 35 to be awarded to the best books submitted, subject to a fair distribution of prizes among the various regional languages. Besides, any book which is adjudged of sufficient merit will be approved. The approved books will be brought to the notice of various State Governments, who will be recommended to purchase them for their use in the Community Project Area and elsewhere in their educational institutions and libraries.

Books in any one of the regional languages of India can be submitted. They should be written in a simple style and should have a literary appeal. Though original books and manuscripts will be given preference, acknowledged and authorized translations or adaptations will also be considered. The books submitted should be helpful to the neo-literate adult from the economic, social and cultural view point.

Works of authors, who are not alive, can be considered for 'approval' only. They will not be eligible for prizes. Books should normally be of about 32 pages and in no case should they exceed 48 pages of demy octavo or 20 × 30, printed in not less than 6 point type. A book submitted in manuscript should also conform to this limitation in size. Four copies of each printed book should be submitted and three copies, if manuscripts. Each book (title) should be accompanied by the treasury chalan of Rs. 3 if submitted by an author or Rs. 5 if submitted by a publisher.

In all cases of dispute, the decision of the Central Ministry of Education will be final. Further particulars can be had from the Secretary, Folk Literature Committee, Ministry of Education, New Delhi, to whom together with the Treasury chalan/Postal Order should be sent before 30th April 1955.

Dr. Helen Keller in Madras

Have you ever pondered over the immense potentialities of the human spirit? To see Dr. (Miss) Helen Keller is to learn a lesson about this great phenomenon. Our faith in humanity is reinforced when we see this great woman, blind and deaf, and even mute for a long time, coming to us with a message of love, of compassion, of solicitude for the welfare of all the less privileged and suffering members of the human society. Only her physical eyes have been rendered ineffective by nature. A thousand eyes of the heart, of the soul, are peering at you to find out whether justice is being done to the handicapped among us, to the blind, to the deaf and to the mute.

In the afternoon of March 9, a crowd different from the usual gatherings in the aerodrome was waiting for the plane from Hyderabad. A good number among them were those who could not see the plane. They could not even hear its drone. They were the inmates of the various schools for the blind and deaf in the city. They were there to welcome their great friend and one of their own world—Dr. (Miss) Helen Keller.

At last the plane arrived. Resting one hand on the shoulders of Miss Polly Thompson, her companion, and the other catching at the railings after three attemps at locating it, Dr. Keller slowly got down from the aircraft. Said Miss Polly Thompson: "Helen, the Governor of Madras is here to receive you."

Dr. (Miss) Helen Keller and Miss Polly Thompson.

"Thank you, Mr. Governor," said Dr. Helen.

It is difficult to forget that sweet and long drawn out "Thank you." One never comprehended that so much of sincerity and poesy could be packed into that common word of ceremonial courtesy heard from one for anything. Then followed a scene unequalled for its pathos. The boys and girls of the different schools for the blind were lined up to receive Dr. Keller. They were seeing each other with their minds' eyes. It was human willpower staging a parade. Before that power of the human mind, of will, the onlooker made an offering—a drop of tear!

The next day at Raj Bhavan was the Press conference. Only the fragments of an inspiring and redoubtable story came out as answers to the questions of the pressmen. The queries of pressmen were repeated by Miss Thompson. Sometimes the latter also scrawled the messages in the palm of Dr. Helen. Quick flashed the answers even before the sentences were completed.

As usual the questions related to the struggle waged by Helen against her triple handicaps—the arrival of Anne Sullivan on an eventful day in the seventh year of Dr. Helen, the touching

DING: Braille with seeing fingers.

or feeling of objects and learning of its equivalents in words, and ultimately the heroic struggle waged for 25 years culminating in the dramatic announcement: "I....am....no....longer....dumb!"

But Helen is still not satisfied. In the context of the remarks of Dr. Keller on dreams, a Press representative stated: "But one of your greatest dreams had been fulfilled—the dream to acquire the capacity for speech!"

Helen replied: "I would consider the dream completely fulfilled only when I am able to speak like you!"

Dr. Keller was full of tribute for the work being done in Madras for the handicapped. She heartily congratulated the Madras Government for the part they were playing in this direction. And she was immensely pleased at the special pay that was being given to the teachers employed for the education of the blind and the deaf-mutes. She also spoke with added feeling on the question of prevention of blindness. She wanted more clinics, more equipment, and more trained occulists. She stressed the duty of the Government in this direction.

The reception by the Guild of Service, at Raj Bhavan, was also a memorable function. Said the Governor Shri Sri Prakasa, who presided: "I have never in my life felt small in the presence of any man. But before this great and noble lady, I feel small."

Polly Thompson's fingers were busy conveying the speech to Dr. Helen. But suddenly it stopped. Why? The Governor was paying a fulsome tribute to Miss Polly Thompson, the great friend and guide of Dr. Helen. For 40 long years, Miss Thompson had been immersed in this labour of love and yet not tired. Dr. Helen was pressing the hand of Polly for getting the message. Probably she had guessed what was going on. But to no avail.

The Governor again resumed paying tributes to Helen and Polly's fingers were again murmering. The involuntary words of tribute poured out from one. "Oh Polly, you are an angel!"

When in the presence of great children of God like Dr. Helen Keller and Miss Polly Thompson one's faith in humanity is reinforced. Humanity's destiny is not self-destruction. Will the mess caused by politicians of the world make the fumes of the hydrogen bomb reach out even to the blesssed like Helen and Polly? One is reminded of Siddhartha's words: "Yeshodara, will you too die, will I too die!"

Posthumous Award to City Constable for Gallantry

The President has awarded posthumously the Police Medal for gallantry to Sri Arunachalam Ratnavelu of the Madras City Police.

According to the citation read on the occasion of the presentation of the President's Medal the decoration has been awarded "for outstanding courage in grappling unarmed with a notorious registered criminal who stabbed him and giving up his life in the scuffle."

The Governor of Madras presented the Medal posthumously at a Parade held on the Pudupet Maidan, Madras at 5 P.M. on Saturday, the 19th February 1955.

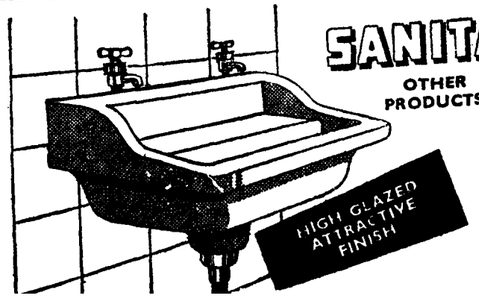
Born in South Arcot District on January 7, 1918, A. Ratnavelu enlisted himself in the Army as a Sepoy in 1942 and was discharged in 1946 with a certificate that his conduct in the Army was "very good". He joined Madras City Police on August 20, 1947 and maintained a clean record of sincere service.

On June 14, 1953 he was a Police Constable attached to Vyasarpadi Police Station. Hesaw a rowdy come to a betel nut shop at 95, Demellows Road, Choolai, and attempted to extort money under threat. Though in mufti and unarmed and 'off' duty, he without hesitation challenged the rowdy and arrested him even though he was dragged on to the adjacent Munuswamy Street being overpowered by the rowdy.

The rowdy suddenly drew a bichuva from his person and stabbed the unarmed Constable on the neck. The Police Constable succumbed to the injury and died in a pool of blood almost immediately.

This gallent Constable's funeral was held with Police Honours on June 16, 1953 in Oteri Burial ground. He left behind his wife Lakshmi Bai aged 22 years with two sons, one daughter and a baby.

He left his family in very poor circumstances with no property. The Government granted extraordinary pensions to them in recognition of the gallant act of the deceased and their helpless condition.



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increased if the Government of India grant us a loan for distribution to licensees.

Board Scheme opposed.

The question of Constitution of a Statutory Electricity Board for this State was examined by the Government on several occasions previously and they had reached the conclusion on every occasion that a Board as envisaged under the provisions of the Supply Act was neither necessary nor desirable for this State. The main objects underlying the Board Idea, viz., improvement co-ordination and rationalisation of production, bulk transmission and distribution of power have already been achieved in this State, as over 99 per per cent of the power now consumed in this State is generated and transmitted in plants owned and operated by the State. The Electricity systems of this State are now being operated in one grid under unified and co-ordinated control and management. In the matter of power development and administration of the Electricity supply business in this State the Government machinery has proved to be quick resilient, and efficient as evidenced by the power development achieved in this State and the steady return yield on the capital outlay with only very reasonable rates charged to consumers.

It is a matter for doubt whether the Board, if one had been in existence in this State, could have achieved so much of progress as has been achieved by the Government during the period of the First Five-Year Plan. Electricity supply in bulk and distribution of power, which is a public utility, must necessarily be a State monopoly if a large grid is to be operated. An Electricity Board with such a monopoly is likely to show profits by pushing up rates and be generally unresponsive to public opinion and needs. The Board which will not have the same authority and resources as the State Government may not be able to raise funds for development any better than the State Government.

The Government have built up a well-knit organization in their Electricity Department and it would be very difficult to hand it over to the Board at this stage without sacrificing its efficiency and prejudicing the interest of the public at large. The interests of electrical development in this State are bound up with those of irrigation

Rural Electrification

The number of villages electrified during the month of January 1955 in the various system was as follows :—

Pykara System	22
Mettur System	4
Papanasam System	6
Madras System	1
Total ..	33

The names of villages and the particulars of the taluks and districts where they are situated are given below :—

Pykara Electricity System.

Cheyur	Palladam ..	Coimbatore.
Muriandampalayam		
Puliampatti	Avanashi ..	Do.
Alathur	Palghat	Malabar.
Manjalore		
Kavaseri		
Pallavoor		
Pudiangam		
Kunathukavu		
Kattucheri		
Puliampatty	Pollachi ..	Coimbatore.
Devanurpudur	Udamalpet ..	Do.
Pudupalayam		
Thathubennu	Coonoor ..	Nilgiris.
Honnathalai		
Kalinguhatti		
Kunnaseri	Palghat	Malabar.
Purakulam		
Meripetta		
Thirupalur		
Peringulam		
Ayyanpalayam	Nilakottai ..	Madurai.

Mettur Electricity System.

Dalavaipalayam	Karur	Tiruchirappalli.
Purassai	Arkonam ..	North Arcot.
Murungai		
Vasampalli	Gudiyatham ..	Do.

Papanasam Electricity System.

Pazhamcottai	Sankarankoil ..	Tirunelveli.
Alwar-Tirunagari	Tiruchendur ..	Do.
Alagiamanavalapuram ..	Do. ..	Do.
Kunchanaickenpatti	Aruppukottai ..	Ramanathapuram.
Poon Chothu	Melur	Madurai.
Virattipatti	Madurai	Do.

Madras Electricity System.

Kovur	Saidapet ..	Chingleput.

(*Continued on the next page*)

e.g., in the case of Mettur, Papanasam and Periyar Schemes, and the setting up of an Electricity Board for this State will amount to indirectly placing the control on irrigation also with the Board.

These are in brief the considerations on which the Government have been opposed to the setting up of an Electricity Board for this State.

Reduction in Expenses.

About the demand for working expenses of electricity schemes actually in operation, while our gross revenues have been going up steadily, as is to be expected, our working expenses have not shown any undue or unreasonable increase. The gross revenue expected in 1955–56 amounts to Rs. 6.45 crores as against the Budget Estimates for Rs. 5.26 crores for 1954–55. The Budget Estimate of Rs. 3·25 crores for net expenditure on working for 1955–56 (as against 3·19 crores last year) amounts to only 50 per cent of the gross revenue expected as against 61 per cent in 1954–55. The increase in the size of our Electricity system with a common direction and control, stores, etc., for the whole Department has actually meant a reduction in expenses compared with revenue.

(*Continued from the previous page.*)

A large number of rural extension schemes were progressing. The following are the particulars of new lines constructed and brought into beneficial use during the month in the several systems.

	H.T.	*L.T.*
	(*In miles*).	
Pykara Electricity System	36·17	46·62
Mettur Electricity System	6·90	8·02
Papanasam Electricity System	5·76	17·52
Madras Electricity System	1·90	10·20
Total ..	50·73	82·36

In the Madras Electricity System a total number of 87 D.C. services with an approximate connected lead of 106·43 K.W. were changed over from D.C. to A..C supply on a voluntary basis.

During the month 15 extensions were sanctioned by the Chief Operation Engineers and Chief Engineer for Electricity at an estimated cost of Rs. 5,65,800.

"New Look" for the Police Journal

The Madras Police Journal, now in its sixth volume, a quarterly which formerly had a restricted circulation in official circles, has now assumed a "New Look", with an attractive format and a carefully selected budget of articles of general interest. The Editorial of the January-March 1955 quarter emphasises the new approach : "Our aim now is to associate in an ever-increasing measure, members of the general public in our work."

This is a fine move and worthy of every encouragement. In the pre-Independence era the red-turbaned policeman was a figure of awe, rather than assurance : he symbolised the might of authority, not the benevolence of law. In London a benighted stranger can always 'Ask a Policeman'. But in the British Raj the only person who could confidently claim acquaintanceship with policemen were either KDs. or informers.

That is not the position today. In Dr. Cherian's words, the policeman should be looked upon as the friend of the public. The acid test to differentiate between totalitaraniam and democracy is the nature of the police organisations in either state. In the former, the police forces stand apart as an instrument of tyranny ; in the latter as Kibble says, the public and the police are to great degree identical. "Orderly society is dependent upon efficient police work and the prestige of the police work."

The Madras Police Journal has made a good beginning by publishing and inviting further artiqles from contributors other than police officials. Even an article critical of police failure to solve a celebrated train murder case, finds a place in the *Journal*. A brief account of the fabulous exploits of Forjett, a 19th Century police officer; retold by H. G. C. Barboza, clearly indicates police admiration for the type of officer "keeping abreast of his office-work by day and perambulating the more dangerous haunts of the local criminals by night."

Crime detection is ever an engrossing subject. It is therefore natural to assume that the *Journal* will have an increasing readership, and speedily build up happier police-public relations.

Commercial Directory, 1952

The 'Commercial Directory, Madras, 1952' published by the Government of Madras, contains valuable information regarding the resources of the State, descriptive accounts of major industries, State enterprise, State Financing and Industries, conditions of import and export trade, etc. The price of this publication has been reduced to Rs. 5. Copies are available with the Controller of Stationery and Printing, 166, Mount Road, Madras, and all authorised Agents of Government Publications.

Popular Handbook on Railways

A popular handbook entitled '*Indian Railways*—1953–54' has just been published by the Ministry of Railways, presenting in a readable style the different aspects of Railway working during the last financial year.

The publication, which is available from the Manager of Government Publications, Delhi, is intended to provide the general public a popular account of the operations of India's largest nationalised undertaking.

Electricity Schemes in Operation

By SRI R. SHANMUGHA RAJESWARA SETHUPATHI, Minister for Works

On the recommendation of the Governor, I move that the Government be granted—

(1) a sum not exceeding Rs. 5,50,71,100 under Demand XXVII—Electricity ; and

(2) a sum not exceeding Rs. 11,78,64,500 under Demand XXXVIII—Capital outlay on Electricity Schemes.

The first demand is for a grant from current revenues to meet working expenses of electricity schemes in operation. The working expenses include expenditure on smaller works financed from ordinary revenues, expenditure on operation and maintenance, cost of establishments and provision for depreciation. Against Rs. 5·51 crores required for these working expenses, the net expenditure on working alone will be Rs. 3·25 crores. The gross revenue expected to be earned by the Department will be Rs. 6·45 crores. The gross amount required under Demand XXXVIII relating to capital outlay on Electricty Schemes is Rs. 11,78,64,500.

Extension Schemes

While every attempt is being made to see that extension of electricity is not lop-sided, it should be appreciated that extension of electricity depends on the feasibility of supply, availability of power, etc. Expression has also been given in certain quarters that the Electricity Department should not insist on minimum return or guarantee. The Electricity Department is not a service Department like other Government Departments but is a commercial Department and any extension of power given by the Department should at least be self-supporting, meeting the interest, maintenance and operation, depreciation and generation charges though not yielding a profit which any commercial Department is entitled to expect.

Electricity schemes are executed from borrowed capital and the Department cannot be expected to take up an extension scheme costing say a lakh of rupees which is expected to yield a return of Rs. 1,000 or so annually as our interest charges alone will amount to Rs. 5,000, not to speak of the operation and maintenance and depreciation charges.

Achievements

Let me now mention some of the achievements of the Department. In the matter of rural electrification, Madras State leads all other States in India. The number of villages electrified in this State so far is over 2,200 and this is more than 50 per cent of the total number of villages electrified in India. The total number of pumpsets working on electricity in the State is now nearly 22,000.

The connected Irrigation and Agricultural load is now about 91,000 K.Ws. which is more than double of what it was in 1946–47, and the Industrial load is 226,000 K.Ws. The installed capacity of our power plant is 247,300 K.Ws. and our mileage of Transmission and distribution lines is nearly 10,600. The power demand is 173,000 K.Ws. and the units generated in 1954 were 894 millions.

The generating schemes included in the First Five-Year Plan have all been completed and brought into beneficial use a year ahead of the Plan period, except the Periyar Hydro-Electric Project. This project was sanctioned by the Planning Commission only in December 1953 and the House voted a provision of Rs. 30 aksh for expenditure in the current year. As negotiations with the Travancore-Cochin State Government in regard to the royalty to be paid for use of the Periyar Lake water for power generation by this Government could be completed only in November 1954, preliminary work was started in December 1954 and the work is in progress. A provision of Rs. 17 lakhs in the revised estimate for the current year and Rs. 109 lakhs in the Budget Estimate for next year has been made for expenditure on the project.

From the Speech of the Minister for Works in the Madras Legislative Assembly, moving Demand XXVII—Electricity, and Demand XXXVIII—Capital Outlay on Electricity Schemes.

POWER FOR VILLAGES : Sri K. Kamarai, Chief Minister, switched on the Rural Electrification Sch[illegible] ai District) on 11th February 1955.

Power Consumption

Agricultural and Industrial expansion are the necessties for the prosperity of a nation. Nearly 75 per cent of the power production in the State is consumed by Agricultural and Industrial loads and the balance is used for domestic, commercial, traction, public lighting and other purposes. Agricultural loads are given priority to the extent feasible and in addition to the concessions given to agricultural consumers previously the Government have ordered that the security deposits to be recovered from agricultural consumers towards current consumption charges may be limited to two months' charges as against three months' charges in other cases, that when the security exceeds Rs. 300 the amount may be recovered in three monthly instalments as against a single instalment in the cases of other categories of consumers.

The Government have also ordered that where it is proved that a well did not have sufficient water in a year for utilising the pumpset to the fullest extent, the recovery of the guaranteed minimum charges may be waived provided the consumer agrees to a corresponding extension of the period of agreement.

Hydels

Water sortage position in the Hydel reservoirs is satisfactory at present and an additional thermal plant of 15,000 K.Ws. capacity has been recently commissioned at Basin Bridge under the II stage extensions. The addition to the generating capacity targetted for the five year plan, viz., 111 M.W. has already been achieved with the commissioning of the plant.

The Government therefore expect that as in 1954 there will not be any power cut in 1955 also. The demand for power is growing at a fast rate and steps are being taken to increase the generating capacity of the Madras Station by another 30,000 K.W. by 1957–58 and to purchase from the Travancore-Cochin Government an additional block of 20,000 K.W. of power.

The Kundah Scheme

The demand for power, particularly for agricultural pumpsets and rural electrification is widespread and insistent and by the time the projects included in the Plan are completed, it will be far in excess of the power supplies which would be available then. To meet the situation, the State Government have made a strong representation to the Planning Commission and the Government of India to sanction the Kundah Hydro-Electric Scheme which will have an initial capacity of 1·45 lakhs K.W. and an ultimate capacity of 1·80 lakhs K.W.

A decision has been taken by the Centre to take up the lignite mining project inclusive of the setting up of a lignite burning thermal power station of 200,000 K.W. capacity and when this materialises, power to the extent of 80,000 K.W. will be available for the State grid after meeting the needs of the mining project and the fertiliser and other industries which are proposed to be taken up along with the mining.

Capital Outlay

The revised estimate under Capital Outlay on Electricity Schemes is Rs. 7·13 crores and the budget estimate for next year is Rs. 11·40 crores. These large provisions have been possible on account of the loan amounts granted or promised by the Centre. The Government of India have offered a total loan of Rs. 6·97 crores to this State for financing rural electrification schemes and for expansion of power facilities with a view to increase employment opportunities. Our programme of rural electrification in the First Five-Year Plan was to extend supply to 250 villages and to connect up to 3,000 pumpsets annually. Due to financial stringency during the earlier years of the plan period, this programme could not be kept up. The programme for 1955–56 is to electrify 500 villages and to connect up 6,000 pumpsets.

The power tariffs under the grid are kept as low as possible to benefit the consumers and encourage industrial production. It has been expressed in some quarters and in the Press that the surcharge which was introduced by the Department during the war time has not been withdrawn. Though the cost of generation and distribution has increased considerably as a result of the increase in prices of materials, wages, dearness allowances, etc., the basic tariffs have not been increased above pre-war levels but only a surcharge of 20 per cent on these rates is being levied to meet the increased costs. This surcharge compares very favourably when viewed in the light of the proportionate increase in price index over pre-war levels. Any reduction in the rate of surcharge will result in the Department working at a loss and I am afraid it may not be possible to reduce or remove the surcharge until prices go down to pre-war level.

Acquisition proceedings

The Madras Electricity Undertakings Acquisition Act, 1954, received the assent of the President on October 9, 1954, and has come into force from October 13, 1954. The Palghat Electrical Undertaking has been notified to vest in the Government on April 1, 1955, under the provisions of the new Act. Provision has also been made in the next year's budget for payment of increased compensation to those local authorities whose undertakings were already taken over by the Government under the 1949 Act and advance compensation for those licensees whose undertakings will be taken over in 1955–56.

All the remaining licensee s undertakings cannot be taken at one stroke as it will involve a large capital outlay. As already explained by me at the time of passing the Act by this House, only those undertakings which are not working efficiently or which have to be acquired immediately to help the Government's programme of rural extension will be taken up first. The others will be taken up gradually in batches after drawing up a programme for the purpose so that the licensees may not be kept in suspense. Pending such acquisition, the Government have sanctioned to the licensees a loan of Rs. 10 lakhs during the current year and will sanction a further sum of Rs. 15 lakhs in next year for rural extension scheme in licensees' areas. This financial assistance will be further

Co-operative Housing

It is needless to say that Madras has made good progress in the matter of co-operative housing as in every other field of co-operative activity, though there is, as yet, much more to be done. The first real attempt at organizing a co-operative housing society in the State was made at Coimbatore in the year 1913–14. But the real progress in the activities of co-operative building societies began only from 1924 onwards when Government began to finance these societies direct. House building co-operative societies sprang up throughout the State mostly in urban areas and provided Government loans to their members for construction of houses according to approved plans. The loans carried low rates of interest and were repayable over a long term period of 20 years.

The housing problem became phenominally acute after the termination of the war and special measures were needed to meet the growing need for residential accommodation. Housing Committees were constituted in May 1947 in Municipal and Major Panchayat areas with officials and non-officials as members for the election of house sites in centres where the scarcity of houses was acute. After the Committees had selected suitable sites for house construction, co-operative housing societies were organized in these centres.

There are at present 119 ordinary building societies, 39 house building societies, 11 house construction societies and one co-operative township—170 in all with a total paid-up share capital of Rs. 102·16 lakhs and a total working capital of about Rs. 364 lakhs. Nearly 5,700 houses have been constructed in various municipal and major panchayat areas through the efforts of co-operative housing societies. There are also rural housing societies established to provide houses for the rural folk with the help of Government loans. There were 23 rural housing societies in the State on 30th June 1953.

Two Central Schemes

Housing is the primary need of civilised life and it ranks in importance next only to food and clothing. It is therefore necessary that schemes suited to benefit all classes of people according to their varying repaying capacity are formulated so as to provide accommodation to the needy who can afford and who are willing to pay for them. Any solution of the problem must take note of the social traditions and pecuniary circumstances of the people and so newer ways of tackling the problem of large scale low cost buildings have to be devised.

The Central Government have since formulated two schemes, one for low income groups (income not exceeding Rs. 6,000 per annum) and the other for Industrial Workers. The first scheme provides loans up to 80 per cent of the actual cost of the house subject to a maximum of Rs. 8,000 per house and separate loans for developing sites, etc. Under the second scheme, help is given in the form of loan and subsidy to State Government private employers and co-operative housing societies. Co-operatives undertaking the scheme are eligible for a subsidy of 25 per cent and loan of 50 per cent of the cost of houses repayable in 25 years.

The Bodinayakkanur Co-operative Building Society which is opening the Subbaraj Nagar colony today was registered on 11th July 1948 and it started work on 15th November 1948. On date it has 142 members on its rolls with a paid-up share capital of Rupees 87,485. The society obtained 45·61 acres of land through land acquisition proceedings and 0·05 acre by private negotiations at a cost of Rs. 43,625. The land was parcelled out originally into 250 house plots after setting apart the necessary site for common purposes like roads, parks, schools, playground, etc. Some of the plots have since been clubbed.

The society has so far allotted 101 house sites realizing Rs. 49,522–3–0 as land cost. It has adopted four type-designs of houses at an estimated cost of construction ranging from Rs. 3,500 to Rs. 12,000. It has so far been sanctioned Government loans to the extent of Rs. 2,19,200 to 31 members. Out of the amount sanctioned, it has drawn till now Rs. 1,84,200. It has completed 21 houses and has eight more under construction. Out of 21 completed houses, 15 have been occupied.

The society has spent till now about Rs. 2,53,420 on construction. The credit for this progress made by the society goes to the ceaseless and untiring efforts of the Directors of the society.

Though the co-operative housing societies have doubtless made a notable contribution to the relief of housing shortage and the co-operative movement in general has been making steady progress year after year, there is no room for self complacency.

The Rural Credit Survey undertaken by the Reserve Bank of India has shown that the ryot is still at the mercy of the private money-lender for his needs and that the co-operative movement has not even touched the fringe of the problem of rural credit. The task that lies ahead of us, co-operators, both official and non-official, therefore, is to reorganize and revitalise the co-operative movement in such a way that the entire agricultural population is brought within the fold of the co-operatives and full and prompt finance is provided to them by the co-operatives. If this gigantic task should be accomplished successfully, State participation and State guidance is necessary.

We have, therefore, to evolve a suitable programme of co-operative development and expansion under State participation and direction without sacrificing the democratic and autonomous character of co-operative organizations. As we have a lot of lee way to make, we have to take a bold step forward instead of clinging to abstract theories and narrow technical concepts. The movement has to readjust its programmes and policies, having regard to the fact that our national economy is to be reordered on the socialistic pattern and make its legitimate contribution towards the realization of the ideal of a Welfare State placed before us by our National Leaders.

A Committee has recently been constituted by the State Government to review the progress made by the Co-operative Movement in the State, to enquire into its present needs, difficulties and problems and to make recommendations regarding its consolidated movement and reform. We may expect very valuable suggestions from the Committee for the all round development of the Co-operatives in the State.

(From the speech made by the Registrar of Co-operative Societies on the occasion of the opening, by the Chief Minister of the Subbaraj Nagar Colony of the Bodinayakkanur Co-operative Building Society in Dindigul Circle.)

SUBBARAJ NAGAR Colony, built by the Bodinayakkanur Co-operative Building Society (Dindigul Circle) was recently opened by Sri K. Kamaraj Nadar, Chief Minister of Madras.

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Preventive Measures in the Public Health

By A. B. SHETTY, Minister for Health.

The low standard of health and the vast amount of sickness prevailing among our people make it difficult to cope with the increasing demand for more hospitals and larger supply of medicines. The more logical approach would be to shift the emphasis from curative to preventive measures and spend the available funds in a larger measure on schemes which will help to maintain and promote public health.

Malaria Control

Among the preventive measures undertaken by this State, the anti-malarial work done by the Public Health Department may be said to be its most outstanding achievement. The Madras State is implementing the National Malaria Control Programme sponsored by the Government of India.

In addition to the two control units taken up in June 1953 to cover a population of two millions, a third control unit to cover a population of one million in certain urban areas has been obtained in the current year. We have asked for half a unit more for 1955-56 to extend operations to certain isolated pockets which have been left out. The end of the First Five-Year Plan will find this State in the happy position of having brought all the Malarious areas under control.

B.C.G. Vaccination

The introduction of the B.C.G. vaccination on a mass scale in this State is another preventive measure of great importance. The work which began in November last year has been finished in the cities of Coimbatore, Kozhikode and Mangalore and their belt areas. It has now been taken up in Salem. All the district headquarters stations will be covered this year and afterwards each district will be taken in turn to cover the other urban and rural areas in two more stages.

Family Planning

Sanction has been accorded to the opening of a research centre at the Women and Children's Hospital, Egmore, and the starting of eight clinics in the City and moffusil hospitals. The Government of India will give financial assistance for this purpose.

Urban and Rural Water Supply

The Planning Commission have given No. 1 priority to safe drinking water supplies in the health programme for this country. The budget speech of the Finance Minister has made mention of the funds allotted by the State Government and the grants and loans expected from the Government of India for the provision of protected water-supply in the urban and rural areas. The additional engineering staff required for the quick execution of these works within the prescribed time has been sanctioned.

The Second Five-Year Plan will, doubtless, make ample provision for a large water-supply, drainage and sanitation programme and this will reduce the commonly prevalent diseases due to contaminated water, polluted soil and infection from insects and flies. It will also create an environment conducive to decent standards of living.

Health Personnel

The efficiency of a Health Department depends, to a large extent, upon its ability to recruit and employ an adequate number of suitably trained personnel. The work of the Health Officers is more difficult and less attractive than that of the officers of the Medical Department. Recruitment to the post of Health Officers, Class II, has been disappointing. It has, therefore, been decided to unify, with effect from next year, the two classes of Health Officers as in the case of Civil Assistant Surgeons.

The Orientation Training Course started at Poonamallee in February last year with the aid of the Ford Foundation has, so far, trained six batches of medical and health personnel who are to work in Community Project areas. A scheme of refresher courses for Health Officers has recently been conducted at three centres, namely, Madras, Tanjore and Coimbatore.

The problems of poverty, malnutrition, ignorance and diseases are interrelated. The plans undertaken for large scale economic development and educational progress are expected to raise living standards and also contribute to the improvement of public health in some measure. We are only at the beginning of a long and challenging endeavour. It will take a long time to achieve substantial results.

(*From the speech of Sri A. B. Shetty, Minister for Health, at the Madras Legislative Assembly moving that the Government be granted a sum not exceeding Rs.* 1,33,30,500 *under Demand XVII—Public Health.*)

Rs. 19,96,448 for Filterpoints

The Government have sanctioned the sinking of 600 filter-point wells at an expenditure of Rs. 19,96,448 in the districts of North Arcot, South Arcot, Chingleput, Salem, Tanjore, Tiruchirappalli, Madurai, Ramanathapuram, Tirunelveli, Malabar and South Kanara.

Under this scheme 29 filter-point wells have been so far successfully sunk for the fortnight ending January 31, 1955.

More Facilities for Medical Aid

By SRI A. B. SHETTY, Minister for Health

Medical Education.—Medical colleges and the attached hospitals occupy a pivotal position in the whole scheme of curative and preventive services. On the quality and number of medical and health personnel trained at these institutions depends the efficiency and adequacy of medical relief and health work. The WHO-USC team of medical scientists who spent about a month in Madras some time back, have expressed their appreciation of the progress made here in medical education and practice and they have made valuable suggestions in their report for raising still further the standard of medical and surgical work done here.

With the opening of a new medical college at Madurai last year, the number of seats available in our three Government medical colleges has increased to 295. In addition to this, 42 students of this State have been given admission this year to the Kasturba Medical College at Manipal in South Kanara.

Hospital Facilities.—The conversion into wards of the quarters vacated by the nurses at the General Hospital, the construction of a new building for the R.S.R.M. Lying-in-Hospital and other additional buildings at the Stanley Hospital will be providing more adequate and better accommodation in the two teaching hospitals in our City.

Budget provision has been made for increasing bed-strength, employing additional staff and providing extensions and improvements in respect of some more hospitals. The Part II schemes provide for the establishment of blood-tranfusion service in the district headquarters hospitals at Cuddalore and Ramanathapuram and for the purchase of Deep X-Ray sets for the headquarters hospitals at Madurai and Tanjore.

Quality of Medical Practice.—With a view to keep our medical officers up to date and improve the efficiency of their work, short-term courses for training batches of medical officers in Anæsthesia, Radiology, Surgery and Pathology have been started this year at the Madras General Hospital and the Stanley Hospital. The revised scheme of refresher courses inaugurated last year is being continued to be carried on this year at five different district headquarters hospitals. A new quarterly Medical Bulletin is being published and distributed to all medical officers.

Tuberculosis.—More facilities are being given for tuberculosis treatmenrt by increasing the bed-strength in our Government institutions and giving grants towards capital and maintenance expenditure to the sanatoria run by private agencies. A Thoracic Surgical Training Centre has been started at the Sanatorium at Tambram.

Leprosy.—The Government of India have taken over this year our Leprosy Sanatorium at Tirumani and the Children's Clinic at Saidapet for developing them into a Central Leprosy Teaching and Research Institute. With the assistance offered by the Government of India, the Madras Government have sanctioned the establishment of a Study and Treatment Centre at Tirukoilur in South Arcot district and two subsidiary centres at Gandhigram and Vettavalam in Madurai and North Arcot Districts respectively. Sulphone therapy has been ordered to be given in all our leprosy clinics and batches of medical officers and health assistants are being given short courses of training in leprosy work.

Drug Inspectors.—The number of Drug Inspectors is being increased from 6 to 13 so that there may be more adequate inspection and supervision over the manufacture and sale of drugs.

Primary Health Centres.—In addition to the 16 Primary Health Centres established in previous years 10 Health Centres have so far been started in Community Project areas and 5 more are proposed to be started in the Blocks inaugurated in October 1953. Government of India are offering assistance for opening 8 Health Centres in National Extension Service areas. Additional assistance is expected for starting more centres.

The Employees' State Insurance Scheme.—The inauguration of this scheme at Coimbatore in January for providing free Medical treatment to 40,000 workers in about 100 factories may be said to mark the first step of a new era of social security for industrial employees. The scheme will be extended to other industrial areas in due course.

The College and Hospital of Indigenous Medicine.—The steps taken for the construction of new buildings, the setting up of laboratories, the revision of the curriculum and the introduction of one year's compulsory course of house surgeoncy, have contributed in a great measure to the progress and popularity of this institution. The teaching staff of modern medicine at this College will be absorbed in the Madras Medical Service. Additional avenues of employment have been made available to those who pass out of this College.

(*From the speech of the Minister of Health in the Madras Legislative Assembly moving that the Government be granted a sum not exceeding Rs.* 3,15,99,800 *under Demand No. XVI—Medical*).

Drink More Milk

The child cries, the mother takes it up.....there is the faint rhythm of tiny lips ardently suckling. After a while with a not-too-polite burp the infant signals its satisfaction. The mother is happy too, for mother's milk is the best food for suckling babes.

But what of the day, when the baby is weaned? Then there are other days—the stages of the toddler, the school-boy, the adolescent, youth, manhood, middle-age and dotage—these too are in the offing.

Ideal Food

For all humans—from the weaned child to the crabbed grandparent, nature has provided one ideal food to supplement every type of diet—milk. Whether from the cow or the buffalo, milk is the richest food that one can take—in any age, in any clime—wholesome, refreshing and strengthening.

This milk may come to us in different ways. We may have a cow or buffalo at home, or the milkman may haul us out of bed at crack of dawn to wave his upturned pail before milking the cow in our presence. Perhaps we may be getting 'depot' milk—cycle peons serving pasteurised milk from sealed can sent out by co-operative societies or dairies; we may open a tin of condensed milk, or add water to milk powder. Whatever the mode, it is still milk, the finest food we can get.

Contents and Uses

Let us see what milk does for us. Milk is one of the best sources of—

Thiamine (vitamin B1) essential for growth, carbohydrate metabolism, functioning of the heart, nerves and muscles.

Deficiency symptoms for Thiamine are retarded growth, loss of appetite and weight, nerve disorders.

Riboflavin, essential for growth, health of the skin and mouth, cell activity, functioning of the eyes, carbohydrate metabolism.

Deficiency symptoms for Riboflavin are retarded growth, lesions at the corners of the mouth, dimness of vision, cataract like symptoms, intolerance to light, inflammation of the tongue.

Pyridoxine—Specific functions are unknown, but probably essential for growth, health of the skin, functioning of the muscles and nervous system, protein metabolism.

Possible deficiency symptoms are skin eruptions, and vague symptoms like insomnia, irritability and muscular rigidity.

Pantothenic acid.—Specific function unknown, but probably essential for growth, health of the skin, normal hair production.

Vitamin D essential for growth, regulating calcium and phosphorus metabolism, building and maintaining normal bones and teeth.

Deficiency symptoms are soft bones, poor tooth development and dental decay.

Milk plays a vital role in our diet, throughout our life—even before, for prenatal care calls for plenty of milk.

For Mothers

Nutritional needs of women are more exacting during pregnancy and lactation, as the visible symptoms of nutritional deficiencies show up then or after the birth of the child more prominently than at any other time. The right type of food would help immeasurably to avert the complications in pregnancy and to set the health of the infant on a firm basis for the future.

A large amount of evidence accumulated in recent years emphasises the importance of the diet of the expectant mother for the protection of the life and health of the child. Milk and milk products are foods that will usefully supplement many deficient diets.

Child's Needs

Properly fed mothers are able to nurse their babes, and breast feeding

CHIEF MINISTER'S TOUR OF TIRUCHIRAPALLI

Sri K. Kamaraj Nadar, Chief Minister, undertook an extensive tour of Tiruchirapalli District during the month of March 1955. The photos show :

(1) and (2) The inauguration of Rural Bank at Thuraiyur on 15th March 1955.

(3) Bhoodan meeting at Perumbalur; Sri Raja Chidambaram presenting the patta for 9½ acres donated by him (14th March 1955).

(4) Receiving the patta of Bhoodan lands donated at Perumbalur (14th March 1955).

(5) and (6) The crowds listening to the Chief Minister.

(7) Addressing the Fifth Conference of I.N.T.U.C. at Tiruchi on 14th March 1955.

(8) Arriving at the Conference in procession.

(9) A section of the audience.

(10) Laying the foundation stone for the Board High School at Ariyallur on 14th March 1955.

(11) Opening of Elementary School at Kopali village on 14th March 1955.

(12) Laying the foundation for the new Municipal Office building, Tiruchi on 13th March 1955.

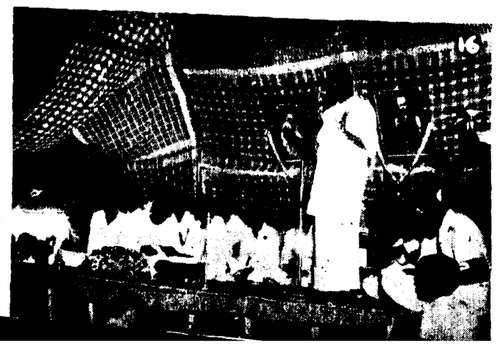
(13) and (14) Addressing the public meeting at Tiruchi on 14th March 1955 and the crowd.

(15) Inspecting a tank at Thuraiyur on 15th March 1955.

(16) and (17) Addressing the Political Conference and Bhoodan meeting at Metupalayam in Tiruchi District.

(18) Opening of Panchayat at Unniyur.

(19) Participating in the Annual Day Celebration of Seshashayee Institute.



WHOLESOME MILK is good for these young ones

Reports show that a large number of children attending primary and secondary schools are undernourished and suffer from malnutrition. They are thin and undersized, and often show signs of food deficiency diseases. The result is apathy and listlessness in the class. The schools and public health authorities have a responsibility to see that the children take wholesome and health-building foods. They cannot do better than encourage the young ones to drink more milk.

Milk is no less important for higher age groupes. People who work under mental or physical strain require the right type of food for physical stamina. Nutritional deficiencies in the case of such persons may not strike abruptly, but if allowed to continue, premature senility becomes inevitable, with a consequent rapid decline in health and efficiency.

Nutritional experts declare that the surest foundation for a long period of usefulness and activity is that which is nourished in infancy, well based in childhood, preserved in adolescence and conserved in adult life. For this purpose, the adoption of a well-balanced diet through healthy food habits is the greatest factor in the prevention of senitlity and untimely decay. Milk, rich in protein and vitamins will help to keep the body immune for the many afflictions of advancing age.

Continuance of family and race depends on good, healthy food. In India with the world's largest cattle population, we have plenty of milk, Nature's ideal food. Let us all therefore drink more milk.

Checking White Ant Attack

Farmers having white ant trouble in their field will get good relief if they use crude oil emulsion with irrigation water.

Crude oil emulsion is used in the form of a solution in the proportion of one pound of the emulsion in four gallons of water. This can be used for irrigating the infested plants, also the semi-solid emulsion can be placed in the irrigation water by putting the oil in a gunny cloth and placing it in the flowing current. Since the repulsive smell of the emulsion lasts only for a few days, the operation has to be repeated after eight to ten days, Instead of crude oil emulsion, five per cent kerosene emulsion may also be used.

Clean cultivation, removing the stubbles away from the field after harvest, deeper ploughing and following crop rotations are other methods, suggested that help in removing the white ant trouble.

Central Scheme for Village Oil Industry

The Village Oil Industry programme as sanctioned by the Government of India envisages the establishment of 25 Model Demonstration - cum - production Centres throughout India, payment of subsidy on ghanis and on production of ghani oil as well as grant of loans for stocking oilseeds. The training at the two training centres of the All India Khadi and Village Industries Board has already started and the 30 mistries (Carpenters) for whom stipends have been sanctioned, have been already admitted to the training classes.

For being eligible to the selection for the establishment of a model Ghani Centre, an institution should fulfil the following conditions : (1) There should be at least 50 ghanis working in the round about areas (say within a radius of 10 miles). (2) There should be availability of oilseeds as well as staff to man the centre (applications for the staff may be preferably sent with that for the model centre). (3) The institution should be a registered one or a Co-operative Society, preferably connected with the development of Village Industries, particularly Village Oil Industry.

The Regional Development Officer for Madras, Travancore, Cochin, Mysore, Hyderabad and Andhra is Sri M. Vinaik.

All the applications for posts, or training or for financial assistance should come through the Regional Development Officer with a recommendation of the State Government, the State Khadi Board, or the Zonal Director of the Central Board.

Communications be sent to the following address : Regional Development Officer, Village Oil Industry, All India Khadi and Village Industry Board, Mount Road, Madras.

Co-operative Poultry Farming in Chingleput

EXOTIC breeds of Cocks are supplied for cross breeding. These are White Leghorns.

With a view to improving production and marketing of eggs by Co-operatives, the Government of Madras sanctioned in 1950, a scheme for being implemented by the Madras Co-operative Milk Supply Union.

The Madras Co-operative Milk Supply Union is arranging for sale of milk supplied by over 100 milk supply societies in Chingleput district in and around three main routes leading to the City of Madras from Singaperumalkoil, Kilacheri and Kunnathur. As the Union is sending its lorries and milk vans to the villages for collection of milk, it was selected as the agency to work the poultry development scheme as it could easily collect eggs also. The scheme was introduced in June 1950 and was to be worked out in the following three stages :—

1. Collection of eggs of members of selected milk supply societies in the Milk vans and marketing them at Madras through milk depots and through two egg salesmen employed for the purpose.

2. Improving the country breed of poultry by introduction of exotic breeds purchased from Government Poultry Research Stations.

3. Introduction of hatching by incubators.

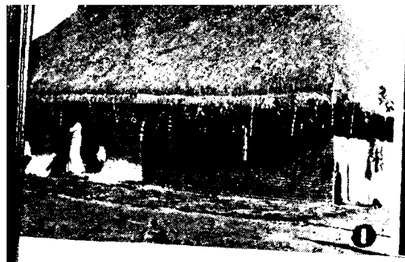
Collection and Sales

A Senior Inspector of Co-operative Societies working under the Deputy Registrar of Co-operative Societies, Madras, is to supervise the working of the scheme and the Government sanctioned the appointment of three Egg Collectors and two Egg Salesmen each on a pay of Rs. 50 per mensem. The Senior Inspector and the three Egg Collectors were given training in poultry farming at the Government Poultry Research Station, Teynampet, Madras. Eighteen milk supply societies, six in each of the three routes, Kilacheri, Kunnathur and Singaperumalkoil were to work the scheme at the first instance. Eggs are purchased at Rs. 1–2–0 per dozen and sold at Rs. 1–8–0 and Rs. 1–6–0 according to sizes.

Out of the margin between the purchase and selling price, one pie is given to the salesmen at the depot, another pie to the agent of the milk supply union who collects and arranges for the despatch of eggs to the Madras Milk Supply Union from member societies and the third pie to the supplying member as bonus. Usually the president or any office-bearer of the milk supply society is appointed as the agent of the union. The egg collectors whose headquarters are Singaperumalkoil, Kilacheri and Amarambedu, arrange for the procurement of eggs. The eggs are placed in wooden boxes with sawdust, bran, paddy husk, etc., and are sent in the milk vans of the Union.

The egg salesmen at the Madras Co-operative Milk Supply Union take delivery of the eggs, candle them in a powerful hooded light for quality, grade and stamp the name of the Madras Milk Supply Union on them. Very small and spoiled eggs are rejected and returned to the supplying agents. The Madras Milk Supply Union arrange for sale of eggs at milk depots and through two salesmen at the doors of the customers. During the first year of the scheme the Madras Milk Supply Union collected and sold 128,932 eggs.

CANDLING of eggs in a hooded light.



BLOCK DEVELOPMENT AT KURINJIPADI

(For details see opposite page)

disposes of many of the health problems of infancy. However, once the child is weaned, special attention must be given to its food. The formation of good food habits in childhood contributes in no small measure to the sound health of the grown-up individual.

This need continues throughout the pre-school period, the school years and adolescence. The damage done by faulty feeding in the prenatal period, in childhood, and in adolescence cannot be repaired later in life.

Protective Food

Here milk comes into prominence. Broadly speaking, our body requires two kinds of foods—the energy yielding or fuel goods, and body-building and protective foods. Milk and milk products are excellent foods in the body-building and protective class. In an average balanced diet there should be an intake of at least 10 ounces of milk. Vegetarian should replace fish, meat and egg with more milk and milk products such as curds and buttermilk.

It is possible even within limited means to draw maximum nutrition from our diet, provided we know what the essential food values are. Milk contains ingredients which are necessary for growth and for the building of strong bones. It is indispensable for expectant and nursing mothers, and for children.

For the growing child, milk is ideal food, providing protein to make muscle and flesh and calcium to build bone. Every child should be made to take a pint or more milk per day.

Graded consumption

Nutritional experts advise the following graded consumption of milk (apart from other foodstuffs) :—

Daily consumption of milk in ounces.

Subject.	*Milk in ounces.*	
Infants—		
(i) A week old ..	10	preferably mother's milk.
(ii) 5 months old.	30	
(iii) 1 year old ..	20	
Children—		
(i) 2 to 4 years ..	20	
(ii) 6 years ..	20	(vegetarians may substitute flesh foods by additional 6 to 8 ounces of milk and milk products such as curds, buttermilk, cheese, etc.
(iii) 11 years ..	20	
Adolescents—		
16 years with moderate activity.	15	

TO THE INFANT: Pasteurised milk from a sealed can is sold to these women with babes-in-arms

BLOCK DEVELOPMENT AT KURINJIPADI IN SOUTH ARCOT DISTRICT

All Plan activities, particularly in the N.E.S. and Community Project areas, aim at the creation of a new way of life. Something unprecedented is being done—a mental and material revolution through persuasion, through love, and through co-operation. The pictures on the opposite page give a glimpse of this effort, an effort not completed, but just well begun. (1) Voluntary gifts play a prominent part in this programme—a birth day gift for a school building at Mettupalayam village. (2) "Home front" with Magan-Choola (smokeless oven). (3) Potter trainees learning to make Magan-Choola. (4) An old occupation with a new consciousness and a new method—the transplantation of paddy under Japanese method. (5) The Officers of the new movement are not file-ridden—here is an Extension Officer (Agriculture) helping a farmer to learn dusting of pesticides. (6) A mass meeting—not for deciding a feud or petitioning but to evolve new patterns of action for growth. (7) Animal Husbandry—De-worming of sheep at Vanniarpalayam village. (8) Murrah Buffaloe supplied under Free Male Stock Distribution Scheme at Mettupalayam village. (9) Dispensary Building at Vellayanakuppam village—a little monument of self-help. The villagers contributed almost the double of what the Government spent. (10) Another instance of self-help—they wanted a road and they had it. The two-mile road was completed in 15 days.

Improving the Breeds

To implement the second stage of the scheme, i.e., for supplying cocks of exotic breeds to improve the breed of the country fowls, Government sanctioned a sum of Rs. 1,650 for purchasing exotic cocks. A sum of Rs. 1,000 was contributed by the Madras Milk Supply Union for the purpose. So far 311 exotic Birds of the following * varieties have been purchased and supplied to members of the Milk Supply Societies affiliated to the Milk Supply Union who have large number of fowls. The country cocks surrendered by the members in lieu of the exotic cocks received were brought to Madras and sold in order to weed out gradually the country cocks in-villages where the scheme is implemented. Naturally the price of fowls has increased in the villages and graded poultry has come into existence on account of the introduction of second stage of the scheme.

*White leg horn	175
Black Minorca ..	40
Rhode Island Red	96
Total ..	311

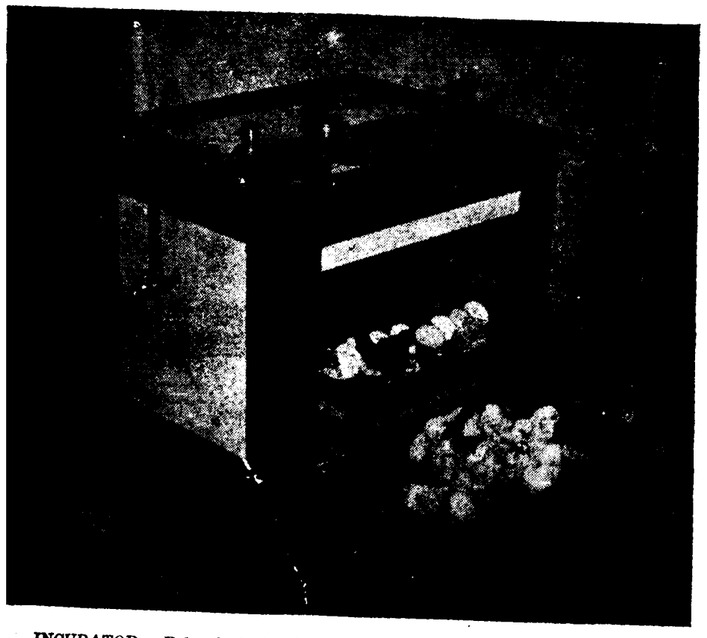
Great care is taken to prevent and arrest the spread of poultry diseases. The Dairy Officer who is rendering veterinary aid to the cattle of the members of milk supply societies is also treating poultry diseases. During the 2nd year of the scheme in Madras Milk Supply Union collected and sold 224,488 eggs. The working of the 2nd stage in the improvement of the breed in the villages and consequently increased the weight and size of eggs. On an average 1,085 eggs were purchased and sold daily as against 900 targeted.

Incubators for Hatching

The working of the third stage of the scheme contemplated artificial hatching of eggs. Government sanctioned a sum of Rs. 1,500 for purchase of and repairs to incubators. Three new incubators purchased at a cost of Rs. 995 and three old incubators of Madras Milk Supply Union repaired at a cost of Rs. 120–15–0 were made use of. Eggs are received from members of the milk Supply Societies free of cost and they are loaded into the incubators for hatching. The eggs are loaded once a month. Hatching is not conducted during the summer months.

Eggs loaded are candled on 7th and 14th day of setting. So far 850 chicks have been raised by artificial hatching at 16 settings and distributed to members who supplied eggs for hatchings. They are fed and looked after for a fortnight in the centres which are provided with coups and runs and foster mothers to rear the chicks. A sum of Rs. 20 per hatch is incurred at each centre towards maintenance charges in running the incubator. The cost of the scheme is met by the Government with the contribution of Rs. 1,000 of the Madras Milk Supply Union towards purchase of birds.

The Madras Milk Supply Union is giving advances to agents for purchase of eggs. The scheme besides improving production of eggs is providing an additional source of income to members of the milk supply societies.



INCUBATOR: Baby chicks just hatched in an incubator at the Kilachery Village

Quiz

1. The length of kutcha and pucca roads constructed upto the end of September 1954 under the Community Development and National Extension Services Schemes is over.
   (*a*) 7,000 miles.
   (*b*) 10,000 miles.
   (*c*) 13,000 miles.

2. Under the Low-Income Group Housing Scheme, the total amount allocated by the Government of India so far to 15 States for the remaining period of the First Five-Year Plan is :
   (*a*) Rs. 1,000 lakhs.
   (*b*) Rs. 1,200 lkhs.
   (*c*) R.s 1,400 lakhs.

3. With a view to providing adequate facilities for higher education in rural areas, the Specialists' committee, appointed by the Ministry of Education, has recommended a pattern of institutions to be called :
   (*a*) Rural Institutes.
   (*b*) Janata Colleges.
   (*c*) Rural Universities.

4. The Community Development Programme now benefiting about :
   (*a*) 50 million people.
   (*b*) 65 million people.
   (*c*) 70 million people.

5. The current consumption of white sugar in the country is :
   (*a*) 1 million ton per year.
   (*b*) 1·2 million ton per year.
   (*c*) 1·8 million ton per year.

Answers : 1—(*c*), 2—(*b*), 3—(*a*), 4—(*b*) and 5—(*c*).

Child Art Exhibition

The renaissance of a nation or a people unfolds itself through various phases. Any student of human affairs can detect this phenomenon in modern India. With the end of political thraldom we find a new tempo in the realm of art, literature and other manifestations of civilization. The organization of academics in the centre and in the States are only the visible organizational channelings of this spontaneous movements springing in the hearts of men in the new era of our Nation.

Any new atmosphere has an amazing effect on children. We find evidences of this renaissance in the subconscious of these tiny little flowers of nature—the children. They have begun to give expression to this new mood through their scrawlings—images of beauty, works of art in pristine purity through colours, bright and lushy red, green, blue and all the rest of the vibgyor.

Children live in a world of their own. That is a holy ground. We adults have no place there. We cannot even criticise. Because even the most seasoned art critic has no yardstick to measure these works of art. The whole thing proceeds from an imagination too rich and too divine for interpretation. It is a riot of colour, and as to figures, it is Picasso, Matisse all rolled into one. One just looks and admires. Let us leave them to their colours and brushes. Let them paint anything. The only thing that we can do is to look and enjoy. Because that is a world which we can look at but never penetrate.

ART

The Exhibition of drawings and paintings by the children of the schools in the Madras State opened by Sri C. Subramaniam, Minister for Finance and Education, on the 5th March 1955, is the second of its kind. The first was held in February 1953.

This time 125 schools sent in a total number of 1,200 entries by 830 children for the competition. The entries were judged by a committee consisting of Sris K. C. S. Panikkar, S. Dhanapal and R. Krishna Rao, leading artists. The Committee not only selected the pictures for awarding the prizes but also selected the best ones for display.

After a careful scrutiny 270 pictures were selected for the exhibition. This number includes the 22 pictures which are awarded prizes and 27 declared highly commended.

Prize winning pictures, including those which the judges have declared to be outstanding specimens of Child Art, will be retained in the Museum for permanent exhibition in a Gallery of Child Art.

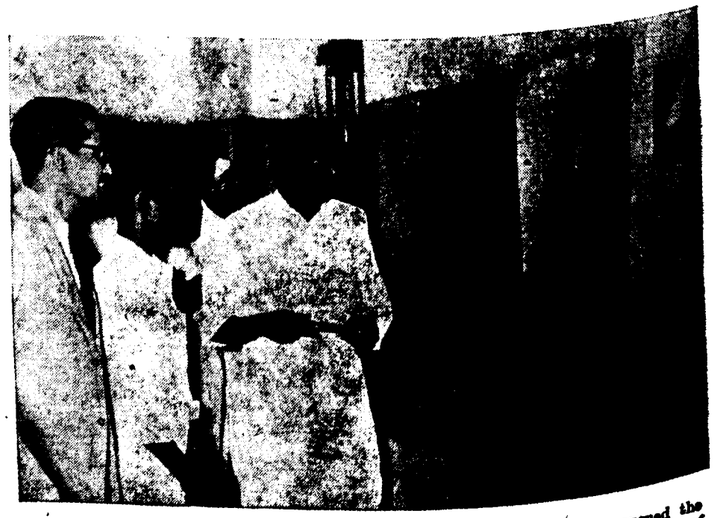
The Judges reported:

A good portion of the work showed both talent and enthusiasm. The works of a few of the top prizewinners are examples of outstanding child art. They could represent the child art of this country in any international exposition. Age group between five and nine were naive and extremely interesting for their spontaneous creative faculty. The older groups appear to suffer from stereotyped ideas probably brought to bear on them by inexperienced Drawing Masters.

It was felt that guidance of these talented children by trained Artists as distinguished from the usual run of Drawing masters will produce far reaching results. A large number of exhibits have been rejected and excluded from the exhibition as they do not serve any purpose. It is felt that the selected exhibits will give a whole and complete idea of the Child art of this State, in all its variety and spontaneity. One feels sorry that in some cases an over enthusiastic teacher or parent has left his (here) unpleasant adult imprint on the work of the child.

But on the whole it is an exhilarating work dealing with these child fantasies. It has an immense promise.

YOUNGEST prize winner in the Child Art Competition, Kumari Siri Devi Chamkur, gets her prize from the Education Minister. Her prize winning entry adorns the cover page of this issue.



ART EXHIBITION: Sri K. Kamaraj Nadar, Chief Minister of Madras, opened the fou th Annual Exhibition of the Senior Students' Association, Government School of Arts and Crafts, Madras. Picture shows the Chief Minister viewing the exhibits.

Rs. 75,00,000 for Malampuzha Right Bank Canal

The Government have sanctioned an expenditure of Rs. 75,00,000 inclusive of direct and indirect charges, on the scheme for the extension of irrigation facilities on the right side of the Malampuzha project in the Malabar District. The scheme will be treated as part of the main project itself.

The Government intend levying a betterment fee, in respect of lands to be benefited by the scheme, in accordance with a legislative enactment to be made in the near future.

ART

CHILD ART COMPETITION

Prize Winner's List.

Serial number.	*Name of the Student.*	*School.*	*Age group.*	*Prize.*
1	Chamkur Siri Devi (Girl) ..	St. Thomas Convent, Mylapore	5—6	I
2	Vijaya Raghavan (Boy) ..	I Class, St. Ebbas Girls' High School	5—6	II
3	Asam Raja Sabai (Boy) ..	III Standard, Pudupet Convent, Pudupet, Madras.	6—7	I
4	Sekar, E. (Boy)	II Class, the Besant Theosophical High School, Adyar.	6—7	II
5	K. R. Mukundhan (Boy) ..	II Standard, Arya Samaj School, Georgetown, Madras.	7—8	I
6	Miss O. T. Roopa Lekha ..	II Class B Section, Good Shepherd Convent, Nungambakkam.	7—8	II
7	Chitra Rajasabai (Girl) ..	V Standard, Pudupet Convent, Pudupet, Madras.	8—9	I
8	V. Prema (Girl)	III Class A, Bentick Girls' High School, Vepery ..	8—9	II
9	U. Sitha (Girl)	Vidyodaya Girls' High School, V Class	9—10	I
10	Yeswanthi (Girl)	IV Class, Presidency High School for Girls', Egmore.	9—10	II
11	Rajalakshmi, S. P. (Girl) ..	National High School, Mayuram, I Form, A Section.	10—11	I
12	L. Balaraman (Boy) ..	I Form, Children's Garden School, Mylapore, Madras.	10—11	II
13	Rajeswara Rao (Boy) ..	II Form, Madras Christian College School, Chetpet, Madras-10.	11—12	I
14	Sree Jayam (Boy)	IV Form, Madras Christian College School, Chetpet, Madras-10.	11—12	II
15	M. P. Vasantha (Girl) ..	II Form, the Besant Theosophical High School ..	12—13	I
16	M. P. Krishnan Kutty (Boy) ..	IV Form, Madras Christian College School, Chetpet, Madras-10.	12—13	II
17	N. S. Rishikesh (Boy) ..	IV Form, the Besant Theosophical High School, Adyar, Madras-20.	13—14	I
18	L. Devaraj (Boy)	III Form, A Section, Sir M. Ct. Muthiah Chettiar High School, Madras-7.	13—14	II
19	P. N. Kumar (Boy) ..	VI Form, the Besant Theosophical High School, Adyar, Madras-20.	14—15	I
20	S. Kamal Khan (Boy) ..	II Form A, Board High School, Cheyyar, Tiruvettipuram, North Arcot district.	14—15	II
21	A. Nagarajan (Boy) ..	VI Form, the Besant Theosophical High School, Adyar, Madras-20.	15—16	I
22	D. Sophie Nirmala (Girl) ..	II Form, St. Annes Girls' High School, Rayapuram, Madras.	15—16	II

ESSAY COMPETITION

(For Dr. B. Sundara Raj Prize).

Prize Winner—
T. M. Ramakrishnan .. .. .. Sri Ramakrishna Mission High School, T. Nagar, Madras. VI Form.

Handbook on Sales Tax

With a view to making available to non-resident dealers in a ready form all relevent information pertaining to the system of taxation in vogue in this State, the Government of Madras brought out a handbook explaining the provisions of the Madras General Sales Tax Act, and the rules made thereunder.

Paragraph 2 of the handbook says that the additional tax on luxury goods is leviable on the first seller in the State and that the non-resident seller being first seller in the State has to pay the additional tax on such articles. After the Madras General Sales Tax (Second Amendment) Act, 1954 came into force on August 23, 1954, the position has changed and the additional tax under Section 3 (2) of the Act is leviable on the first sale after import into the State (i.e.) on the first resident dealer. The non-resident dealer is not liable to pay the additional tax but only the general rate of tax

Progress in Community Development Schemes

Substantial progress has been achieved in the progress of the Community Development Schemes in the Madras State. The total expenditure on Community Projects set up in 1952–53 has risen to 43 per cent of the proportionate targetted expenditure for the quarter ending December 1954 against 37·8 per cent up to the end of the previous quarter. Similarly, the expenditure in the Community Development Blocks recorded a rise of nearly 20 per cent being 42 per cent of the targetted provision as against 21·25 per cent for the previous quarter.

The progress under the National Extension Service was even more satisfactory with a total expenditure of 57 per cent of the targetted provision. In fact from a comparative study of the achievements in the 1953–54 National Extension Service Blocks of the various States for the quarter ended 30th September 1954 for which figures are readily available, it is observed that Madras has led the other States in India with 49 per cent of total Government expenditure to State's target.

There are Six Basic Agricultural Schools and two Extension Training Centres in this State for training the Grama Sevaks. In order to meet the

COMMUNITY PROJECTS: A conference of Presidents of District Boards was held at the Secretariat in March 4, 1955, under the presidentship of Sri M. Bhaktavatsalam, Minister for Agriculture, to consider the implementation of the Community Development programme.

needs of the Second Five-Year Plan in this State, the capacity of these schools and centres has been raised and a third Extension Training Centre opened, so as to turn out 500 trainees per annum in basic agriculture and 500 trainees every year in extension methods.

An abstract of physical achievements under the various heads up to 31st December 1954 is given herewith. The results achieved have been quite substantial and we hope to do even better before the end of March 1955.

COMMUNITY PROJECTS AND NATIONAL EXTENSION SERVICE SCHEMES.

Progress of Physical Achievements under various heads up to 31st December 1954.

Serial number and details of heads.	*Community Projects.*	*Community Development Blocks.*	*National Extension Service Blocks set up in 1953–54.*	*Tanjore National Extension Service.*	*Grand total.*
(1)	(2)	(3)	(4)	(5)	(6)
1. Population	2,175,551	368,355	3,064,768	920,000	6,548,675
2. People's contribution (in'000 of rupees).	1,491·5	204·4	1,417·5	114·6	3,228·0
Agriculture—					
3. Fertilizers distributed (maunds) ..	714,510	30,187	267,747	68,575	1081,019
4. Seeds distributed (maunds)	13,043	4,244	12,741	7,674	37,702
5. Demonstration held (Nos).	4,768	453	2,869	1,053	9,143
6. Area brought under fruits (Acres) ..	1,016	324	2,514	107	3,961
7. Area brought under vegetables (Acres).	3,260	383	6,149	241	10,033
Irrigation—					
8. Area commanded (Acres)	106,355	99	2,358	9	108,821
Animal Husbandry—					
9. Breeding and Artificial Insemination Centres started.	17	12	58	8	95
10. Pedigree bulls supplied	47	4	210	5	266
11. Pedigree birds supplied	546	85	1,774	56	2,461
Public Health—					
12. Drains constructed (yards)	4,883	6,399	28,358	80	39,750
13. Drinking water wells constructed ..	180	36	296	128	640
14. Drinking water wells renovated ..	753	29	277	..	1,059
Education—					
15. New Schools started	102	12	364	28	506
16. Schools converted into basic schools.	50	1	106	..	157
Social Education—					
17. Adult education centres started ..	237	58	606	2	903
18. Community Recreation centres started.	149	24	527	..	700
19. Community entertainments organized.	3,348	139	1,541	..	5,028
Communications—					
20. Pucca roads constructed (Miles) ..	19	6	10[illegible]	..	13
21. Katcha roads constructed (Miles) ..	578	67	3[illegible]	21	96

Note.—The statement does not include details for the ten National Extension Service Bloc[illegible]ed on 2nd October 1954.

Pearl Fisheries of South India

It was a famous eighteenth century English poet who wrote about the "dark unfathomed caves of the deep" which bear "full many a gem of purest ray serene". But our ancestors had long ago explored the "dark unfathomed" depths of the sea and perhaps the most precious gem they unearthed—or rather "unseaed"—was the pearl, which perhaps is also the most ancient among precious gems and which was put to use not only as an ornament, but was put to other uses too. For instance the Ayurveda system of medicine uses the pearl as an ingredient in some drugs.

Ancient references

The most ancient literature in Tamil and Sanskrit refers to pearls and it is difficult to say when this precious gem was first discovered embedded in the oyster and how or when they began to exploit successfully the pearl fisheries. References to the pearls are found in the Vedas, the Ramayana and the Mahabaratha. Greeks, Egyptians, Barbary Moors, Arabs, Venetians and Genoese who happened to visit India apparently as travelling merchants and sailors on their returning home recorded their experiences and notable sights seen by them. In their accounts they mention about pearls among the precious objects found in India.

As early as the 3rd century B.C. Megasthenes, the Greek Ambassador in the court of Chandragupta wrote about the beauty and greatness of Indian pearls. The ancient kings and monarchs seem to have vied with each other to procure as many pearls as possible from the Indian seas.

Famed in Ro[illegible]

While it is difficult, d[illegible] the lack of adequate historical [illegible] to say when exactly the pearl fi[illegible] of the Gulf of Mannar were fi[illegible]pited, there is evidence to show [illegible] more than two thousand years ag[illegible] were well-known throughout t[illegible]own world from China to th[illegible]er-ranean.

In Rome, it is said, in the days of Pliny, pearls from the Gulf of Mannar were valued at a high price and Pliny refers to this fishery as the most productive of pearls of all parts of the world. Pliny has also recorded about the two famous pearls worn by the beauty queen Cleopatra, probably presented to her by Julius Ceasar, and it may not be far from the truth to say that the pearls that added to the fatal charms of Cleopatra were products of the Bay of Bengal.

The Queen of Sheba, according to the Bible, took a few pearls from the East when she went to see the wise King Solomon of Palestine.

Ptolemy (who died in A.D. 163) in his descriptions of the important places and towns of India mentions about the pearl fisheries of Sosi Kourai believed to be the present town of Tuticorin.

Tamravarnika

The Tamil poets of the Sangam Age (about the first three centuries of the Christian era) mention about the pearl fisheries and the pearl trade in the City of Korkai. From them we come to know that the Paravas, called in Tamil *Parathavar* were the people who were engaged in pearl fishing. Varahamihira, the renowned Indian astronomer refers in his work called *Brihat Samhita* in A.D. 404 to the pearl fisheries Pandyan kings, and the river Tambraparni.

The author of *Arthasasthra* calls pearls by the name Tamravarnika—that which is obtained from Tamraparni. Marco Polo who visited India in A.D. 1292 gives a very interesting account of the Indian pearls and pearl fisheries.

The pearl fisheries of the Tirunelveli-Ramanathapuram coasts of South India have been famous in history and have been responsible for attracting foreign travellers and traders from all parts of the world to South India from very ancient times.

Vasco da Gama (1499) and St. Francis Xavier (1542) have also in their travel diaries referred to the pearl fisheries of Tirunelveli.

Chief Trade Centres

From other available historical data it is found that in South India Korkai, Madurai, Woraiyur, Kaveripatnam, Kottayam and Cranganore were chief trade centres and Kaveripatnam in the Chola Kingdom, Korkai and Kottayam in the Pandyan territories and Cranganore in the Chera Kingdom were flourishing ports and emporia of Commerce.

The Pandyan kings who ruled Madurai and Tirunelveli appear to have been enjoying the rights of the pearl fisheries off the Madurai-Tirunelveli coast from the first establishment of Civil Government towards the middle of the 11th Century A.D. "Korkai" and "Kayal" were the cheif pearl fishing centres in those times and condemned criminals it is said were trained to dive for pearls in those days.

Rights of Fishing

The Cholas who rose to power after the Pandyas were enjoing this fishery for nearly two and a half centuries over the entire Coromandel coast from Orissa to Cape Comorin. Then for about 50 years the fisheries passed into the hands of Muslim rulers from whom the fisheries passed on to the Vijayanagar kings who held suzerainity over these areas for about two centuries.

The Portuguese had control over these fisheries between 1524 to 1658 and later the Dutch from 1658 to 1796 when the sovereignity passed on to the British; and from the British the monopoly rights of fishing passed on to Independent India in August 1947.

Pearl Fisheries are conducted also in Australia, South Sea Islands, West Indies, Japan, California, Mexico, Venezuela, and the Persian Gulf. But it is only the Indian and Iranian

MADRAS INFORMATION

fisheries which yield good gem pearls, whereas the fisheries of other countries like Australia are meant chiefly for the mother-pearls whose shells are utilised for other industries like the manufacture of buttons, cuff-links, knife handles, etc.

Mickimoto's Experiments

In Japan, Mickimoto in 1905 started experimenting the production of cultured pearls and since then the Japanese pearl fisheries have been a great success. Under the Mickimoto method the Japanese have been able to overcome the irregular cyclic character of pearl fisheries and perpetuate their occurrence.

Mickimoto found that pearls are more or less rounded masses of shell substance made up of concentric layers laid down around a nucleus. The nucleus may be some foreign intrusive body like a small stone or sometimes even some particles produced by the oyster itself. To overcome the irritation caused by this foreign matter the oyster produces some paste like secretion which envelopes the irritating substance. This gradually hardens and in course of time becomes the pearl.

Cultured Pearls

It is due to this reason that pearls are not found in all oysters. Mickimoto started experimenting by inserting a glass bead or some small stuff like that into the oyster and leaving it to grow for three or four years, and found that such oysters were sure to have pearls inside. This is how he started a pearl oyster farm and opened the way for cultured pearl fisheries.

The dormancy and irregular cyclic character of the pearl fisheries of South India have been long apparent but no adequate or satisfactory explanation of the phenomenon has been suggested except the one suggested by Mr. James Hernell who conducted detailed research and investigations in the pearl fisheries of South India in the early part of this century. He says that the depredations of predatory fishes on the pearl banks are on such an enormous scale as frequently to wipe out in their entirety densely packed beds of young pearl oysters during the first few months of their existence.

Research at Krusadai

Intensive research was carried [illegible] in the Krusadai Biological Re[illegible] Station on pearl oysters, concentrated attention being paid on the artificial faning, growth, maturity, age and artificial culture of pearls on the lines of the famous Mickimoto's pearl farm in Japan. The pearl oyster farm at Krusadai Island was started in 1933 under the able guidance of Dr. B. Sunder Raj, the then Director of Fisheries, who had met Mickimoto while on a study tour of Japan and was greatly impressed by the Japanese experiment.

The experiments conducted at Krusadai have been a great success in keeping the oysters alive in capacity from the spat stage to the adult state of five years. Owing to dearth of oysters, the experiments were not vigorously followed up. A research station has been opened in Tuticorin in 1947 and this research unit was able to detect a spat fall by the end of 1949 and successfully followed up the development of the banks which ultimately led the way to a prospective pearl fishery in 1955.

Fishing Operations

The pearl fishery like chank fishery at present is a Government monopoly. Pearl fisheries occur generally along the southern portion of the East Coast of this State and occur at long intervals. Between 1890 and 1926 there were only three fishing operations. In the non-fishing years a regular survey of inspection of the various banks is undertaken with a view to see the condition of the different beds and to assess their productivity.

The pearl fishery operation conducted in 1910–11 yielded Rs. 2,500 to Rs. 3,000. The pearl bank inspections conducted during 1923–24 showed that the oysters were growing rapidly in size and weight. In the year 1925, as most of the beds were replete with mature oysters the Government prohibited fishing on the pearl banks and penalised poaching and theft of oysters and pearls. The pearl fisheries conducted during 1926 to 1928 yielded good results. The income derived during those years were over Rs. 9 lakhs. The maximum revenue from pearl fisheries were in 1927 when it reached the peak figure of nearly Rs. 4½ lakhs.

Surveys Undertaken

Since 1928, the operations have been confined merely to the survey of pearl banks and scrutiny of the growth of pearl oysters. The surveys con[illegible] in 1952 and 1954 revealed that [illegible] oysters have grown, that there are [illegible] good lot of oysters for exploitation and that the pearl banks will be ripe for a fishery early in 1955.

Accordingly the Government have prohibited all kinds of fishing in the pearl banks off the Tirunelveli District for a period of two years. It is estimated that there are about three crores of oysters in the pearl banks lying in the sea off the cost of Tirunelveli district for exploitation. The Government have also stationed a special staff for patrolling the pearl banks against theft and destruction.

Thus it is after an interval of nearly three decades the famous pearl fisheries of South India are being opened up this year, off Tuticorin in Tirunelveli. The operations start on the 19th of March and are expected to last till the end of April.

Cost of Community Radio Receiver Reduced

Hitherto a sum of Rs. 650 towards the cost of a battery set and Rs. 390 towards the cost of a mains set including all installation materials, had been collected by the State Broadcasting De[illegible]ase partment from the Pancha[illegible] and Boards, in the Community [illegible] In the tening scheme. [illegible]eat grain

The costs of the sets a[illegible]nary room lation materials are n[illegible]s. Infested Rs. 545 and Rs. 310[illegible] which black and mains sets respe[illegible] includes the cost of [illegible] is spread ou[illegible] tion materials, and [illegible] The grain i[illegible] in the case of battery [illegible]stored till re[illegible]

Panchayat Boa[illegible] practice give[illegible] to instal radio r[illegible]ever the temp[illegible] community listen[illegible]igh. Where it [illegible] the amount un[illegible] soaking in wat[illegible] Account "XI[illegible] a concrete surfa[illegible] Contribution [illegible]gh to kill the fung[illegible] in[illegible] [illegible]d fuse.

th[illegible]

M[illegible] treatment of seed is successfu[illegible] s[illegible]d to control loose smut in bar[illegible] grain smut of *jowar* with g[illegible]ts at the Indian Agricult[illegible]search Institute, New Delhi.

Concept of Social Security

By SRI M. BHAKTAVATSALAM, Minister for Agriculture

Social security is a dynamic concept. It can be achieved for the society as a whole by the society as a whole. The need for protection against the various economic and social risks to which an individual is exposed in his life has now been officially recognized in a majority of countries and on an international scale in the Charter of the United Nations. The 'National minimum' as Social Security that has come to be known in Western countries, is a comprehensive term and aims at providing security to a majority of people from the beginning to the end of their life.

It is a matter of common observation and experience that every person who earns a livelihood for himself or his family, i.e., every person who is engaged in a gainful occupation is exposed to certain risks, which make his income unsteady and as such hold a constant fear for all the wage-earners including industrial employees. These risks include sickness, invalidity, employment injury, maternity, unemployment, old age and death. Some of these contingencies particularly, sickness, injury and maternity come under the one head as well as an inevitable curse, viz., there is loss of earnings on the one hand as well as additional expenditure on the other.

As early as [illegible] may have a little saving [illegible] to meet these contingencies, seldom does this saving [illegible] and generally one has to borrow at exorbitant rates. Others may not have the prudence to save or the [illegible] providing for such a [illegible]

Famed Towns

While it is difficult to [illegible] the growth of modern [illegible] when exactly the pearl [illegible] cum- [illegible] Gulf of Mannar were fi[illegible] in villages [illegible] there is evidence to show [illegible] years ago [illegible] than two thousand years ago [illegible] in well-known throughout [illegible] and world from China to the [illegible] their [illegible]

homes and families. When a worker falls sick, he has none to look after him. His illness is not properly cared for and in certain cases, instead of recouping, he deteriorates, resulting in the sapping of his vitality. This has proved harmful to the industries.

The lack of security of income during these contingencies has again led the workers to become migratory. In such circumstances, the worker has no other alternative but to return to his village. This results in the high rate of absenteeism. Under such conditions, it is all the more necessary that social security measures should be taken and the labour force protected against these risks and stabilised.

Usual Methods

The usual methods of meeting such contingencies and solving the problem of economic insecurity have been as follows :

(i) *Individual basis.*—Savings and borrowings.

(ii) *Family basis.*—Old persons and invalids were supported by the earning members ; so were the children. The reciprocal obligation of the parents to support the child and the grown-up children to support their old parents have been recognized from the ancient times.

(iii) *Charity and Community help.*—The village community helping those families which cannot provide for themselves. There have been Relief Funds and Charitable Institutions—both religious and non-religious.

With the change in the economic structure mainly due to the advent of machinery and the scattering of family members in different places, the age-long structure of family life, especially those of the artisan classes, who usually worked with their own tools and in their own homes, has broken down. But the social changes introduced by the industrialization and economic conditions have considerably weakened this sense of reciprocal obligations in several families.

Mutual Aid Systems

The village communities as such are ceasing to provide adequate support or protection, with the result that the grown-ups leave family surroundings and seek employment in industrial undertakings in towns. Thus the industrial revolution has brought into existence a large class of city dwellers who depend for their livelihood on their earnings by working in factories. Since most of these persons have left their homes and their relations behind in villages, as and when such contingencies as mentioned above arise, they have to seek new modes of mutual help based on common economic interest.

This has found expression in modern times in two main movements, viz., (i) Trade Union Movement and (ii) Mutual aid organizations. The mutual aid movement either within or outside Trade Unions did go a long way to help the working class with better conditions of living, but have failed to solve the problem of economic insecurity to the extent necessary. Being purely voluntary schemes, they have failed in many countries to bring a large proportion of the working classes within their orbit. The poorer sections of the working class have little chance of putting by any savings from their meagre earnings and becoming members. Thus the mutual aid system could not effectively solve the problem of economic insecurity. Therefore, it falls on the society as a whole and on the State, in particular, to protect these wage-earners against such risks.

State approach to problem

The social or State approach to the problem generally takes one of the following three forms : (i) State subsidised schemes of voluntary insurance, (ii) Social Insurance, (iii) Social assistance. Several European countries, such as the United Kingdom, Switzerland, etc., experimented with the State-subsidised voluntary Social Insurance Schemes ; but these schemes were ultimately given up for the reason that either the social conditions for its success were lacking or the State subsidy was not sufficient. Apart from this, even these schemes failed to insure the majority of these groups, which needed insurance protection most, viz., those with the lowest wages or employed in the most irregular or casual employment. Therefore, the need for compulsory Social Insurance has arisen. Further, social assistance is usually a supplement of Social Insurance only and as such is not by itself a solution of the problem.

Social security is not mere legislation. It is not just social economics. It is not charity. The proper motivation of social security is not fear, but hope. In modern conditions, therefore, when prices are high and wages not high enough to support all the members of the family, the best method of social security is by the collective effort of all members of the society to insure against these risks and that is known as Social Insurance, in its various aspects as Health Insurance, Old Age Insurance, Unemployment Insurance, etc. The workers in India are in need of such a method. Hence a recognized method of positive approach for protection against the risks faced by the wage-earner is through Social Insurance in the present-day condition.

Social Insurance Schemes.

Social Insurance Schemes can broadly be described as having the following main features :—

(i) The obligation of the society to protect those of its members who become victims of social contingencies. This obligation is inherently recognized.

(ii) It involves the creation of a Fund out of which all benefits in cash and kind will be paid.

(iii) A fund created by contributions not only from those to whom benefits are granted, but also from other members of the society interested in their welfare as well. Generally the State as the custodian of the Nation, the employers as interested in the welfare and efficiency of their employees and the employees themselves who are the beneficiaries, contribute towards the Fund.

(iv) It is compulsory in character so that the State imposes an obligation on those members of the society for whom a particular scheme of Social Insurance has been designed to insure themselves against contingencies provided for therein.

(v) The benefits are so designed as to provide for the maintenance of the usual standards of living of the various classes of the community covered.

(vi) Benefits are granted as a matter of right and without any 'means test', so that there is no damage to the self-respect of the individuals concerned. Certain qualifying conditions as to the period of employment or contributions to be paid or of residence are, however, usually attached to the grant of benefits to prevent malingering and other abuses.

The main differences between social insurance and commercial insurance are :

(i) Social insurance is compulsory, while commercial insurance is not.

(ii) In social insurance there is a sharing of cost between different parties including the State, while in commercial insurance the insured persons have to meet the entire cost of the insurance.

(iii) The element of private profit may be one of the main factors of commercial insurance, which is totally absent in social insurance.

Employees' State Insurance Act.

The question of instituting Sickness Insurance Schemes for industrial workers in India came under the consideration of the Government of India for the first time in 1927 in connexion with the conventions regarding Health Insurance of workers which the International Labour Organization had adopted at its Tenth Session. However, no further action was taken until the Government of India, in 1943, entrusted to Prof. Adarkar the work of formulating a scheme. He prepared a scheme for Health Insurance which was examined by two I.L.O. experts, who suggested certain modifications to it. This was considered by the Government of India, who, in 1946 introduced a bill called the "Workmen's State Insurance Bill" in the Central Legislature. This bill was passed as the Employees' State Insurance Act in 1948, to provide certain benefits to employees in case of sickness, employment injury and maternity.

Before the passing of this Act, two measures of Social Security existed in India. They are "The Workmen's Compensation Act" and "The Maternity Benefit Act". Even though these measures provide some income to the workers at the time of employment injury and to women workers when they could not work due to maternity, they are limited in scope and liability. As such, they hardly form part of social security programme, as it has now come to be understood in other countries.

In view of various circumstances prevailing in our country, the Employees' State Insurance Act is very limited as regards the risks it proposes to cover at present. However, in course of time, there is vast scope for its extension.

Sun as Sterilizer

The sterilizing effect of the sun can be made use of for keeping the smut disease of wheat in check. The disease is found wherever wheat is grown and causes heavy loss of grain. In the sun treatment the infested wheat grain is immersed in water at ordinary room temperature for four hours. Infested wheat comes from field in which black heads have appeared.

The seed thus soaked is spread out for drying in the sun. The grain is thoroughly dried and stored till required for sowing. The practice gives excellent results wherever the temperature of the sun is high. Where it is low, the seed after soaking in water should be spread on a concrete surface, which is hot enough to kill the fungus causing the disease.

This treatment of seed is successfully applied to control loose smut in barley and grain smut of *jowar* with good results at the Indian Agricultural Research Institute, New Delhi.

New Fuel with Many By-Products

Scores of men and women labourers are busy baring a million-year-old treasure at Neiveli in South Arcot District of Madras State. The find—2,000 million tons of lignite—will help change the entire complexion of South India's economy.

The Madras State, which is financing the pilot project, has already executed about 85 per cent of work at the quarry. The purpose is to expose a 100 ft. square lignite surface by digging 180 ft. deep pit of 600 + 600 ft.

The experience, information and technical data as gathered from this pilot project will be utilised in the planning of full-scale mining of the lignite deposits.

Since March 5, 1953—when the actual work on the quarry started—the Madras Government have spent over Rs. 43 lakhs exclusive of the value of the machinery made available by the Union Government and U.S. Technical Co-operation Mission. The Central Government have also obtained the services of a British firm of technical consultants under the Colombo Plan for preparation of a project report on the mining of the lignite and its utilisation.

What Is Lignite ?

The lignite is coal which does not mature into that black hard substance we call coal. It contains about 30 to 35 per cent of moisture but can be processed into a fuel.

This fuel is as good as any other and can run locomotives, feed thermal power stations, smelt ores and cook meals. Besides, it can form a basis of important industries—synthetic petrol, chemical and fertilisers.

Gain to South India.

The deposit of lignite—extending over an area of 100 square miles—has opened new vistas of opportunities for the entire population of States like Madras, Andhra, Travancore-Cochin, Hyderabad and Mysore. First, it will help ease the chronic fuel shortage in South which has been an obstacle in the way of industrial development. Nowadays, for example, the yearly local demand of South India comes to about three million tons but it is met to the extent of only two million tons. In addition, the cost of transporting coal a thousand miles from Bihar and West Bengal coal fields to the South make it expensive.

Second, the lignite-fed thermal power stations will reduce dependence on hydro-electric power which is greatly affected by the vagaries of the monsoons. The cheap electricity will also be available for the development of electro-chemical and electro-metallurgical industries. For instance, the bauxite ores in Salem district can be advantageously used in the manufacture of aluminium.

(*Continued on page 32*)

Neiveli Lignite

At present only a pilot lignite quarrying project is in progress, to determine the economic feasibility of a large-scale integrated scheme for the mining and utilisation of lignite. During the mining of lignite, fire clay, white clay and water will also be obtained. Lignite can be processed to yield raw lignite briquettes, carbonised briquettes, carbonised dust, tar, phenol, nitrogenous fertilisers, motor spirit, diesel oil and sulphuric acid.

Fire clay is suitable for manufacturing fire bricks, stoneware pipes, etc., and white clay is suitable for manufacturing crockery, low and high tension insulators, sanitaryware, etc., and for use as fillers in the textile, rubber and paper industries and for medicinal compositions. Water which will be available in fairly large quantities from the artesian aquifer will be adequate for the industrial plants proposed to be located at Neiveli, such as, Thermal Station, Fertiliser Plant, Briquetting Plant and for water-supply for the colony. Any surplus which may be available could be used for irrigation.

Lignite can be made into briquettes which can be used as fuel for industrial plants at the spot. The lignite can also be carbonised and transported to long distances for use as industrial and domestic fuel. During the carbonization of lignite briquettes, tar can be obtained and used as liquid fuel in boilers and furnaces and will also serve as raw material for making various chemicals including sulphur and motor spirit and diesel oil.

Fractional distillation of lignite can yield oils which will be suitable for use as wood preservatives and disinfectants and also pitch which can be used as a constituent of road tar and as a source for electrode carbon used in the electro-chemical industries like aluminium production, etc. Another product obtained by processing lignite is mortan wax, which can be used for manufacturing polishes, insulating materials gramophone records, wax, papers, etc., and for explosives.

Committee to Report on Agricultural Prices

The Government of Madras have constituted an *Ad Hoc* Committee temporarily for continuously watching the prices in this state of rice, jowar and bajra and other agricultural commodities, in respect of which the Government of India have taken steps to stabilise prices in one way or another, and for taking prompt measures on the lines contemplated by the Government of India or in other respects within the competence of the State Government or with the co-operation of the Central Government.

The Committee will make a review and apprise the Government of the real position in regard to the prices of the agricultural commodities.

The following are the members of the Committee : the Commissioner of Civil Supplies (Chairman), the Director of Agriculture, the Director of Industries and Commerce, the Registrar of Co-operative Societies and the Director of Statistics. The Director of Statistics will be the Convenor.

This Committee will review the latest price reports of agricultural commodities received in the Department of Statistics, the Board of Revenue, the Agriculture Department (Marketing branch), etc., and record the commodities the prices of which have fallen so low as to cause distress to producers or have fallen below the floor level fixed by the Government of India and the centres in which this has occurred for, the purpose of purchase operations, if necessary. The Committee will also review to the extent possible the stock position of the commodities, so that steps may be taken for improving exports and for taking such other action as may be necessary for improving movements and marketing of those commodities.

The Committee will also consider the advisability or otherwise of the release of buffer stocks of rice by the Central Government at any particular moment and the advice that should be tendered to the Government of India. As Government consider that credit facilities and marketing assistance will go some way to stabilise prices, besides other measures, steps may be suggested by the Committee for improving such facilities through Co-operative Societies Banks, etc.

It may be recalled in this connection that the Government of India have taken some steps for stabilising the prices such as permitting the export of rice from all ports, the purchase of jowar, bajra and maize in selected markets in rural areas, where the prices of those foodgrains decline below Rupees 5–8–0 per maund, Rs. 6 per maund and Rs. 5–8–0 per maund respectively and the liberalisation of export and the reduction in export duties in the case of commodities like oil seeds, oil, pepper, etc.

Success of Jap Method

Sri K. Ramakrishnan, M.L.A., Timber Merchant, Kottekad, Palghat, writes :

On the advice of Sri Karthat Balachandran, Sarvodaya worker, and agricultural experts of the Community Projects administration, I adopted the Japanese Method of Paddy Cultivation. Harvesting was done on one acre of land under cultivation, in the presence of the Agricultural Demonstrator and others ; it was found that it yielded 6,880 lb. of paddy, more than three times the usual yield. Though the cost of cultivation was about Rs. 125 more in the present case, the results on the whole are very encouraging. Other agriculturists may try this method.

Madras Board of Transport to be continued for Another Year

The Government have sanctioned the continuance of the Madras Board of Transport for a further period of one year from March 10, 1955. The Minister in charge of Transport will be the Chairman of the Board and the Secretary, Central Road Traffic Board, the Secretary to the Board.

The following persons are appointed to serve on the Board for a further period of one year from March 10, 1955 :

(1) Secretary to Government, Home Department ; (2) Secretary to Government, Public Works Department ; (3) Transport Commissioner, Madras ; (4) Chief Engineer for Highways ; (5) Chief Engineer for Irrigation ; (6) Inspector of Municipal Councils and Local Boards ; (7) The Chairman, Madras Port Trust ; (8) State Port Officer ; (9) Chief Commercial Superintendent, Southern Railway ; (10) State Director of Transport, Travancore-Cochin Government ; (11) General Manager, Mysore Government Road Transport Department ; (12) Commissioner of Transport, Government of Andhra ; (13) Chairman of the Madras Flying Club; (14) Chairman of the Indian Roads and Transport Development Association ; (15) Representative of the Muslim Chamber of Commerce, to represent Coastal Shipping Agents (Sri M. M. Syed Md. Rowther, Partner of K. P. V. Shaik Md. Rowther and Company) ; (16) Sri C. Machado, to represent Country Craft Owners' Association, Tuticorin ; (17) Chairman of the Motor Vehicles and Allied Merchants' Association.

Mahathma Gandhi on Gokhale

GOKHALE MY POLITICAL GURU

By M. K. GANDHI.

Published by Navajeevan Publishing House, Ahmedabad—Price Re. 1.

Gokhale is now an institution. He is one of the most outstanding statesman India has produced and his labours in the cause of freedom are too wellknown. The part that he played in the then imperial Legislative Assembly and the work that he did both in England and in India in bringing about the political emancipation of this country in a constitutional manner are matters of common knowledge now. He organised the Servants of India Society and the pioneering work that association did in the cause of social welfare has provided a perennial inspiration to others to follow in the path chalked out by him. The interest that he took in the cause of elementary education and his ceaseless efforts in promoting the rehabitation of Indian Agriculture are land marks in the history of this country. His perseverance was indomitable; his enthusiasm in any good cause unflagging; and his self-sacrifice in the cause of his country was magnificent.

The present work is a collection in book form of the writings of Mahatma Gandhi about Gokhale. Gandhiji saw in Gokhale the ideal servant of India and he, therefore accepted him as his master endeavouring to set the pattern of his life and work in the political field in India, after those of Gokhale. One thing that attracted Gandhiji to Gokhale above all other things is the religious fervour with which Gokhale took to political work. Political work was no past-time for Gokhale nor a periodical recreation but it was a means of service to the people of India. He spiritualised politics.

The book is published in an attractive form and the contents are arranged in a simple and logical manner. The opinion of the Father of the Nation about one of the greatest sons of India is sure to prove a source of inspiration to all those who are interested in the progress of this country.

ASHRAM OBSERVANCES IN ACTION

By M. K. GANDHI.

Published by Navajeevan Publishing House, Ahmedabad—Price Re. 1.

Gandhiji believed that character building is the surest foundation for nation building and in character building Ashramam life is a useful factor.

This small publication contains facts about Ashramam life. It is divided into 12 chapters and contains Mahatma Gandhi's observations on a number of topics like truth, prayer, ahimsa, satyagraha, education and agriculture. The book is a good collection of ideas and throws a flood of light on Gandhiji's philosophy.

—T.K.G.

DISCIPLINE FOR NON-VIOLENCE

By RICHARD B. GREGG—

Published by Navajeevan Publishing House, Ahmedabad, Price annas 10.

This is a pamphlet written by Mr. R. B. Gregg for the guidance of Westerners who endeavour to follow the law of Satyagraha. Mahatma Gandhi has contributed a foreword to it. In the foreword Mahatma Gandhi has referred to the difference between pacifism and satyagraha. Mr. Gregg is an intimate student of Satyagraha with considerable first hand knowledge about it. He lived in India and for an year in the Sabarmati Ashram. The pamphlet being primarily intended for Westerners is written in a manner that would appeal to the West. India is the home of Satyagraha and she is in a particularly advantageous position to expound its basic principles to the outside world.

The book is worth study by all those interested in the technique of this non-violent weapon which India used with such remarkable effect in achieving her political emancipation.

—Thomas K. George.

(*Continued from page* 30)

Besides its value as a fuel, lignite is also the source of numerous by-products such as petrol, plastic and phenol.

Other Components.

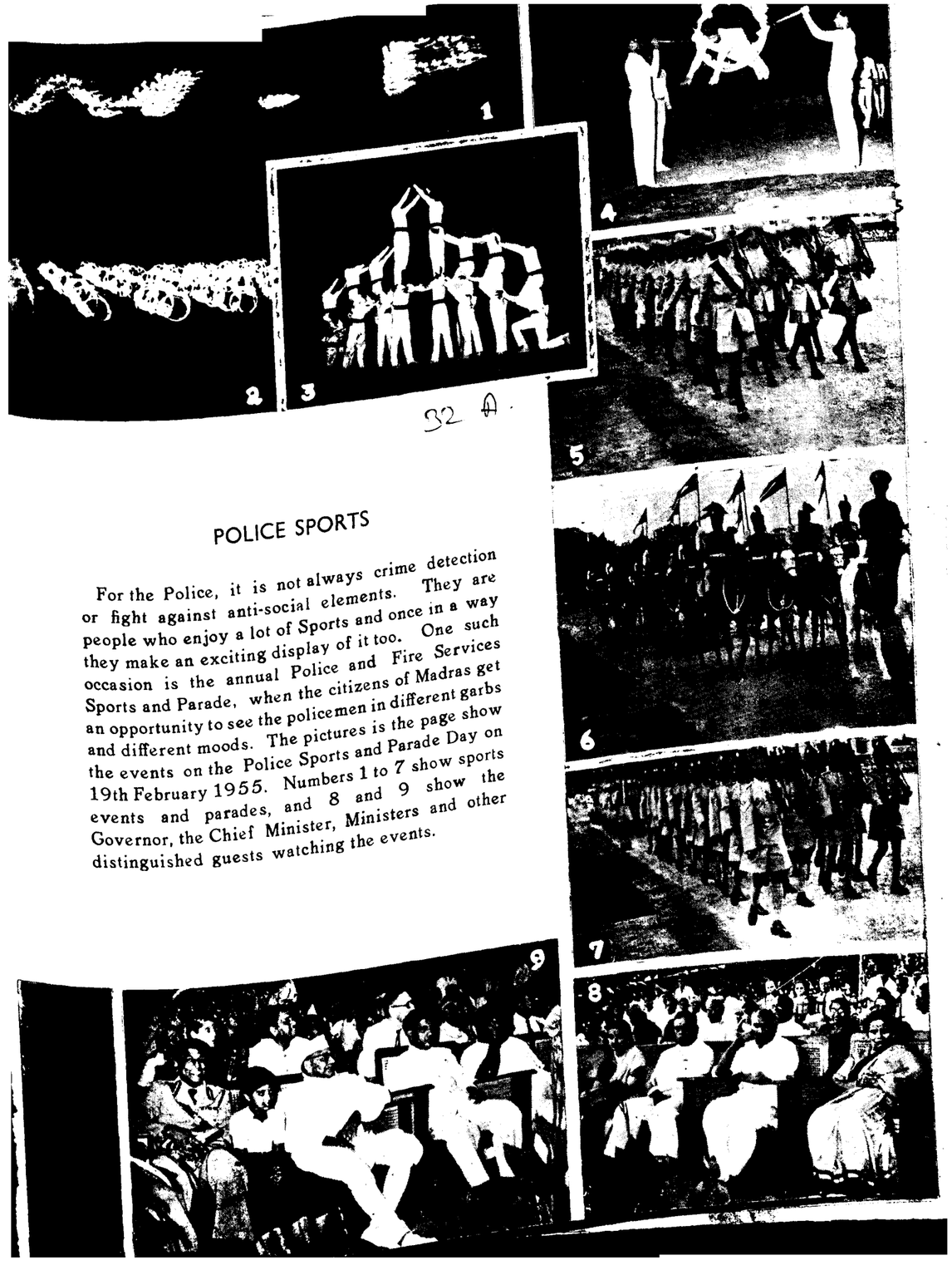
The site from which lignite is being mined has also deposits of other products. There is a thick layer of white clay which can help start the ceramic industry and the manufacture of fire-bricks. The lignite also contains a high percentage of 'Montan Wax' essential for certain defence industries.

The water which will be released from the mining can be conveniently utilised for irrigation. Thus all components—the cover of clay, lignite, montan wax and water—can be effectively utilised.

Laboratory.

Near the quarry is an improvised kind of laboratory where the lignite and other components are being analysed for their possible use. Any full-scale exploitation will await the receipt of the project report from the British firm which are expected to submit it by the end of the current year.

While scientists are busy analysing the lignite, the labourers, with the assistance of giant shovels and bull-dozers, are digging deeper and deeper into the experimental pit. But they chuckle among themselves at the thought that it was one of the workers, like themselves, who 'discovered' this treasure in the middle 30s while boring an artesian well.



32 A

POLICE SPORTS

For the Police, it is not always crime detection or fight against anti-social elements. They are people who enjoy a lot of Sports and once in a way they make an exciting display of it too. One such occasion is the annual Police and Fire Services Sports and Parade, when the citizens of Madras get an opportunity to see the policemen in different garbs and different moods. The pictures is the page show the events on the Police Sports and Parade Day on 19th February 1955. Numbers 1 to 7 show sports events and parades, and 8 and 9 show the Governor, the Chief Minister, Ministers and other distinguished guests watching the events.

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MADRAS Information

MAY 1955 STATE LEGISLATURE WING

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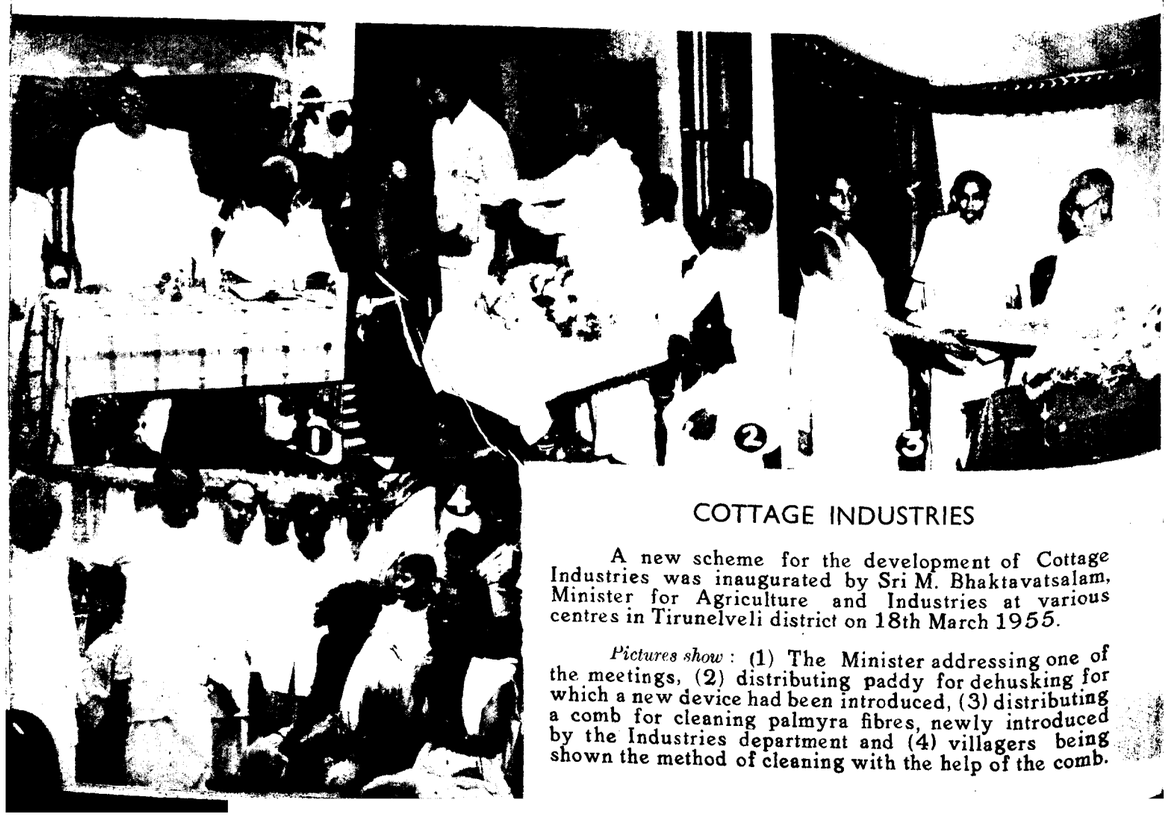

COTTAGE INDUSTRIES

A new scheme for the development of Cottage Industries was inaugurated by Sri M. Bhaktavatsalam, Minister for Agriculture and Industries at various centres in Tirunelveli district on 18th March 1955.

Pictures show : (1) The Minister addressing one of the meetings, (2) distributing paddy for dehusking for which a new device had been introduced, (3) distributing a comb for cleaning palmyra fibres, newly introduced by the Industries department and (4) villagers being shown the method of cleaning with the help of the comb.

Madras Information

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COVER PAGE: A scene off Tuticorin where the Pearl Fishery Operations took place in the months of March and April 1955. The "Little Armada" is not off for anything offensive on the high seas; they are in quest of pearl—that little lustrous wonder of Mother Nature, hidden mysteriously inside the innocent oyster.

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Second Five-Year Plan: Implementation by Madras Government

The Government of India and the Planning Commission are anxious that the Second Five Year-Plan should be essentially a People's Plan and should be prepared from the village upwards. In carrying out the Plan successfully it is essential that local initiative in formulating plans and local effort and resources should be stimulated and marshalled to the maximum extent possible. In generally accepting this idea, the Government of Madras have decided that in preparing the Second Five-Year Plan a suitable machinery should be provided for ascertaining the needs and wishes of people and the extent to which they are willing to co-operate with money and voluntary labour.

The Plan for the State will be prepared for each district after consulting opinion in the villages and will provide for meeting, to the extent practicable, the elementary requirements of the people in all districts in the matter of primary education, drinking water-supply, rural sanitation, agricultural facilities, communications, medical assistance and village co-operatives. Large developmental works planned at the State level will be broken up into parts and the part relating to each district will be added on to the Plan evolved at the district level to make up the total Plan for the district.

Village Plans

The first step in the formulation of village plans is the setting up of a suitable organisation of villagers (which will be called the Village Development Committee) to function as the Planning agency for the area for which it is constituted and to undertake the implementation of the Plans, in co-operation with the villagers. Taking into consideration the importance of increased agricultural production as a means of improving the standard of living of the rural population, there would be in the Committee at least one efficient practical farmer, who is recognised as such by the villagers and is also willing to spare time and labour to advise and assist other cultivators in adopting improved agricultural methods and practices. The Committee will have to raise local contributions for implementing the village works programme and it should therefore command the confidence of the villagers that the money collected will be properly accounted for and spent to the best advantage.

As the co-operation of every family in the village will have to be enlisted in implementing the Plan, care will be taken to ensure that the Committee is representative of all sections of the people including sections earning their livelihood in occupations other than agriculture. The Madras Government also desire that in villages for which statutory Panchayats have been constituted, the Panchayats themselves should be utilised to the maximum extent possible for planning purposes and should form the nucleus of the planning agency.

In the remaining areas, where statutory Panchayats are not in existence the villagers would be invited to elect from among themselves a Village Development Committee which may be regarded as their duly authorised representatives for the formulation and implementation of the village plan. The Karnam and the Village Munsif will be members of the Village Development Committee. The Karnam will function as its Secretary.

Size of the Village Plan

As regards the total expenditure for which each village plan should be prepared, it would not be unrealistic if the outlay expected by the Government over the Villagers' basic needs in each district is of the order of Rs. 2 to 3 crores for the five-year period. This works out roughly to an expenditure by Government of a sum of Rs. 2 per head of population per year. To this must be added the contribution which the villagers themselves are willing to make towards the execution of schemes included in the village plan.

Demarcation of Planning areas

The Planning Commission has pointed out the desirability of dividing each district into convenient planning areas. Such planning areas will not cut across taluk boundaries, and will be formed taking into account all relevant factors and the facilities that may exist in particular areas for special kinds of development. Any tract, the problems of which are materially different from those of other tracts to the neighbourhood will be constituted into a planning area. Where conditions are more or less the same over an entire taluk, it will be constituted into one or more planning areas on the basis of population.

Constitution of Committees

A Development Committee would be constituted for each 'Planning Area' which will consist of the following: Revenue Divisional Officer—Chairman, Presidents of all Panchayat Boards in the area, Members of the State Legislature representing the area, two or more persons to be nominated by the Collector to represent agriculturists, special workers and any other special interests, Tahsildar, nearest gazetted officer of the Public Works or the Highways Department, Agricultural Demonstrator, nearest Veterinary Assistant Surgeon, nearest Deputy Inspector of Schools, nearest Co-operative Sub-Registrar. Officers of the other departments may also be co-opted when any schemes relating to their departments come up for consideration.

The functions of the Committee will be to scrutinise the village plans with

reference to their suitability, the availability of funds and the commitments they involve by way of supplies of improved seeds, manure and so on and to prepare a consolidated plan for the area. The Committee will also embody in the plan any special lines of development that may be possible in the area with reference to any raw materials or other facilities that may be available there.

District Plans

The Planning Commission has recommended that with a view to gaining experience as a first stage, plans may be worked out for 3 or 4 selected districts. The Government propose, to begin with, to have detailed district plans prepared for the districts of Coimbatore, Ramanathapuram and Chingleput. There is at present no special staff who can attend to planning work outside the Community Development and National Extension Service areas. The Government have therefore sanctioned the appointment for a period of 3 months in the first instance of a special staff consisting of a Deputy Collector and a number of Deputy Tahsildars and Revenue Inspectors in the districts of Coimbatore, Ramanathapuram and Chingleput for work connected with the preparation of district plans.

Plans in Community Development and N.E.S. areas

The Government have issued orders that the staff of Village Level Workers sanctioned for Community Development and National Extension Service areas should take up at once on the lines indicated above the work relating to the formation of Village Development Committees and the formulation of plans in villages for which such comprehensive plans have not been prepared already.

Plans for Municipalities and Major Panchayats

The Planning Commission has recommended that each town should have a plan of its own which would be a defined part of the district plan. Each municipality and major panchayat will therefore have to take steps to prepare a comprehensive plan of its own which would in due course be fitted into the district and State plans. For the purpose of preparing the plan, each municipal council and major panchayat will be the Planning Committee for its area. The plan may roughly be divided into the following heads : (i) water-supply ; (ii) drainage ; (iii) medical facilities ; (iv) education ; (v) roads ; (vi) town-planning and improvement of slums and (vii) improvement of financial resources of the Municipality or Panchayat. This list is not exhaustive. Local authorities may add other items of immediate importance to them, if any.

Time Schedule

In the districts of Coimbatore, Ramanathapuram and Chingleput, the special staff sanctioned will start immediately with the organisation of

Representatives of trade and industry met in conference at the Secretariat on 25th March 1955 to offer their suggestions regarding Schemes for inclusion in the Second Five-Year Plan. Photo shows Sri M. Bhaktavatsalam, Minister for Agriculture, addressing the Conference.

informal village development Committees in consultation with the local staff of the Revenue and Agricultural Departments. It is expected that the work relating to the formulation of Village Plans would be completed in a period of three months. After getting the Village Plans, the Collector has been instructed to finalise the work of the District Plan within a period of one month and to submit it to the Government by the middle of August, 1955.

Village Plans in other districts

In the districts other than Coimbatore, Ramanathapuram and Chingleput, the Collectors have been instructed to take on hand immediately the work relating to the constitution of Village Development Committees and the Committees for the Planning areas in their districts through the ordinary Revenue staff and complete the work within a period of three months.

Public Co-operation

The District Plans will be sufficiently wide in scope to make a real impact on the life of all sections of village communities and will lay down specific targets to ensure sufficient increased production to sustain an ever-widening scale of welfare activities. In framing agricultural programmes, it is necessary to place before the villagers a goal which they should strive to attain and this goal should be the doubling of production within a period of 10 years. It is realised that this goal involves on the part of the State Government an obligation to provide the supplies and finances needed, good seeds, fertilisers, manures, credit facilities, etc. and plans to provide these will be worked out as a necessary supplement to the programme of production. This coupled with a programme for the provision of basic amenities such as drinking water supply, provision of roads, etc., within a short time, will, it is expected, evoke considerable enthusiasm, and all organisations should endeavour to give a common aim and outlook to village communities and ensure wide public co-operation.

Instructions have been issued by the State Government that the staff engaged in the preparation of the Plan should bring these objectives prominently to the notice of the villagers. The Government are anxious that non-officials should be actively associated with the planning work at every stage. It is, therefore, of vital importance to enlist the co-operation of all non-official elements in the formulation of village development plans which would truly reflect the needs and aspirations of the villagers. Before the preparation of plans by the village committees is taken up, it would be necessary to organise mass meetings of villagers at least in three or four centres in each taluk. Prominent non-officials like Members of the Central and State legislatures, Social Workers, etc. will be invited to participate in these meetings, so as to ensure that public co-operation and the spirit of self-help and common endeavour required to implement the Plan will be forthcoming in an abundant measure.

Block Advisory Committees

List of Non-official Members appointed to the Block Advisory Committees under the National Extension Service.

SOUTH KANARA DISTRICT.

Baindur Block.

1. Sri K. Sanjeeva Rao, Member, District Board, Kambadakone, Coondapur Taluk.
2. Sri Dattarama Rao, President, Panchayat Board, Baindur.
3. Sri Chanthayya Shetty, Kalthod, Coondapoor Taluk.
4. Sri Mananje Narayana Rao, Mananje, Ajiri, Coondapur Taluk.

MALABAR DISTRICT.

Taliparamba Block.

1. Sri Kurumathur Narayanan Nambudiripad, Agriculturist, Kurumathur.
2. Sri K. V. Mammu, Agriculturist and Social Worker, Taliparamba.
3. Sri K. V. Moosankutty, Member, District Board, Malabar.
4. Sri Koyilerian Kannan, Harijan Member, District Board, Malabar.

RAMANATHAPURAM DISTRICT.

Rajapalayam Block.

1. Sri A. K. D. Rengaswamy Raja, Agriculturist, Rajapalayam.
2. Sri K. Karuppanan, President, Sundararajapuram Panchayat Board, Soolaiseri Post (via) Rajapalayam.
3. Sri K. Gomathi Thevar, Vice-President, Seithur Panchayat Board, and President, Agricultural Association, Seithur.
4. Sri T. Thirumalai Naidu, Landlord, Maharajapuram (via) Watrap.

TIRUCHIRAPPALLI DISTRICT.

Alangudi Block

1. Sri R. Natesan, Convener, Bharat Sevak Samajam, Alangudi.
2. Sri AR. Annamalai Chettiar, Pudukkottai.
3. Sri Thangavelu Servai, President, Taluk Congress Committee, Alangudi.
4. Sri A. Subbiah, son of Arunachala Ambalagarar, Poovarasangudi, President, Pudukkottai Co-operative Bank.

SALEM DISTRICT.

Peddanaickenpalayam Block.

1. Sri M. Arumugam, President, Panchayat Board, Athur.
2. Sri Kandasami Moopar, President, Panchayat Board, Mallikarai.
3. Sri Angamuthu Naicker, President, Co-operative Society, Athur.
4. Sri S. Narayanan, Secretary, Athur Milk supply Co-operative Society.

THE NILGIRIS DISTRICT.

Coonoor Block.

1. Sri B. N. Rangaswamy, Agriculturist, Bokkada, Sholurmattam post.
2. Sri M. K. Nanja Gowder, President, Kotagiri Panchayat Board Kotagiri.
3. Sri N. R. Bojarajalu Naidu, Social Worker, Ketty, Ketty post.

N.B.—The name of the fourth member will be notified separately.

COIMBATORE DISTRICT.

Palladam Block.

1. Sri R. M. Komaraswamy Gounder, Convenor, Bharat Sevak Samaj Rangasamudram, Panikkampatti Post
2. Sri P. K. Kasturiswami, Social Worker, Puliampatti, Anupambatti Post, Palladadam taluk.
3. Sri P. N. Rangaswami Gounder Agriculturist, Village Headman, Pappanipatti post, Varapatti firka.
4. Sri L. V. Govindarajulu Naidu Agriculturist, Mettur Lakshmanaickenpalayam, Varapatti firka.

TIRUNELVELI DISTRICT.

Koilpatti Block.

1. Sri A. Velayutha Raja, Member District Board, Koilpatti.
2. Sri A. Venkatarama Naidu, President, Panchayat Board, Avalnatham.
3. Sri E. M. A. Ramachandra Moopanar, President, Panchayat Board Ettayapuram.
4. Sri K. R. Nammalwar Naidu Gopalapuram, Nallattinputhur.

Salvage of Dry Cattle in Madras State

By SRI A. PALANIAPPA MUDALIAR, M.A., Registrar of Co-operative Societies, Madras

The term "salvage" is commonly used in India for the preservation of cow or a buffalo during her dry period till she calves. Ordinarily the dry period of milch animals ranges from 3 to 15 months. Most of the cities in this country have no milk pockets surrounding them and there is therefore no possibility of large scale production of milk in areas very close to the cities. This has necessitated the maintenance of milch cattle inside the cities.

As the population of a City grows the number of milch cattle correspondingly increases to cope with the demand for milk. This system of keeping cattle inside the cities has serious defects, the chief among them being the drain it causes on the cattle wealth of the country. The milch animals which are brought to the City seldom return to the rural areas as they are slaughtered or rendered unfit for further breeding and its progeny also is got rid of at the earliest possible time. Milch animals have therefore to be imported into the cities, to replace the animals that go dry. This drain which has been continuing for a long time past has depleted the country of its good breeds and some of the important breeds are affected to the verge of extinction.

Population of milch cattle in the City

The cream of stock in the most of the rural areas and breeding centres is generally imported into the City, because, the milkmen go in for these quality animals which they can profitably maintain and earn a living under the expensive urban conditions. So far as the Madras City is concerned about 15,000 to 16,000 cattle are imported annually from the breeding tracts of Ongole and Cuddapah. Out of these only 3,000 to 4,000 animals are sent back to the breeding tracts by rail for preservation. Some of them are marched on foot to the adjoining rural areas ; but still a large number of animals that go dry are sold to dealers and brokers who finally pass them on for slaughter. According to the report of the Salvage Committee on the Slaughter of Animals, fifty per cent of the animals slaughtered are worthy of preservation.

The milch animals in the cities are generally kept in insanitary and congested stalls which are not conducive to the production of clean and wholesome milk. The urine and the manure dung remain lying around the stalls producing foul smell and forms an excellent media for breeding of flies. This affects the health of the people living in the vicinity. Besides, the cattle have no room for exercise much loss grazing grounds or other facilities and the calves have no place in the general management.

Need for preservation

It is a common feature that large number of freshly calved animals are imported to the towns and cities every year from breeding tracts and after one or two lactations they are rendered unfit for further use. The worst of it is that calves are neglected and many die soon after their arrival in the cities. Under these conditions it is no wonder that production of wholesome milk is neither plentiful nor cheap. It is obvious that from all points of view there is the dire need for planned preservation of cattle wealth in the country.

Kambakkam Salvage Farm

The need for the salvage of dry cattle of the Madras City was realized by the Government and the owners of milch animals in the City as it was observed that there was a gradual depletion of valuable milch animals in the City due to the difficulties experienced in maintaining them during their dry periods. To prevent this continuous wastage of cattle wealth a scheme for the salvage of dry cows was launched by Government in the year 1944. The scheme is worked by the Animal Husbandry Department through the Madras Co-operative Society for Salvage of Dry Cows started for the purpose. The scheme provided for the reception of dry cows and their maintenance in the Kambakkam Reserve Forest where there is plenty of pasture and shade and a perennial stream. The dry animals are maintained until they calve and are returned to the owners. A nominal fee of Rs. 10 per animal per month is collected from the owners. As the fees collected from the owners of animlas are not much, the major portion of running the farm by the Animal Husbandry Department is subsidised by Government. On an average, about 200 to 250 animals are admitted to the farm every year. 2,203 animals have so far been admitted into the farm for salvaging them.

Vattambedu Salvage Farm

In the year 1950, another scheme for salvage of dry she-buffaloes was put into operation, under which dry animals in the City are collected by the Madras Co-operative Milk Supply Union and sent to the Salvage Farm at Vattambedu in Nellore district. This farm is run by the Madras Co-operative Milk Supply Union with some financial assistance from Government by way of free services of the Supervisory staff consisting of one Senior Inspector of Co-operative Societies, one Stockman-compounder and one attendant and a cash grant of Rs. 460 per annum towards the maintenance cost of stud bull and medicines. A monthly fee of Rs. 8 for each country buffalo is charged by the Union. On an average, about 100 animals are admitted every year. So far about 800 animals are admitted from the inception of the scheme. The Union has invested about Rs. 60,000 for establishing the farm and reclaiming waste lands for growing fodder crops. The farm has now under plough, 40 acres under wet and 20 acres under dry cultivation.

Difficulties of Milkmen

Though the facilities made available by the Government and its benefits have been well realized by the public yet the admissions have not been appreciable. The two schemes appear to have not even touched the fringe of the problem considering the population of milch cattle in the City. An examination of the statistics of the animlas salvaged in these two schemes show that only middle-class and well-placed owners avail themselves of the benefits of the scheme. The bulk of the professional milkmen owning thousands of milch cattle in the City have not availed of the benefits.

The chief causes for the poor response are said to be : (1) Due to the low economic level of the people engaged in the trade, none of them can afford to wait for 10 months for a salvaged animal to return and at the same time meet the salvage costs at Rs. 8 to Rs. 10 per month. (2) When an animal goes dry the milkman has to lose his customer. He is therefore faced with either losing his customer or to find means to immediately replace his dry animal with one in milk. The cattle traders in the City exploit the weakness of the milkmen. The middleman-trader takes the dry animal at a low price and replaces it with a lactating animal at a higher price. Only an advance of half the value of the animal is received from the buyer and the balance is allowed to be paid in monthly or weekly instalments. The milkman is therefore exploited at both ends. But he prefers this procedure as it readily solves his problem of running his milk trade.

To tide over the difficulty of the members from paying the salvage fees monthly and to give at least a temporary financial relief, the department permitted the Union to treat the salvage fees as a loan and recover the same in easy instalments when the animal comes to milk, but even this concession has not found much response. It is therefore necessary to see that in the interests of the preservation of cattle wealth of the country that the salvage scheme is made cheap and attractive by organising several such farms.

Other Schemes

A drive has been instituted to organise several salvage farms on co-operative basis on the outskirts of big towns and cities throughout the State. The Deputy Registrars of Co-operative Societies have been asked to investigate the possibilities of starting salvage farms in suitable places. Proposals for starting salvage farms in the following places are under consideration and the investigations to start farms in other places are in progress :—

(1) *Thuvakudi* (*Tiruchirappalli district*).—It is proposed to take over an area of 100 acres for salvaging 50 dry cattle. The farm will be run by the Tiruchirappalli-Srirangam Co-operative Milk Supply Union. The capital cost of the establishment of the farm is estimated at Rs. 11,250.

The scheme has been considered at the meeting of the State Livestock Improvement Board held on February 2, 1955. The scheme will be suitably modified in the light of the suggestions called for from the Director of Agriculture and the Director of Animal Husbandry.

(2) *Karkal* (*South Kanara district*).—It is proposed to organise a Cattle Breeding Society at Karkal for salvaging the dry cattle in South Kanara district. An extent of 500 acres of Government poramboke land near Karkal town will be taken over for running the scheme. The scheme envisages the salvages of about 300 animals. As the site is near a reserve forest the animals will have adequate grazing facilities. The capital cost of the scheme is estimated at Rs. 20,000 and the recurring cost at Rs. 8,000. The scheme wi[illegible] submitted to Government for their approval shortly.

(3) *Karaikudi* (*Ramanathapuram district*).—There is a proposal of Karaikudi Co-operative Milk Supply Society to run a farm for salvage of about 300 to 400 animals by taking over an area of 612 acres of Government lands in Sencheri village, south of Karaikudi town. The capital cost is estimated at Rs. 1·05 lakhs. This scheme could not however be pushed through as the District Agricultural Officer is of the view that availability of underground water resources should be ascertained in order to secure adequate water-supply from a well to be sunk under the scheme. This matter is now being examined by the Assistant Director of Industries, Ramanathapuram.

(4) *Abisekapatty and Pillaiyarkadu* (*Tirunelveli district*).—The Tirunelveli Co-operative Milk Supply Society has proposed to take on long lease an extent of about 800 acres of lands in the above two villages belonging to Swami Nallaiyappan and Kanthimathi Ammal Devasthanam. The terms of the lease are under correspondence between the Registrar of Co-operative Societies and the Commissioner, Hindu Religious Endowments. If the lands are secured on lease a farm for the salvage of about 100 dry animals at an estimated capital cost of about Rs. 18,000 can be established.

(5) *Mannur and Nagalapuram* (*Chingleput district*).—Proposals of Madras Milk Supply Union for running two more salvage farms in the above two places are under active consideration. The sites will be inspected by the Registrar of Co-operative Societies shortly and the proposals will be finalised.

It is hoped that a good number of salvage schemes can be put into operation in the coming years. It is hoped that these co-operatives will to some extent solve the problem of preservation and improvement of the cattle wealth in the Madras State.

Rural Price Index

The index numbers of rural prices for the month of January 1955, with the year ending 30th June 1936 as base or 100 for the several centres were as follows :—

Serial number and Rural Centres.	*Index number (Base July 1935 to June 1936 : 100).*
1. Puliyur (S. Arcot).	388
2. Agaram (S. Arcot).	374
3. Tirulayanatham (Tiruchi) ..	445
4. Eriodu (Madurai).	392
5. Gokilapuram (Madurai) ..	403
6. Kinathuk[illegible] (Coimba[illegible]	404
7. Koduvam[illegible] bar) [illegible]	
8. Gudu[illegible]	
9. [illegible]	

[illegible] nal [illegible] operative [illegible] Central [illegible] co-ope[illegible] [illegible]ions having [illegible] financial resources utilize them [illegible] similar objects.

The question of increasing the average per capita yield of cows is a

Some Special Aspects of Urban Milk Supply

By CAPT. U. K. MENON, Dairy Officer

It is a well-known fact that apart from small areas in the Punjab, throughout the rest of India milk is in short supply. The result of this state of affairs is mainly two-fold: (1) At the production end there is no question of any ethics. Milk is produced under most insanitary and careless conditions and is widely adulterated. (2) At the consumers' end it shuts off this essential commodity from the lower income groups which constitute the bulk of our population.

Nutrition experts are unanimous in prescribing a minimum of 8 oz. of milk per head as part of the general diet necessary to keep the basic nutritional level. How far we are from this objective is too well realized. We are not in a position today to assure the minimum quantity of milk required for normal nutrition, even to the vulnerable groups of our population, viz., growing children and pregnant mothers.

How to assure the minimum requirement

In planning any scheme for milk supply the objective should therefore be to satisfy this minimum requirement. How quickly we can attain this objective depends on the following factors: (1) Organization of the trade, (2) increasing the output, (3) cheapening costs and (4) adopting a policy of marketing which will ensure a steady distribution system. It is worthwhile to review the position under these heads while analysing the progress achieved with respect to the Milk Supply Schemes in the Madras State.

The need [illegible]ually from [illegible]ngole and Cuddalore [illegible] system of milk s[illegible] only 3,000 to 4,0[illegible] [illegible]ent back to the breedin[illegible] [illegible]y rail for preservation. S[illegible] them are marched on foot to [illegible] adjoining rural areas; but still a large number of animals that go dry are sold [illegible]

Urban sources of milk supply

In any urban area a large majority of animals are maintained by hereditary milkmen of the shepherd class, who have been plying this occupation through generations. Most of them on an average own three to four cows. They act both as producers and retailers. Due to this dual role they are obliged to play, they are forced to keep their animals as near their custom as possible. The rapid increase in urban population during recent years has created severe problems of accommodation, rent, cost of maintenance, etc., with the result that this class of trader has been forced to conduct his business under the most insanitary conditions. Public agitation has been going on against this menace to public health. Despite all this, even in a premier city like Madras this class continues to operate their business. The one great objection against taking a decisive step to remove this blot on the city, is the general reticence against dispossessing the source of income of one class of traders. Public agitation in future years is bound to become stronger and it is well that we think of a plan to gradually get rid of these insanitary pockets within the city.

The Bombay Milk Plan is a bold step in this direction. Under this plan almost the entire city has been rid of what was popularly known as "cattle menace". The City of Calcutta has now followed suit. The Calcutta plan has improved upon the original Bombay Milk Scheme in the light of experience gained, with the result that it is expected that the Calcutta plan would be lighter on the exchequer and at the same time more [illegible]ient. Even the comparative small[illegible] City of Delhi has launched a milk [illegible] emulating the [illegible] of the [illegible] cities.

[illegible]ing up a similar sche[illegible] City has been examin[illegible] of times. Most recently Government constituted an Expert Committee to go into the question of Madras City Milk Supply. Amongst other recommendations made by the Chairman Dr. A. Lakshmanaswami Mudaliar in his report is one for the immediate appointment of a Milk Commissioner in order to work out a City Milk Scheme on the same lines as the Bombay and Calcutta schemes.

The problem of the producers in the City can never be expected to find a solution till a milk plan is adopted. Organization with reference to city production has been attempted by the institution of co-operative bodies. Invariably the City Milk Supply Societies depend on the contracts for supply of milk to the City Hospitals. If for any reason the Hospital supplies are lost to the Co-operative Union it is almost certain that the City Milk Supply Societies will all have to be wound up.

Rural sources

In no urban area in the State is the cattle population within it, sufficient to meet the entire demands of the urban area. Naturally the defect in the supply position has to be met by receipt of milk from suburban villages that lie within transportable distances. The Village Milk Supply has its own difficulty for example, the average village production is only about 60 lb. The difficulty involved in collecting these small quantities of milk from scattered homesteads in several villages and transporting it to urban areas for distribution is great and particularly so because milk is a highly perishable commodity.

The obvious answer to these difficulties would be the starting of large scale dairy farms from which bulk supplies should be tapped. Unfortunately dairying has never been a remunerative industry. Several factors constitute to keep the large scale investor out of this industry, the main reason being that the quality of cattle stock itself

is too poor to be economical. Again the price of milk itself is relatively high when compared to the low purchasing power of the population which forces the organization to keep margins of profit low. To these the risk of losing capital from disease and death of animals in an additional bogey. Under such conditions therefore the task of tapping, collecting, and transporting the milk produced in the villages, however difficult, has necessarily to be undertaken.

It has been found from practical experience that co-operative organization offers the best solution for tapping rural supplies. This mode of organization ensures a fair return to the producer by reducing the number of intermediaries in the trade and also assures the consumer a steady supply at reasonable cost. The organization relieves the producer of the task of finding a suitable intermediary and leaves him sufficient time and inducement to concentrate on increased production. The co-operatives themselves are more amenable to direct Government control than any other type of organization. In this State the work of organization is nearly complete. Almost all the major panchayats and all the municipalities are served with milk co-operatives.

The Problem of quality control and the remedy

The greatest difficulty that has been facing the working of these organizations is the cut-throat competition that exists in the trade. Widespread adulteration of milk is more a rule than an exception. Though legislation for controlling unclean and impure milk from finding a market is in existence, yet effective administration of these acts has not been possible. Even in the larger municipalities few or no samples are taken for analysis. The conditions are so bad in many places that the consumer who is particular about the genuineness of his supply is forced to keep his own cow. The co-operatives themselves despite all controls and checks, are still not far being without blemish. The difficulty about co-operatives is that they cannot sell milk on credit. Most of the middle and lower middle class are particularly concerned with the credit facilities offered and cheapness of the commodity. Quality is a subsidiary consideration.

Apart from the dangerous effects on health of the populace which results from consumption of unhygienic milk, the effects on nutrition which results from scarcity of supplies, the malpractices which are so prevalent in the trade in the face of legislation would have severe moral repercussions on the sanctity of laws. Under existing conditions it would require an army of staff to make legislation effective. The existing checking system in the State itself has its limitations; for example 'A' class municipalities with a population of 5 lakhs can send only 4 samples per month of food materials for analysis. Of these 4, the number of milk samples that are sent is not known. A limitation has to be made because the chemical analyst's laboratory in the city can only take up a limited number of samples for analysis. Many of the major municipalities have recommended the setting up of laboratories at the rate of one per district. Even if this were done there would still have to be limitations on the number of samples.

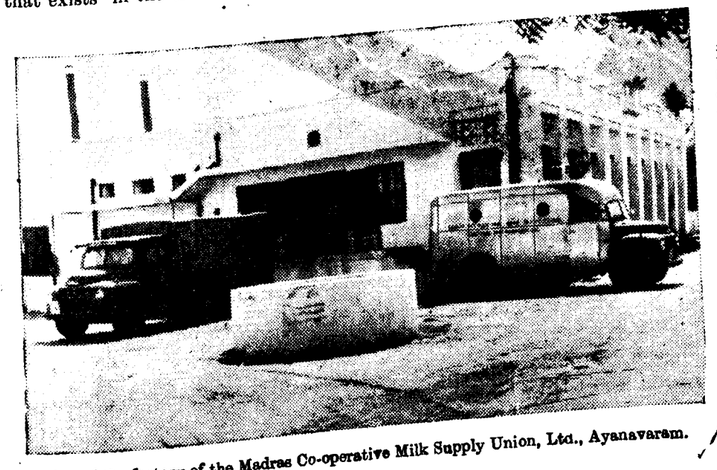
To be effective, therefore, the answer to the problem of quality control is obviously internal. It should be made obligatory on the part of institutions, agents or bodies to have a tight internal check on the quality of milk. The administrators of the acts should be left only with the task of conducting super checks. In other words the trade in any particular urban area has to be forced to organize itself, if quality is to be effectively controlled. The individual tradesmen and vendors now operating independently have to take their supplies from a recognized source. The best way to introduce this measure is to prevent the sale of milk other than through organized institutions.

After the first stage of organization the trade channel is bound to crystallize and settle down to specific institutions. It has been discussed in the preceding paragraphs that institutions of co-operative nature offer the best means of tapping rural sources and that the urban sources of production have necessarily to be shifted to convenient areas suitable for rehabilitation of the trade.

Increasing output

There are only two ways of increasing output: (1) Increasing stock and (2) increasing the per capita yield of cows. It will be easy to increase the stock by widening the area of operation and by a planned programme for issue of loans for purchasing milch cattle. The co-operative organization also offers an effective means for the transaction of loans. In this State, apart from Government providing an annual sum of 12½ lakhs for loans to co-operative milk supply organizations, many Central Banks also issue loans to milk co-operatives. In addition, institutions having their own financial resources utilize them for similar objects.

The question of increasing the average per capita yield of cows is a



A view of the factory of the Madras Co-operative Milk Supply Union, Ltd., Ayanavaram.

long-term measure which would have telling effects ultimately on the nation's economy. A systematic breeding programme backed by scientific feeding methods is the surest way of improving the stock. The industry itself depends entirely on the quality of livestock. To facilitate an effective breeding and feeding programme it is very necessary to have organizations through which such programmes could be implemented.

In the case of urban areas it has been accepted by the Indian Council of Agricultural Research that a programme of cross-breeding is the easiest and best method to improve the stock. In the suburban village, similarly a clear-cut policy is needed. It may perhaps be interesting to note, that the so called Dairy Animals in the vil'ages are almost exclusively buffaloes. The danger of cross-breeding the village stock and thereby effecting a deterioration in the quality of work animals is eliminated, if the breeding programme for villages is centred round improvement of buffaloes. The co-operative organizations in the villages, could discourage keeping of cows. Buffaloes in the villages could easily be graded up with murrah bulls. It has been estimated that a systematic programme of breeding and Animal Husbandry would be able to double production within the space of five year.

Cheapening costs

Organized handling of milk by itself will reduce the cost to the customer because it will remove the intermediaries in the trade. At the producers' end it will effect a saving resulting from the assured and steady market. The producer will be rid of the trouble of being a bill collector and a retailer and will consequently have more time to concentrate on the problem of increasing production. Increased turnover, as in any other trade, is bound to reduce costs.

The inst[illegible] of milk processing [illegible]nery wi[illegible] [illegible] [illegible] [

Roads in Coimbatore District

By SRI K. K. NAMBIAR, Chief Engineer (Highways)

Coimbatore District consists of ten taluks comprised in two Divisions as detailed below :—

Coimbatore Division—

Coimbatore, Pollachi Udamalpet, Palladam and Avanashi taluks.

Erode Division—

Dharapuram, Erode, Bhavani, Gobichettipalayam and Kollegal taluks.

Coimbatore district is one of the centrally situated districts of the Madras State. The area is 7,100 square miles. It is bound on the north by Mysore State, the River Cauvery and Salem district, on the east by Salem and Tiruchirappalli districts, on the south by Madurai district and the hills of the United States of Travancore and Cochin and on the west by Malabar and the Nilgiris districts.

Though some parts of the district in the south-west and north abound in mountainous terrain covered with forests and thick jungles, yet the extent may be considered to be a fairly flat plateau gradually rising from the south and east, the base of the Nilgiris and Palghat ranges, from which they rise abruptly to a height of several thousands of feet.

The tributaries of the Cauvery River, the Bhavani, the Noyyal, and the Amaravathi run for the most part in this district and join the parent river at the eastern boundary. The waters of these rivers especially those of the Amaravathi and the Bhavani are being used to irrigate several thousands of acres in the Coimbatore district. The new schemes of constructing dams across them in Udamalpet and Gobichettipalayam taluks (via) the Amaravathi and the Lower Bhavani Projects will on completion convert the portion of this district into a self-sufficient one in food production.

Sea-Wall of the Western Ghats

The Western Ghats, lying to the west of the district form a gigantic and continuous sea-wall. They, therefore, intercept the South-West Monsoon clouds and thus make the inland regions of the whole of Pollachi, Udamalpet and Dharapuram taluks and the southern part of the Palladam taluk peculiarly liable to droughts and famines at frequent intervals. The roads formed under the famine relief programmes in recent years to the extent of 183 miles are sufficient evidence in this connection and they form the subject of a separate paragraph of this report.

There is one exception, however, in the case of Coimbatore taluk which receives rain from the South-West Monsoon through the Palghat gap, in addition to the usual quota of the North-East Monsoon mentioned below. The rainfall is from 30 to 50 inches per year and covers the period from October to December. The Eastern Ghats run from east to west especially through the Kollegal and Gobichettipalayam taluks and meet the Western Ghats forming a knot or group of mountains and are not so very high as the Western Ghats and as such the North-East Monsoon clouds sweep inland more easily, making these northern and eastern taluks more fertile densely populated, of course, with the exception of the last regions covered by the Forest Clad Hills themselves, where the population is

Sri R. P. Sethu Pillai, Head of the Tamil Department, University of Madras, who has been awarded the Government of India money prize in recognition of his book 'Tamil Inbam' was honoured at a public function held at Annamalaimanram. Sri K. Kamaraj Nadar, Chief Minister, presided over the function and gave away the Pattayam (Medal) while Mr. M. A. Muthiah Chettiar presented the PONNADAI (Golden Shawl).

The surface of the district is generally uneven and hence the roads in most cases confirm to the lie of the natural ground, without either high embankments or deep cuttings to form easy gradients. There are, besides, many storm water streams running across the roads without bridges and in some cases even without road dams. The improvements in this direction form a taxing problem to all Engineers in Highways construction in this district, in spite of several new schemes gradually taken up every year as far as funds permit.

Population.

The population of the district is 3,293,204 as per the Census of 1951 as against 2,809,648 according to the 1941 Census. The population is the lowest in Kollegal taluk, viz., 138,908 and highest in Coimbatore taluk, viz., 562,522. Twenty per cent of the population of the district live in towns and 80 per cent in rural parts. The taluk-wise figures of the population, area, length of roads, etc., are furnished hereunder for easy comparison :—

Taluk.	*Total population as per census.*	*Area in square miles.*	*Length of road in miles.*	*Area served per mile of road.*	*Population per mile of road.*
Coimbatore	562,522	528	345	1·5	1,630
Pollachi	384,677	709	346	2·0	1,112
Udamalpet	190,442	555	180	3·1	1,068
Palladam	351,734	585	358	1·6	982
Avanashi	272,536	493	308	1·6	885
Dharapuram	323,307	854	728	1·2	444
Erode	439,641	599	571	1·1	770
Bhavani	235,170	572	247	2·3	952
Gopichettipalayam	394,267	1,129	355	3·5	1,111
Kollegal	138,908	1,076	179	6·0	776
	3,293,204	7,100	3,617		

A group of journalists from North India recently visited development projects in South India. The Picture shows the journalists over Palar, the first pre-stressed concrete bridge to be constructed in India.

History of Roads.

The first of the roads formed historically can be said to be the Coimbatore-Chamarajanagar road, via Satyamangalam, Dhimbam and Hassanur situated in the district. It is one of the roads partly constructed and used by Tippu Sultan of Mysore in his conquest of the Southern Tamil districts. The Kollegal-Hassanur road branching from mile 62/1 of the former road and passing through the forest region from mile 15/0 to 48/7 was originally formed and maintained by the Forest Department.

It was taken over by the District Board in the years 1932 and 1935 and improved and maintained as all British route to Kollegal from Coimbatore, as Kollegal is an outlying taluk of the Coimbatore district not easily accessible to the District Officers till then, except through the Mysore State Railways and roads paying tolls each time. This road forms a very useful route for the transport of silk from Kollegal and forest produce from mountains of the Kollegal taluk to the rest of this district.

The road from Tiruchirappalli to Coimbatore, via., Karur, Erode, Kangayam and Avanashi is perphaps the oldest one known and it connected the two famous kingdoms, the Cheran and Chozhan as is seen from the poems and travels of Sundarar, Appar and Thirugnanasambandar, the most revered of the Tamil saints. The road thus formed the main route used by pilgrims to the several temples enroute. The link from Coimbatore to Kangayam now forming the direct and shortest route to the Tiruchirappalli district should have been a later development due to commercial and industrial needs as also the several major district roads of the present post-war classification all converging towards Coimbatore which abounds in cotton mills, not to speak of several others situated in taluk towns at their other ends.

The Madras-Kozhikode road, via Salem and Bhavani must have been developed by the British Government into a trunk road of strategic and military importance presumably by connecting the broken links of several inter-district roads then in existence enroute.

Influence of War.

The availability of cement-making materials like chalks, lime-stone, clay,

etc., in abundance in and around Madukkarai and the necessity of their transport from the several quarries and their transport afterwards as a finished produce to the several markets, not connected by rail should have also largely contributed to the improvement of the several roads to their present standards. Further more the World War II which was about to convert the South India, especially the Coimbatore district into a base for defensive and offensive operations (though fortunately the district escaped from being actually used as such due to the success of allies in other places) did contribute largely to the development of the communication system of the district.

There are no canals in the district to aid transport. There are railways running through all taluks. However roads are the main dependable means of transport in these taluks.

A statistical adequacy statement is given below :—

—	*Areas of the division in square miles.*	*Length of roads.*	*Length per square miles of area.*	*Area served per mile of road.*	*Population per mile of road.*
Roads ..	7,100	3,617	0·51	1·9 square miles.	911
Railway ..	..	296	0·07	66·6	30,852

Need for More Roads.

About 960 villages and towns in these taluks have roads connecting villages or groups of villages with each other, and with the nearest district roads, main highways (Provincial or National) and Railways. They mainly form tracks well planned and maintained, as unit of a designed and regulated road system. The existing rural roads are of course not adequate to serve the needs of the village population. More length of roads is required and Government have already taken steps in this direction. The future development of road has been designed taking the geographical, agricultural and population conditions and agricultural areas, non-agricultural areas, large villages, towns and markets and the future agricultural and industrial developments of the locality in the post-war period.

The 15-Year Plan, now commonly known as the Nagpur Plan for Road Development, has been prepared for several States for coo-rdinated and planned economy and development of the Indian roads. As far as this State is concerned, the comprehensive plan envisages to construct 22,000 miles of village roads, the bulk of which are to be all weather roads to hamlets of villages with less than say 500 people for which merely fair weather roads can be afforded.

The entire 15-Year Scheme of Road Development in Madras State aims at providing every village a road. According to this no village will be more than five miles from the main road, after the execution of the scheme. The plan is proposed to be taken up in three district phases of which the First Five-Year Plan ending 1951–52 itself accounts for the development of 305 miles of village roads at a cost of Rs. 9·15 lakhs, for the ten taluks of this district. The taluk-war development of roads is as follows :—

	M.	F.
Coimbatore taluk ..	11	0
Pollachi taluk	31	0
Udamalpet taluk ..	26	0
Avanashi taluk	23	0
Palladam taluk	42	0
District board	12	0
Erode taluk	25	1
Kollegal	42	6
Bhavani	22	1
Gobichettipalayam ..	45	6
Dharapuram	15	6
Variations	8	4

Besides these, more rural roads will be considered in the remaining two periods of the comprehensive plan for Post-War Road Development, when these plans are executed, the facilities for the villages would have fully reached the maximum. About 909 miles of roads have been formed in the area of this district since 1937 both under Famine Relief Schemes and Village Improvement Schemes.

Need for Better Communications.—The Southern Railway had already laid lines connecting most of the important places of pilgrimage and business of any consequence. The other places not connected by rail are connected by roads. In fact, road development in the older days appears to have been made only according to the needs and intensity of pilgrim traffic the villagers having then been self-sufficient units in the matter of food needs. Sale of rare commodities was effected through travelling merchants who moved from one centre to another and from one market place to another with their merchandise. This fact is in evidence at the present time also. Now, the demand for pilgrim roads is only local and of secondary importance while the present cry is for better and improved dustless surfaces which can stand numerous bus, lorry and motor traffic.

Forests.—From the classification of the lands in this district it is seen that the area of the extent of forests is larger than that of other extents. Improvements have already been made in the forest areas for transport of forest produce by formation and maintenance of roads by the Forest Department itself with the exception of the roads taken over by the Highways Department and District Board. Motor lorries play an important part in transport. It will not be long before any defects existing in the present system of communications will be completely wiped out as and when improved surfaces suitable to the traffic are completed.

Hills.—The hills in the district assume no importance as health and summer resorts. Most of them are dismembered hills of the chain of mountain known as Eastern Ghats. They are mostly forest clad and as forests, they are yielding revenue to the Government. Kollegal taluk which is separated from the rest of district by mountains is therefore an outlying taluk of the district. Some parts are malarial too. The new road formed and improved known as Kollegal-Hassanur road, taking off from Coimbatore-Hassanur road now affords direct access to the area.

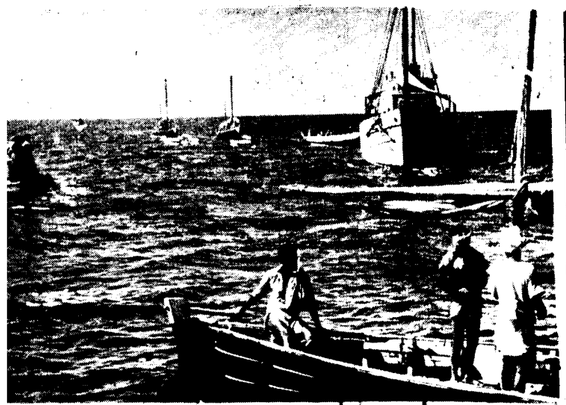
Soils.—The soil is generally gravel or admixture of Kunker gravel : 1,457 miles of roads are earthern roads treated with gravel or maintained with natural soils.

Bridges and culverts.—The river Noyyal runs in Coimbatore and Palladam taluks and river Amaravathi runs in Dharapuram taluk (bordering the Udamalpet taluk). The river Allayar runs across Udamalpet and Pollachi taluks.

MORE MILK DAY 16A

More Milk Day was celebrated throughout Madras State on 14th April 1955.

Pictures show : (1) Shri Sri Prakasa, Governor distributing milk to children of Raj Bhavan School, (2) Sri K. Kamaraj Nadar, Chief Minister and Sri C. Subramaniam, Minister for Finance, at the Cattle Show organised at the S.I.A.A. Grounds, (3) and (4) The Chief Minister and the Finance Minister at the exhibition of milk and milk products organised on that day, (5) The Chief Minister speaking at the public function held in the evening and (6) Sri A. B. Shetty, Minister for Health, inspecting some of the exhibits.



16 B

16 C

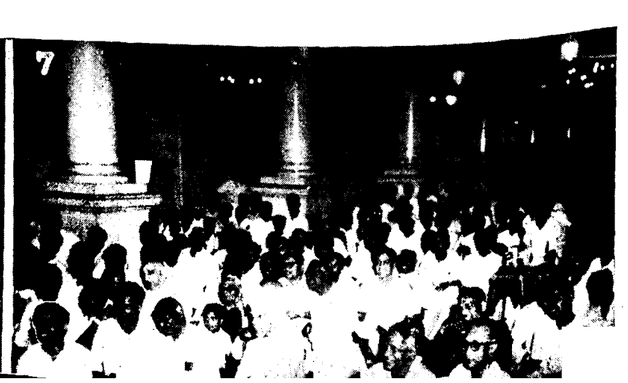
PEARL FISHERIES

The Pearl Fisheries Operations off Tuticorin was inaugurated on 19th March 1955 by Sri M. Bhaktavatsalam, Minister for Agriculture (*top centre*). Various stages of Pearl Diving Operations are seen in the pictures on the *left and right*. Oysters caught on each day are divided into three shares, one-third of which goes to the divers and the remaining two-thirds to the Government. The Government share is sold in public auction (*bottom*). One of the oldest of divers, Arokyam Fernando (75) is holding his share of Oysters (*cut out*).

16 D

LEGISLATORS' HOSTEL DAY

Sports and entertainments were a feature of this year's Legislators' Hostel Day Celebrations held on 25th March 1955, at Government House Estate. "Trial of Strength" is a handy expression for news-writers for describing various situations in political life, be they enacted in open arenas or inside the Assembly Halls. But here is "Trial of Strength" in the literal sense; (1) Smile of victory on the face of the Chief Minister, (2) Grim determination is evident on the face of Sri S. S. Ramaswami Padayachi, Minister for Local Administration, (3) He faces the situation with supreme confidence—Speaker Sri J. Sivashanmugam Pillai, (4) A "throw-back" to School days, (5) Histrionic talents is no one's preserve—a legislator trying his hand at that ancient folk art—dummy horse show, (6) "A King who reigned 5,000 years ago" is visiting the modern world, (7) And they are pleased.



HIGHWAYS

Traffic.—As rail connection is poor, volume of lorry and bus traffic is greater than bullock and cart traffic. Buses ply on all important roads, and on many village roads too. The period for peak traffic occurs in the month of April in Erode Division and in September or October in Coimbatore Division, when most of the agricultural produce is transferred to the marketing centres. The average traffic intensity on roads comes about 2,000 to 2,500 tons per day of 24 hours on the main roads.

Road Materials.—There are large number of quarries in the district yielding hard granite and kunker metal.

Labour.—There is no dearth of labour for road works except during harvest season.

Water for Consolidation Facilities.—The rainy season occurs in October and November. There has been a continued failure of rains in the area. There are 17 lorries and 30 power rollers which are used for watering and consolidation. Average length of spreading per day comes to 1 to 1½ furlongs. The contractors generally bring water from neighbouring wells and streams.

Road Mileage.

	MILES.
Government Roads and District Board Roads.	3,617

Government Roads.

	Expenditure on maintenance.	*Average cost per mile.*
1950–51 ..	27,48,636	2,678
1951–52 ..	29,37,462	2,863
1952–53 ..	32,36,314	3,154

District Board Roads.

1950–51 ..	13,78,401	519
1951–52 ..	15,75,928	593
1952–53 ..	16,91,668	636

Gang Mazdoor System.—This system is in vogue in all important sections of the roads. Each gang consists of an average of three to five coolies and it attends to repair works throughout the year.

Buildings.—There are two Government owned Travellers' Bungalows maintained by Highways Department, one at Attakatti and the other at Manupatti. There are 27 District Board Bungalows and 31 Chatrams maintained fairly well. There are other Travellers' Bungalows at Mettupalayam, Pollachi, Udamalpet, Valparai, Tirupur, Coimbatore, Erode, and Dharapuram maintained by the Municipalities and P.W.D.

Education.—There are 24 District Board high schools, five middle schools and 1,177 District Board elementary schools in the district.

Medical.—There are 44 District Board dispensaries.

Avenues.—The total number of trees on Government roads and District Board roads is follows :—

Government roads ..	48,451
District Board roads ..	28,628

Nurseries have been opened in all compounds of Travellers' Bungalows and important centres and action is being taken to plant more numbers. As water facilities are inadequate in most parts, much headway could not be made in this direction.

Five-Year Plan of the Post-War Road Development Programme. Coimbatore North Division.

The following provisions have been included in the recast Five-Year Plan for Post-War Road Development (P.W.R.D.) for improving the roads :—

1. Metalling the road from 24/0 to 34/3 of Kollegal-Chellampalayam road —Rs. 4 lakhs.

2. Constructing bridges at mile 14/2, 14/7, 21/5 of Kollegal-Chellampalayam road—Rs. 7 lakhs.

The following improvements have already been effected from the provisions under Five-Year Plan for Post-War Road Development :—

(Actual cost)

1. Metalling Kollegal-Ramapuram road, mile 20/0 to 22/2—Rs. 885.

2. Improvements to dips, removing rock out crops widening, etc., of the mile 15–24 of Kollegal-Chellampalayam road—Rs. 12,726.

3. Improvements to dips, removing rock out crops widening, etc., mile 24–44 of Kollegal-Chellampalayam road—Rs. 3,867.

The following improvements have been carried out from the provisions under Five-Year Plan of Post-War Road Development :—

1. Shelcreting Brouch road.
2. Shelcreting Erskine road.

3. Widening and constructing revetments in M. 31/0 to 48/7 of Kollegal-Hassanur road.

4. Black-topping of roads about Perundurai Sanatorium.

5. Improvements to dips at M. 4/7 and 10/7 of Dharapuram-Pollachi road.

6. Widening Chinna Dharapuram-Pallapatti road.

7. Improvements to dip at M. 7/1 of Erode-Chennimalai road.

The following bridges and culverts have been constructed under the Five-Year-Plan of Post-War Road Development :—

1. Constructing a bridge in M. 49/6 of Coimbatore-Hassanur road.

2. Reconstructing the culvert in M. 7/6 of Kollegal-Sivasamudram road.

3. Constructing causeways in M. 0/5, 3/4, 5, 4/6, 6/5 and 13/8 of Sathy-Attani road.

4. Constructing culverts in M. 6/5 and 10/5 of Bhavani-Chellampalayam road.

5. Constructing causeways at M. 0/8 of Periakoduveri to Kembanaickenpalayam.

6. Constructing causeways in M. 10/1 and 11/4 of Dharapuram-road.

7. Constructing a causeway at M. 15/7 of Dharapuram-Poolawadi Pollachi road.

8. Constructing minor bridges at M. 6/1, 8/6, 10/6 and 14/3 of Vellodu to Pasur Railway station.

9. Constructing a causeway at M. 4/6 and 7/6 of Puliambatti-Nambiyur road.

10. Constructing a causeway at M. 8/6 of Erode-Chennimalai road.

11. Constructing causeways at M. 7/6 and 10/2 of Hariappampalayam-Puliambatti road.

12. Constructing a causeway at M. 2/1 of Arachalur-Vellodu road.

13. Constructing a causeway in M. 9/3 of Kangayam-Muthur road.

The following roads have been metalled under the Five-Year Plan of Post-War Road Development :—

1. Kollegal-Kamapuram road M. 20/0 to 22/2.

2. Perundurai-Kavundapadi road M. 0/0 to 10/7.

3. Kundadam-Ponnapuram road, M. 0/0 to 15/2.

4. Vellodu to Pasur Railway station, M. 0/0 to 16/0.

5. Mile 16/1 of Erode-Kangayam road, Unjalur Railway station, M. 0/0 to 14/7.

6. Perundurai Railway station to Nasianur, M. 0/0 to 7/0.

7. Kolathurpalayam-Vijayamangalam road, M. 0/0 to 6/3.

8. Puliambatti to M. 8/3 of Sathyamangalam-Mettupalayam road, M. 0/0 to 7/0.

9. Udhiyur-Dasanaickenpatti road, M. 0/0 to 11/1.

10. Hanur-Lokkanhalli road, M. 0/0 to 5/7.

11. Kavundapadi-Getticheyur road, M. 0/0 to 15/2.

12. Andhiyur-Ammapet road to Guruvareddiyur, M. 0/0 to 3/4.

Apart from the above, about 37 roads have been formed under the Five-Year Plan of Post-War Road Development.

Coimbatore South Division.

The Post-War Road Development programme in respect of Coimbatore South Division is given below :—

Five-Year Plan of Post-War Road Development (1947–1952).

Group I Roads (*P.H. and M.D.R.*)

whole District cost in lakhs :

1. Cement concrete ..	16·42
2. Black-topping	2·60
3. New metalling	2·14
4. Construction of minor bridges and culverts.	8·42
5. Widening	1·77
6. War arrear renewals ..	3·77
7. Formation	0·52
8. Major bridges	2·25
	37·49

Group II Roads :

1. New metalling of O.D.R.	3·7
2. Minor bridges and culverts.	6·4
3. New formation of O.D.R.	0·59
4. Widening on O.D.Rs. ..	0·01
5. New metalling V.R.S. ..	3·09
6. Minor bridges and culverts on V.R.	2·65
7. New formation on V.R.	9·15
8. Major bridges on O.D.R.	0·55
9. Survey charges	0·72
	26·50

(*Continued from page* 7)

Similarly in respect of quality, our production looses its market to foreign imports, even when they are scarce and more highly priced. Generally speaking our manufacturers lack long range policies, on which alone they can win new and large markets.

The Heart of prosperity—Village

My approach to the subject of Planned Industry has been oblique, for the reason that there is enough said and little done from the obvious approach. The First Five-Year Plan has provided many of the essentials for large scale industrialization. Agriculture, the occupation of the largest sector is in good heart ; two corporations for financing large and small industries have come into existence, import of capital goods is easy, trained personnel is increasingly available, while coal, steel and electricity are not in short supply. All this will not avail, if demand for the new production is not organized by wise and wide salesmanship on one hand and by new and sustained measures to raise the standards of living on the other. Paradoxical, as it may appear, the future of industries in towns is in the prosperity of the people in villages. To the extent the conditions in village catch up with those in the towns, industrialization has infinite possibilities and inexhaustible returns.

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

Shri Sri Prakasa, Governor of Madras, placed a marble tablet in Memory of Sri Gopal Das, an ancestor of the Governor, at the Fort Museum, at Fort St. George in the presence of Sri C. Rajagopalachari and a few leading citizens of Madras, on Tamil New Year's Day, April 14, 1955.

Milk and Public Health

By Dr. V. R. RAJAGOPALAN, Director of Animal Husbandry, Madras

The milk problem is the most complex one in public sanitation. Milk is an essential article of diet during infancy and childhood. It is a perfect food for infants and invalids, but it serves as a good media for bacteria to grow luxuriantly owing to climatic influences, peculiar customs and habits of the people, illiteracy, ignorance of the farmers and the ordinary milk vendors and lack of proper sanitary and legislative control.

Most of the cattle sheds are kept in a very insanitary state and in these stalls milk is liable to be contaminated from a variety of sources. The vessels in which milk is drawn are by no means kept scrupulously clean. It is a rare thing to see the udder of the animals or the hands of the milkers being thoroughly washed before milking. It is a common sight to see the milking operations being done in the busy and dusty streets in front of houses.

Adulteration

Milk is carried by milk vendors in insanitary earthen vessels and measured in tin lotas of different capacities, which are never cleaned. Adulteration has become a routine thing in this class. In some places milk is sold in shops facing the busy streets and exposed to the dirt and dust of the busy traffic, and handled in a primative manner.

Many of the so-called dairies are not worth that name and milk from a majority of these concerns is sold in special bottles or in sealed cans and in spite of these precautions, the milk is far from genuine and clean. Some of these dairymen do not even own cows and purchase most of the milk and thus act only as middlemen.

Owing to the above causes, a large number of diseases are liable to be spread to human beings through milk that is contaminated or infected. They are of animal and human origin.

Shri Sri PRAKASA, Governor of Madras, entertained to tea the Members of the Legislature at Raj Bhavan on 26th March 1955.

Diseases of human origin like human Tuberculosis, Cholera, Typhoid or Enteric fever, Paratyphoid, Diptheria, Septic sore throat, Scarlet fever are also transmitted through milk by infected persons, insanitary vessels and utensils, and hygenic and unclean ways in handling dairy cows and transport of milk.

Bovine Tuberculosis

Bovine tuberculosis is particularly common among children, transmitted by consumption of milk from infected cows. Even the milk from one infected cow might contaminate the entire milk supply by mixing. The Bovine Tubercule bacilli are entirely responsible for the non-pulmonary infection in man and the infection confines mostly to the alimentary tract, chiefly affecting children up to 5 years of age.

Other diseases like Foot and Mouth, Anthrax, Rabies, Cow-pax, Undulant fever, Actinomycosis, and Digestive disturbances are of animal origin and are said to be transmitted to man through milk.

Milk by subjecting to pasteurization eliminates the possibility of transmission of these diseases by destroying all the pathogenic organisms in milk. Apart from this, clean, well ventilated stalls, properly constructed milk houses, clean and healthy cows, clean milkmen and milk handlers, clean milkpails and dairy utensils, clean water-supply on the farms, careful handling after milking, proper manure disposal, control of flies all play a very important role in supply of pure and clean milk.

All-India Jawahar Shield for Tree-Planting

In connection with the Vanamahotsava Campaign, the Government of India have instituted prizes in order to encourage planting of trees and their after-care. According to this scheme, four All-India Shields and a number of State Shields will be awarded every year. One of the All-India Shields, viz., the Jawahar Shield, will be awarded to the village in India which has put in the best effort in tree-planting and their after-care. The Government of India have decided to award the All-India Jawahar Shield for 1952 to Ullal village in Mangalore taluk of the South Kanara district which planted 73,220 trees out of which 71,405 survived. The Shield will be presented to a representative of this Government at a function to be held by the Government of India, Ministry of Agriculture, at Dehra Dun on the 31st instant.

It will be recalled that for the previous year the above (revolving) shield was won by Periyaram village of Chirakkal taluk of Malabar district for its performance in tree-planting and their after-care during the second Vana Mahotsava held in 1951.

TAMIL ENCYCLOPÆDIA: Sri C. Subramaniam, Minister for Finance, speaking on the occasion of releasing of the Second Volume of the Tamil Encyclopædia at the University Departmental Buildings, Chepauk, on 14th April 1955.

Sri T. P. Meenakshisundaram Pillai speaking on the occasion of the release of the Second Volume of the Tamil Encyclopædia at the University Departmental Building on 14th April 1955.

Impressions of a Tour of South India

By A PARTY OF PRESSMEN

SHRI RAJANI KANTH MISRA of "Swathantra Bharath", Lucknow.

This is my second visit to South India. The first I undertook about three years back. My impression has been that the historians have not done enough justice to the history of South India.

When we read the history of India, we come across the four principal dynasties of South India, that is, the Pandyas, Cheras, Cholas and the Chalukyas. They are supposed to have been very powerful rulers and very powerful builders and the example of their work I saw during my visits to South India, when I went round the temples at Tiruchirappalli, the Rameswaram Temple, the Meenakshi Temple at Madurai, and then in Chingleput district the Thirukalikundram and Mahabalipuram temples. They are supposed to have beautiful carvings and beautiful architecture.

South—Its Civilization

I am of the opinion that if anyone wants to know something about the real history and the real civilization of India, he must come to South India. Without knowing South India, one cannot have a true picture of our country. But, when reading history, we find only a little, only a few passages about these principal dynasties. For example, take the case of the seventh century. In North India, we had a very powerful ruler, that is, Harsha.

It is said that Harsha invaded South India, but at the banks of Narmada, he was defeated by Pulikesi, the second of the Chalukya dynasty. But, after that, we get a very little account of the Chalukya dynasty and Pulikesi, the second.

What I feel is that historians and research scholars should pay greater attention to these problems and history should be rewritten so that the coming generations may get a fuller view of the history of South India. Unless we have a complete and fuller picture of our country and particularly of this portion, that is, the southern peninsula, we cannot see how civilized, how advanced we were in ancient days.

It has to be remembered that it was from Mahabalipuram that Indians started their migration to Java, Siam and other places and spread their culture. So, from all these points of view, it is necessary that history should be re-written. Unless we do it, the whole picture shall remain incomplete.

SRI SAT PAUL SAHNI, the Kashmir Representative of "The Times of India."

The South has always been at the lead over the north in matters of education and fine arts and should be a highly industrialized part of our country when the various development projects now awaiting completion in Madras State are completed.

The Institutions

The Madras Institute of Technology, the only one of its kind in India, has devoted itself to specialized training in Aeronautics, Electronics and Instrument Technology to science graduates. Highly useful and new work has been done which may give us at a low price a convenient glider and an auto-diesel conversion engine.

The B.C.G. Vaccine Production Centre is again the only one of sit kind and due to it the scourge of T.B. has been combated. The high

Shri Jatindra Mohan Mukherjee, Representative of "Amrita Bazaar Patrika" declared open a Community Recreation Centre at Poonjee village in Chingleput district when he visited certain development projects in Madras State, along with a group of Pressmen from the North.

standard of therapy that is maintained is commendable.

The Neiveli Lignite project which at present is in an advanced stage of experiment, when completed, should make the South Arcot area a very rich industrial belt. It would get cheap fuel, enough coal to smelt iron ore and be the basis for a big fertiliser plant. People, at great risk to themselves, are doing a fine job of opening up the bosom of the earth for the benefit of their country.

The two Central Research Institutes, one at Madras for leather and the other for electro-chemical research at Karaikudi have already done yeomen job in inculcating the spirit of research. The work in hand at present will be responsible for saving our country crores of rupees of foreign exchange and make us less dependent on others. Both have modern buildings, latest equipment and plenty of good talent.

The Kodaikanal Observatory is doing useful work in measuring the intensity of light and the temperature of the sun. The work in this Observatory, I must say, is unique and is used all over the world. I am told that they have ambitious plans to make it one of the biggest and most modern in the world.

What impressed me most was that most of the important instruments were made in their own workshop. A hurried visit to some of the projects and institutes can hardly give a real integrated picture, but impressions of useful and lasting work are enough to give us an idea about the glorious future of India.

As a North Indian, I take my hat off to the industrious people of the South. We should do good in taking a leaf-off.

SHRI DAVID COHEN of "The New Age", Delhi

The projects and the people

The big question I put to myself on this rapid but most interesting tour of some community projects, south of the Narmada river, the traditional dividing line between the North and South India, was: how are the people participating in these projects? What do the people get out of it? What do they think of it? Are they helping to change the pace of the villages in this beautiful part of our country?

We took lightning trips to three project areas, Hosangabad in Madhya Pradesh, Gandhigram near Madurai, and the Chingleput Development block near Madras. In both Hosangabad and Gandhigram, we saw new roads built by the villagers, freshly dug wells to give them badly needed water, training centres and a good deal of enthusiasm.

When we got down from our jeep at the little village of Mariyamakulam near Gandhigram, a number of village women gathered round us and I asked one of them, Muthu Pillay, the wife of a peasant, who owns an acre of land, what she got out of it. "It is beneficial to our village," she said, in halting Tamil. Angamma, the wife of a tenant cultivator owning three acres of land, said: "I have not been benefited in developing the village. We have no security to offer for loans."

And those two views, I thought, present in a nutshell the effects of the Community Project schemes. The village certainly gained something from the new wells, the new roads, the cleanliness and medical facilities provided by the project scheme. But the poorest sections of the people, the agricultural labourers and poor peasants, with hardly any security to offer for loans, appear to have been little benefited.

While motoring rapidly through the expanse of fields and villages, it struck me more than once that unless the necessary changes are made in land relations, unless the land goes to the tiller of the soil, our country cannot be made more beautiful and the life of our people radically uplifted. We can produce more but we still have not enough money to buy. Yet, I carried with me memories of the happy faces of the selfless workers of Gandhigram.

I find a new spirit of patriotism walking the land—a desire to build and to construct and to wipe away the stain of ancient years. I am sure this will be done by our people living south of the Narmada river. We have tasted the fruits of their labour—grapes and oranges, bananas, coffee and rice—and they are good.

SHRI JYOTHINDRA MOHAN MUKHERJEE of "The Amrita Bazaar Patrika", Calcutta.

The architecture

This is my second visit to the City of Madras. The City has entirely changed from what I saw

A Community Recreation Centre recently built at Sadras in Chingleput Community Development Block (Madras), recently visited by a party of journalists from North India.

in 1927 when I came here to report the proceedings of the Indian National Congress.

You have in this city a magnificent sea beach which people coming from other big cities of India envy. I had then to go away without seeing anything further south. I had eagerly longed to see the famous temples of South India ever since I had been reading of them in books and hearing of them from persons who had visited them.

In my early days, I read a book written by Mr. Harold, a former Editor of the "London Times". He was no friend of India. In the book, he wrote, that the Muslim architecture in the north was magnificent, but if one has to see the real magnificence of architecture, Harold wrote, one has to visit the Hindu temples in the South which are unparalleled anywhere in the world. I thought that the writer was exaggerating things. But, after my visit to Rameswaram, Madurai, Srirangam and other temples in the South, I am inclined to agree with the views of the British author.

I have come so far to see the buildings and the thrill which I felt when I visited the ancient temples, wondering about the skill and patience of the artists to execute them will be a deep and an unforgettable memory in my life.

SRI RAMANANDA SAGAR, Member of the Film Writers' Association, Bombay.

The people

I will take the human side first. It is universal. People in the south, I found, are as human or as inhuman as I have found in other places I have visited. Here are the people who love and eat, sing and dance and cry aloud with passion.

As I found here poverty-stricken people, dancing in festive moods and feasting, so did I see people worrying. They have human strength and human weaknesses, the same as anywhere else. Vices could retain themselves under the very shadows of holy Gopurams just as human character is visible in unknown hamlets.

At the sight of beauty, in the shape of a wonderful sun-rise, or a bountiful harvest, or a human figure, the Jats of the Punjab or the boatman of Kashmir would break into a romantic air in just the same manner as I found the fishermen at Dhanushkodi or the ryots near Gandhigram, or those Harijan girls near Kodaikanal, singing and dancing to the tunes of romantic songs, which like all romantic acts require no further explanation. Even a female social welfare officer of a big community project area was no exception.

Talent wasted

As usual, as we went round, occasionally I found talent being just wasted for want of some one to recognize it and push it to the top. I could not forget a young boy at Singalpatti who could be a real great painter if his sketches were an indication of his genius: also at the station of Karaikudi, a young lad who had a golden voice but who was wasting it in a rural tea-shop with just a few labourers around, who could not even recognize the artist who was so rapturously absorbed in his own music.

As far as the social aspect is concerned, I am sorry to say that tied down to an official whirlwind programme, I did not have any occasion to peep at the social life of the people. But one thing I have felt.

At the community project, a sort of mixed social life is being practised which may, I am afraid, take away the genuine tiller of the soil from his land. However, I am leaving a beautiful land of temples with many sweet memories, as sweet as the bunch of grapes offered by a sweet innocent labourer girl, Muthammal, at Kodaikanal, who earns only four annas a day, and for whom I have done nothing but wasted her time.

This, I take as the generosity of the South and I shall not undo this act by offering a formal thanks. I would rather take back the memory of the sweet generosity of the South.

[*Talk broadcast from the Madras Station of A.I.R. on 12th April 1955 by a party of Pressmen from Northern India, giving their impressions after the tour of the South—Courtesy, All-India Radio.*]

The needs of the rural children have long been overlooked, of course more schools are being opened to take care of their minds. But a little play too will certainly do them good. Hence under the Community Development programme playgrounds like these are being provided. The playground you see in the photo is one opened in a village in Chingleput District. More playgrounds like these will make their appearance in the [illegible] under the Development programme.

Second Half Decker Bus for City Transport

The Second Half Decker Bus christened 'Jaya' was put on the road on the Tamil New Year Day. This Half Decker Bus has a seating capacity of 62 persons and was built at a cost of Rs. 65,000. Due to the fact that this is built on an Underfloor Engined chassis it contains certain features which makes it different from the first Half Decker "Vijay" and similar to it in not allowing for any standing passengers. Because of the Underfloor engine and full forward control, the present one has a full front unlike Vijay and this feature has also enabled the Chromepet Workshop to fix the forward pair of upper tier of seats facing forward and giving good visibility alround. The portion in the rear at the entrance is meant to be completely reserved for the use of women so that they can have a certain amount of privacy.

There are also minor items like mirror hat-rack, etc., in this rear compartment. From this compartment, the passengers enter the centrally raised gangway and go out through the exit next to the driver. The seats are fixed in the same fashion as in the first Half Decker and have the same comforts. An attempt has been made to increase the ventilation and illumination inside the vehicle by improving the type of ventilators and the position of the lights for this purpose. The gangway, the seats, the entrance and the exit are all illumined by lamps placed at proper points.

The vehicle is 30′ long and 8′ broad. Total height of the vehicle comes to slightly more than 12′. The interior height in the Lady's compartment is 8′ 6″ and in the gangway 6′ 9″. The usual grab rails are provided with aluminium handles, this being an improvement from the first Half Decker. The travelling public are bound to notice the extra height which they have to climb in order to reach the

(*Continued on the page 26*)

This new half-decker "Jaya" was added to the City Transport on Tamil New Year Day.

Sri B. Parameswaran, Minister for Transport and Sri R. M. Sundaram, I.C.S., Secretary, Public Works Department, inspecting the new half-decker.

"Operation Lustre-Dip"

On the morning of the 19th March this year a large number of people had assembled in a decorated pandal in the Siluvathurai Pearl Fishery Camp, some two miles north of Tuticorin. They were people drawn from different parts of the country and there were also a few foreigners admidst them. Most of them were traders and businessmen; others were local citizens, Government Officials and some visitors. The occasion was the inauguration of the Pearl Fishery operation off Tuticorin, famous in history and renowned the world over.

World Pearl Markets anxious

As they sat there and witnessed the brief inaugural ceremony and listened to the speeches, the World Pearl Market was anxiously and intently looking forward to the outcome of the operations. In London's Hatton Garden, the world centre of the pearl market, experts were speculating on the size of the catch and its impact on world market. Hatton Garden was reported to be particularly pleased about this new source of raw pearls because of a decline in the numbers coming from the Persian Gulf in recent years.

Persian Gulf and the Gulf of Mannar were the most ancient suppliers of natural pearls in the world and according to Hatton Garden sources the coming from the Gulf of Mannar were equal in quality to those coming from any other region in the world.

As the world market thus watched with excited interest, the divers and their helpers supervised by the officials of the Fisheries Department set out to the sea to pluck out of the womb of the deep Gulf hundreds of oysters that may contain many a lustrous pearl, the most precious among the gems of the world!

The Diving

As the sun rises in the eastern horizon in Tuticorin the divers are already on their way to the diving spots. Three motor vessels of the Fisheries Department, the *Gouhar Khaleeli*, *the Tuticorin* and the *Calicut* lead the fleet of about hundred country crafts towed to the vessels and proceed to the "Pars" about 15 to 20 miles away from the shore. Two smaller vessels, the *Seascout* and the *Leverett* accompany the fleet.

The country crafts which carry divers numbering about a thousand are specially equipped for the purpose of diving. Each boat carries about ten divers and an equal number of helpers called "man-dogs."

As the fleet reaches the diving spot the boats are let loose and they distribute themselves over the area. The diving spot for each day is marked earlier by buoying coloured flags around the place and it is easy to start operations within the area.

The diving operations start at about 10 a.m. The divers here have not adopted any modern devices like diving suits or oxygen masks. They follow the centuries old naked diving to which they are accustomed.

"Man-dogs" get ready a long piece of strong rope, one end of which is tied to a heavy stone. The diver steps on the stone and he holds the rope between his toes and this helps him to reach the bottom at a depth of about 45–50 feet very quickly within about five seconds. As he reaches the bottom, he pulls once or twice at the rope which is a signal to the man-dog about that he has reached the bottom. The stone is immediately pulled up aboard.

The Collecting

As soon as the diver reaches the bottom he starts collecting as many oysters as he can reach while he can hold his breath and puts them in a small bag of closely woven net which is tied round his waist. Then he comes up and swims to the boat, where he empties his bag and takes rest for four or five minutes before going down again.

This goes on all over the spot from all the hundred boats for about four hours.

At the end of four hours, the leading parent vessel, the *Gouhar Khaleeli* sounds a siren signalling the closure of the operations for the day. Then the boats row back to their respective parent vessels and on board the day's catch of each diver is counted. One-third of the catch belongs to the diver and his share is put in a bag and sealed by the bag examiners of the Fisheries department. The Government share also is similarly put in a separate bag and sealed.

It is only after the whole business is over that the divers take their food; for food during or before diving considerably handicaps them. And when they actually take their food they do full justice to it fully satisfied that they have won it.

Then the boats are again towed on to the parent vessels and the fleet sails shoreward. The divers, after the day's hard work relax in their boats. Some of them get hold of some small baits and drop a line in the water and as they go they are rewarded by some good catches too. Hard sea-faring life has left its mark on their faces. Theirs is a life mostly spent in the waters, waging a grim battle against the might and depth of the ocean. Most of them are regular divers; they know the bottom of the sea as one knows the palms of his hands. They dive regularly for chanks, an important fishery of this place. It is only at long intervals they get the opportunity to dive for pearls. The latest pearl fishery takes place after an interval of nearly three decades.

While the main part of the fleet proceeds straight to the harbour, the smaller vessels *the Seascout* and *the Leverett* carrying the oyster bags and the divers heavily guarded by armed police proceed to the Siluvathurai camp shore.

They Share

At the Pearl Fishery Camp the divers sell their share of oysters in retail. On the first day each oyster fetched a

price of one to two rupees. Later on as the daily catch increased the price fell and five or six oysters could be had for a rupee.

The Government share of oysters are sold in public auction, in lots of thousand oysters. At the spacious Auction Pandal in the camp a large number of businessmen and traders enthusiastically bid for the oysters and the oysters bought at the auction are dumped in specially erected tubs for rotting. They are removed the next day and the pearls separated, sorted and graded.

The operations have been going on daily for several days now and are expected to be over by the end of April. Whether the expectation of Hatton Garden will be fulfilled or not, it is too early to predict.

(*Continued from page* 24)

seats from the road. This is occasioned by the fact that this is built on an Underfloored Chassis, the entire engine and transmission parts to be accommodated beneath the central gangway; The outside colour scheme adopted is the same as for the 1st Half Decker "Vijay" but the interior has been painted with larch green paints up to the waist rail and sea-green matt finish for the interior roof so that effect will be very restful at times of glare.

The skeleton structure of the body was fabricated out of Chrome Melybedinum sections pressed by Hindustan Aircraft, Ltd., Bangalore, and the entire coach work designed and constructed at the Government Transport Central Workshop, Chromepet. In passing, it may also be mentioned that the vehicle was commenced and completed in the current year Jaya. Last but not the least, continuing the status of Vijay being the 1st Half Decker vehicle in India, the present one is the second one to be constructed after that date.

ABHAYA NILAYAM: Sri K. Kamaraj, Chief Minister, opened the Reception Home for Women at 2, San Thome High Road on 14th April 1955.

BRITISH WEST INDIES DELEGATION IN THE CITY: A Trade-cum-Cultural Delegation from the British West Indies arrived in Madras on 15th April 1955 and later called on the Chief Minister Sri K. Kamaraj at the Secretariat.

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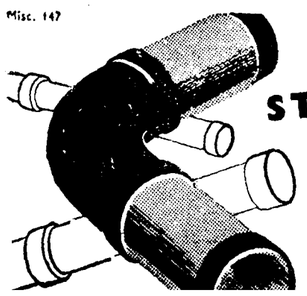

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All-India Farmers' Convention

An All-India Farmers' convention was held at Delhi recently along with the Golden Jubilee Celebration of the Indian Agricultural Research Institute. The Convention was a great success and the occasion was utilised for the formation of an All-India Farmers' Forum. The delegation from this State was headed by Sri R. V. Swaminathan, M.L.A.

The convention discussed various important issues like land ceilings, fall in prices and improvement of the lot of agriculturists. The Union Minister for Agriculture, Dr. P. R. Deshmukh expressed his earnest desire for improving the lot of the agriculturists all over the country.

Sri V. K. Ramaswamy Mudaliar, M.L.A., one of the members of the delegation also met Sri M. V. Krishnappa, Deputy Minister for Agriculture and had further discussion on issues related to the fall in price of paddy. Sri Mudaliar was assured that the Union Ministers were closely following the price situation and that they would do their best to prevent prices from crashing down to uneconomic levels.

Photograph of Madras delegates to the National Farmers' Convention convenedby the Government of India at New Delhi from 1st to 4th March 1955.

Food Adulteration offences

Food adulteration is a major offence. People who adulterate food-stuffs and make money out of it have warped minds. Usually those belonging to the lower income groups buy milk or ghee to be given to children, pregnant women or the sick. It is a sin to give adulterated milk to a child who is yet unaware of the greed enveloping men's minds. And yet people who indulge in this offence somehow manage to escape and pass off as honourable members of society. Below is the list of those who have been caught and punished in the month of January 1955.

Name of local body. (1)	*Name and address of the vendor.* (2)	*Designation of sample.* (3)	*Nature of percentage adulterated.* (4)	*Fine imposed.* (5) RS.	A.	P.
1. *North Arcot district*—						
Polur Panchayat—						
	1. Vellaikanni, Unnampet village.	Buffalo milk ..	17 per cent added water.	30	0	0
	2. Manonmani, Puthurampattu.	Do. ..	32 per cent added water.	60	0	0
2. *South Arcot district*—						
Tindivanam Municipality—						
	1. Chinnakuzhandai Ammal, Tindivanam.	Mixture of Cow and buffalo milk.	21 per cent added water.	30	0	0
3. *Coimbatore district*—						
Coimbatore Municipality—						
	1. Mariappan, Sommanur ..	Mixture of Cow and buffalo milk.	88 per cent deficiency in fat and 12 per cent added water.	30	0	0
Gopichettipalayam Municipality—						
	1. Ammasi Ammal, Kalingiam ..	Cow milk ..	16 per cent added water.	30	0	0
Dharapuram Municipality—						
	1. Shen Bah Sahib, 136, Cholakadai street, Dharapuram.	Pattani Dhall Flour.	50 per cent Lak Dhall.	30	0	0
	2. Seethalakshmi Ammal, Bhimarayar Agraharam, Dharapuram.	Cow milk ..	47 per cent added water.	30	0	0
	3. R. S. Sabapathi Chettiar, 95, Cholakadai street.	Coffee powder ..	30 per cent Wild date seeds.	30	0	0
Avanashi Panchayat—						
	1. Lakshmi, Avanashi	Buffalo milk ..	34 per cent added water.	40	0	0
Satyamangalam Panchayat—						
	1. Ramakkal, Sengaliappu Thottam.	Cow milk ..	17 per cend added water.	35	0	0
	2. Pattammal, Vadakupathy ..	Mixture of Cow and buffalo milk.	37 per cent added water.	70	0	0
	3. Ponnammal, Satyamangalam.	Buffalo milk ..	41 per cent added water.	80	0	0
	4. Veerammal, Periyakulam ..	Cow milk ..	44 per cent added water.	80	0	0

Name of local body. (1)	*Name and address of the vendor.* (2)	*Designation of sample.* (3)	*Nature of percentage adulterated.* (4)	*Fine imposed.* (5) RS.	A.	P.
3. *Coimbatore district*—cont.						
Satyamangalam Panchayat—*cont.*						
	5. Chinnakkal, Varadarajachettiar Thottam.	Buffalo milk ..	32 per cent added water.	60	0	0
	6. Sadayammal, Karatoor ..	Mixture of cow and buffalo milk.	28 per cent added water.	40	0	0
	7. Sadayammal, Karatoor ..	Do.	22 per cent added water.	60	0	0
	8. Karupayee, Baluchettiar Thottam.	Buffalo milk ..	21 per cent added water.	40	0	0
4. *Chingleput district*—						
Kancheepuram Municipality—						
	1. Sri Devarajan, A.-1., 4, Sakkalapalayam street,	Milk	20 per cent added water.	40	0	0
	Sri Venkatesan, A.-2.	Do.	Do.	10	0	0
	2. Mrs. Kamakshi Ammal, 5, Apparao Mudaliar street.	Buffalo milk ..	9 per cent added water.	30	0	0
	3. Sri V. Doraiswamy Chettiar ..	Ghee	90 per cent ..	50	0	0
	4. Sri Manicka Mudalaiar, A-1 ..	Cow and buffalo milk.	21 per cent added water.	40	0	0
	Sri Ganesan, A.-2, Vayyavoor village.	Do.	Do.	5	0	0
5. *South Kanara district*—						
Kasargod Panchayat—						
	1. Mrs. Ponnu, Kasaragod ..	Buffalo milk ..	32 per cent added water.	30	0	0
	2. Koggu Mullayya, Merchant, Kasaragod.	Ghee	96 per cent added other fat.	75	0	0
6. *Madurai district*—						
Madurai Municipality—						
	1. Narayana Chettiar, 39-A, Lakshmipuram, Cross street.	Ghee	92 per cent fat.	50	0	0
	2. Ramaswamy Iyer, 10, Lakshmipuram.	Cow milk ..	31 per cent added water.	35	0	0
	3. Ramamoorthy, Madichiam, Nadu street.	Do. ..	20 per cent added water.	30	0	0
Dindigul Municipality—						
	1. Ramaswamy	Cow milk ..	7 per cent added water.	30	0	0
	2. Veerabadran	Do.	14 per cent added water.	75	0	0
	3. Rakka Pillai	Do.	25 per cent added water.	80	0	0
Palni Municipality—						
	1. Karupana Gounder	Milk	32 per cent added water.	35	0	0
	2. Valli Ammal	Do.	24 per cent added water.	30	0	0
	3. Devathal	Do.	20 per cent added water.	35	0	0
	4. Vanjiammal	Do.	20 per cent added water.	30	0	0
	5. Kaliyammal	Do.	....	35	0	0
Periyakulam Municipality—						
	1. Perumal Naicker	Buffalo milk ..	17 per cent added water.	75	0	0
7. *Malabar district*—						
Kozhikode Municipality—						
	1. Kandoth Assu, A.-1, Kottarath, Mammu, A-2, Shop No. 7/295, Palayam.	Tea dust ..	50 per cent exhausted tea—	20	0	0
			A.-1. A-2 ..	40	0	0

Name of local body. (1)	Name and address of the vendor. (2)	Designation of sample. (3)	Nature of percentage adulterated. (4)	Fine imposed (5)
				RS. A. P
7. *Malabar district*—cont.				
Kozhikode Municipality—*cont.*				
	2. A. P. Balakrishnan, A.-1, K. V. Madhavan Nambiar, A.-2, Court Road.	Tea dust ..	40 per cent exhausted tea.	30 0 0 (each).
	3. Malliseri Appu	Toor Dhall ..	....	30 0 0
	4. V. Mammadkoyya, Grocery Shop, Meenchanda.	Ghee	69 per cent fat not derived from milk or cream.	75 0 0
	5. P. P. Karappaswami Chettiar.	Buffalo milk ..	17 per cent added water.	40 0 0
	6. Kalathingal Gopalan, Shop No. 9/656, Big Bazaar.	Tea dust ..	8 per cent sand, 30 per cent blackgram husk.	50 0 0 (Stock destroyed.)
	7. A. Kandappan Vydier ..	Butter	4 per cent excess water.	50 0 0
	8. K. C. Sankaran Menon ..	Coffee powder ..	30 per cent foreign adulteration.	40 0 0
8. *Nilgiris district*—				
Coonoor Municipality—				
	1. Kaliappan, milk man, Coonoor.	Cow milk ..	16 per cent added water.	55 0 0
9. *Salem district*—				
Rasipuram Municipality—				
	1. Papammal, Katruchampatty.	Cow and buffalo milk.	24 per cent added water.	30 0 0
10. *Tanjore district*—				
Tanjore Municipality—				
	1. Desikan Nattaru, Thenburambur village.	Cow milk ..	25 per cent added water.	50 0 0
	2. Swaminatha Chettiar, 2669, North Main street.	Gingelly oil ..	18 per cent arachis.	40 0 0
	3. Jeeva, Puliamaram Thoppu ..	Honey	29·9 per cent cane sugar.	50 0 0
	4. Kunju Malavarayar, Mariamman Koil.	Cow and buffalo milk.	21 per cent added water.	50 0 0
	5. Pathrapagu, Vathrar	Buffalo milk ..	10 per cent added water.	30 0 0
Nagapattinam Municipality—				
	1. Pakiriswamy, Naganathar West street.	Cow milk ..	22 per cent added water.	30 0 0
	2. M. Pakiriswamy Chettiar, A.-1, Neda East street, Thiruvengadam Chettiar, A.-2.	Mixed oil ..	45 per cent gingelly oil 55 per cent other oil.	30 0 0 (each).
	3. Angammal	Butter	21 per cent fat ..	50 0 0
	4. V. L. Rajalingam, Yadava Street.	Coffee powder ..	50 per cent wild date seed.	75 0 0
Tiruvarur Municipality—				
	1. Kosalai, East street, Pulivalam.	Buffalo milk ..	23 per cent added water.	30 0 0
	2. Nataraja Mudaliar, Tiruvarur.	Do. ..	22 per cent added water.	30 0 0
	3. M. Shanmugasundaram, Tiruvarur.	Do. ..	11 per cent added water.	30 0 0
Mannargudy Municipality—				
	1. Logambal, Akkarai Pudu street, Papanasam.	Cow milk ..	37 per cent added water.	50 0 0

Name of Local body. (1)	Name and address of the vendor. (2)	Designation of sample. (3)	Nature of percentage adulterated. (4)	Fine imposed. (5)
				RS. A. P.
11. *Tiruchirappalli district*—				
Tiruchirappalli Municipality—				
	1. Sellavdu Mudaliar, 31, Chintamani ground, Tiruchirappalli.	Cow milk ..	14 per cent added water.	40 0 0
	2. A.-1, S. Jaya, A.-2. S. Kandaswami, 467, Pillayar Koil lane.	Coffee powder ..	20 per cent wild date seed.	50 0 0
Srirangam Municipality—				
	1. Subramaniam, Bagavathi Amman Koil street.	Cow milk ..	23 per cent added water.	35 0 0
	2. K. Parameswara Iyer, Sundara Lunch Home, Srirangam.	Halva made in ghee.	92 per cent ..	50 0 0
Turaiyur Panchayat—				
	1. S. Chidambaram Pillai, Subramaniam Maligai shop.	Coffee powder ..	50 per cent chicory.	40 0 0
12. *Tirunelveli district*—				
Palayamkottai Municipality—				
	1. Velayutha Konar, Kulasekara Alwar street.	Buffalo milk ..	20 per cent added water.	40 0 0
Tuticorin Municipality—				
	1. Soodamanai Pillai, 12, South Sambanda Moorthy street.	Coffee powder ..	65 per cent wild date seed.	50 0 0
Tiruchendur Panchayat—				
	1. Marimuthu Chettiar	Buffalo milk ..	13 per cent added water.	30 0 0
	2. Shanmugam	Cow milk ..	25 per cent added water.	30 0 0
	3. Vaniyaperumal	Coffee powder ..	Chicory	30 0 0

Crop forecast for groundnut—Final Report for 1954-55.

The area sown with groundnut in the Madras State up to December 1954 is estimated at 1,625,000 acres. Compared with the area of 1,444,700 acres according to the figures as per the season and crop report for the previous year (provisional) the present estimate reveals an increase of 12·5 per cent. As compared with the average area of 1,783,300 acres calculated for the five years ending 1953–54, the current year's estimate shows a decrease of 158,300 acres or 8·9 per cent.

The area under the crop in South Kanara and the Nilgiris districts is negligible. A decrease in area is estimated in the districts of Chingleput and Tirunelveli districts and an increase in area in all the other districts of the State.

The harvesting of winter or main crop is proceeding. The yield per acre is expected to be below normal in all the districts of the State. The Seasonal Factor for the State as a whole works out to 94 per cent of the normal as against 97 per cent estimated for the previous year. On this basis, the total yield in terms of unshelled nuts is estimated at 763,600 tons as against 697,700 tons for the previous year according to the provisional figures as per the Season and Crop Report, representing an increase of 9·4 per cent. The present estimate is also an increase of 5·8 per cent as compared with the average yield of 721,800 tons (unshelled nuts) calculated for the five years ended with 1953–54.

The wholesale price of groundnut (machine shelled) per standard maund of 82-2/7 lb. or 3,200 tolas as reported from certain important markets centres on January 8, 1955 was Rs. 14–13–0 at Vellore, Rs. 14–15–0 at Erode, Rs. 15–7–0 at Salem, Rs. 16–4–0 at Cuddalore and Rs. 17 at Coimbatore. Compared with the prices which prevailed during the corresponding period of the previous year, the current prices reveal a fall of 34·0 per cent at Cuddalore, 36·4 per cent at Coimbatore, 39·1 per cent at Vellore, 39·6 per cent at Salem and 41·3 per cent at Erode.

Potato crop—First forecast for 1954-55.

Potato is grown mainly in the Nilgiris district and to a small extent in the districts of Salem and Madurai.

The area under the winter crop up to December 25, 1954 is estimated at 1,350 acres as against 1,100 acres estimated for the corresponding period of the last year, representing an increase of 22·7 per cent.

Punishments for Corruption

During the month of January 1955, a Head Constable and a Constable were compulsorily retired from service and a peon of the Commercial Taxes Department was removed from service. Four other Government servants were awarded less severe punishments.

'he figures of estimated area by dis-
:ts are given below :—

District.	Estimated area in acres. 1954–55.	1953–54.	Percentage by which column (2) exceeds (+) or less (—) than column (3).
(1)	(2)	(3)	(4)
	ACS.	ACS.	
lem ..	200	150	(+) 33·3
adurai ..	250	250	..
ie Nilgiris.	900	700	(+) 28·6
	1,350	1,100	(+) 22·7

Continuance of Surcharge on Electricity

The attention of the Government has been drawn to criticisms in the Press and elsewhere regarding the continuance of surcharge on electricity. The circumstances under which the surcharge scheme was first introduced and the need for its continuance by the Government Electricity Department were clearly explained in a Press Note issued by the Government on 20th August 1954. As already stated in that Press Note the surcharge is levied for recouping the increase in costs attributable to war conditions such as dearness allowance to the staff, increased cost of labour, fuel, materials, maintenance, etc. Although the war is over, costs have not come down to any appreciable extent. When compared to other commodities which have gone up several times, in price, the increase in the price of electricity by a 20 percent over pre-war rates, is inappreciable. In the circumstances, the surcharge of 20 percent which is collected from all consumers receiving supply direct from the Electricity Department (excepting distributing licensees receiving bulk supply from the Department) will have to be continued, so long as the increased costs of operation and maintenance of the Government Electricity undertakings continue.

The yield per acre is expected to be normal in the districts of Salem, Madurai and Nilgiris.

The wholesale price of potato per maund of 82-2/7 lb. or 3,200 tolas on March 15, 1955 was Rs. 13 at Mettupalayam which is the same as that which prevailed during the corresponding period of last year.

Cattle diseases.

There was a rise in the incidence of and the mortality from contagious diseases in the State during January 1955 as compared to the previous month. In all 307 outbreaks with 1,376 deaths were recorded in the month as against 277 outbreaks with 1,046 deaths in the previous month.

Rinderpest :

This State continued to be free from the disease as in the previous month.

Haemorrhagic Septicaemia :

There was a rise in the incidence of and mortality as compared to the previous month. One hundred and two outbreaks with 458 deaths were recorded during the month as against 87 outbreaks with 437 deaths in the previous month. The disease was prevalent in a severe form in the districts of Chingleput, Tanjore and South Arcot.

Black Quarter :

There was a marked rise in the incidence of and mortality from the disease during the month as compared to the previous month. One hundred and forty-one outbreaks with 569 deaths were recorded during the month as against 120 outbreaks with 511 deaths in the previous month. The disease was prevalent in a severe form in the districts of Chingleput, South Arcot and North Arcot.

Anthrax :

There was a fall in the incidence of and rise in the mortality from the disease during the month as compared to the previous month. Eight outbreaks with 103 deaths were recorded during the month as against 12 outbreaks with 89 deaths in the previous month.

Foot and Mouth :

There was a marked fall in the incidence of and a rise in the mortality from the disease during the month as compared with the previous month. Twenty-three outbreaks with 15 deaths were recorded during the month as against 58 outbreaks with 9 deaths in the previous month.

Ghee Marketing Conference

In order to consider the question of production and marketing of butter and ghee with emphasis on promoting purity standards and to find out the difficulties experienced by the ghee and butter trade, the Government called the producers, traders and packers of ghee to a Conference. The Conference was held at the Rajaji Hall, Mount Road, Madras, on 25th February 1955 and was inaugurated by the Minister for Agriculture. A little more than 100 delegates representing the ghee trade, producers and Agmark packers from all parts of the State and a few from the Andhra area doing business at Madras attended the Conference. The officials of the Agriculture, Animal Husbandry, Co-operation, Medical and Public Health Departments as also the Corporation of Madras, the Indian Dairy Research Institute, Bangalore and the Central Directorate of Marketing and Inspection attended the Conference.

The Minister for Agriculture while inaugurating the Conference thanked the members present for having responded to his invitation to meet in a conference to discuss the several problems relating to the marketing of pure ghee.

The members present accepted the need for eliminating adulteration in ghee and butter and effecting improvement in quality. The Conference recommended among others the setting up of more number of laboratories for grading ghee and the recognition of Agmark as the national standard. An Association of butter and ghee merchants of the State was also formed on the occasion.

On the occasion of the Ghee Marketing Conference an interesting and highly educative Exhibition on the production and marketing of ghee in Madras State was on show. The Minister for Health declared the Exhibition open.

SUGARCANE CROP YIELD COMPETITION

Winners in the Sugarcane Crop Yield Competition, for 1954 were awarded State prizes of cash and medals by Sri M. Bhaktavatsalam, Minister for Agriculture, at a function held at Saidapet, on 25th March 1955.

Pictures show : The Minister awarding the medals to Sri N. K. Krishnaswami Gounder of Madurai district, first prize winner (*photo* 2), Sri V. Abdul Matheen Sahib of Vellore, second prize (*photo* 3) and Sri S. Periaswami Gounder of Karur, third prize (*photo* 1).

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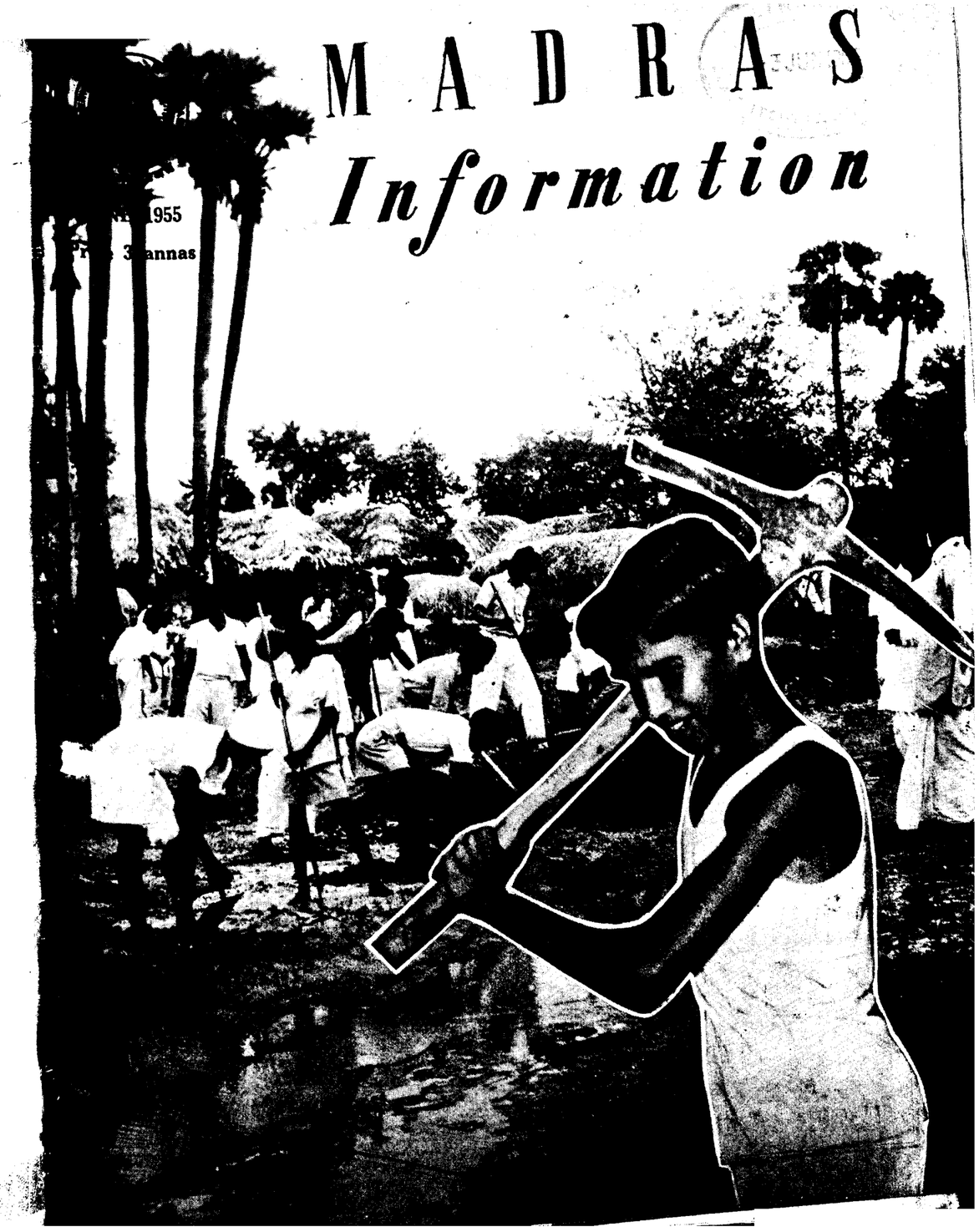

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Local Development Works and Rural Water Supply

By SRI W. R. S. SATHYANATHAN, I.C.S., Commissioner of Land Revenue and Development

The creation of a new order, a new way of life under democratic aegis is probably the greatest challenge of the modern times. It is possible to initiate and even carry out successfully gigantic schemes of reconstruction, "rallying the people," with bayonets glistening in the background. In other words, the coercive apparatus of the State providing the motive force for constructing a dam. It is also possible to construct a dam rallying the people, through love, persuasion and co-operation. That is the lasting way, the democratic way, the Gandhian way. The latter method is being tried in our country today. This is the epoch-making principle underlying our programme of reconstruction, spearheaded under any head, National Extension Services, Community Projects or Local Development works.

Local Development Works

The Local Development Works Scheme was first taken up under the First Five Year Plan in the year 1953–54. The basic idea of the scheme is to stimulate the enthusiasm of the people for the Five Year Plan through local schemes, for the execution of which they will be prepared to contribute either in cash or in kind or through voluntary labour. All rural areas in the State not covered by Community Development and National Extension Service Schemes come under Rural Development which is administered almost exclusively by the regular Revenue Department with the help only of some special engineering staff. During the year, 1953–54, the Central Grant allotted to the Madras State was Rs. 40 lakhs but only a sum of Rs. 3 lakhs could be spent that year. In 1954–55, the grant allotted to this State was Rs. 59·4 lakhs and the instructions were that 50 per cent of it should be set apart for Rural Water Supply Schemes. After a critical study of the whole situation by inspections and Conferences, the machinery for administering the scheme was thoroughly reorganised so that it could work smoothly, simply and effectively without the bottlenecks which blocked progress in the past.

Local Development Works are broadly classified as works other than Rural Water Supply and Rural Water Supply Works. The progress achieved in the execution of works other than Rural Water Supply during 1954–55 is briefly shown below. Works such as formation and metalling of village roads, construction of small bridges and culverts, improvements to existing school and dispensary buildings, etc., are undertaken under this category. The original grant of Rs. 29·70 lakhs for the State was distributed to the several districts on a population basis. Later, as the tempo of progress rose, the grant was enhanced to Rs. 48·96 lakhs based on the requirements of each district taking also into account the unutilised portion of the grant for 1953–54. Out of 2,841 works programmed for the year 1954–55, 358 have been completed, 2,058 are in active progress and 425 have not yet been taken up for execution. The progress achieved in 1954–55 under the several categories is given below.

The progress in laying of village roads is specially commendable in Coimbatore, North Arcot, and Salem districts where 643, 235 and 196 miles of village roads have been laid during 1954–55 at a total cost of Rs. 5·58 lakhs, 2·34 lakhs and 1·40 lakhs respectively.

Expenditure

The total expenditure on works other than Rural Water Supply is estimated at roughly 49 lakhs, which excludes the value of labour and materials contributed by beneficiaries; out of this, the amount of Central Grant

Categories.	*Total number of works undertaken.*	*Approximate amount of grant spent in 1954–55.*	*Approximate total expenditure on these works (excluding value of labour and materials contributed by beneficiaries).*
(1)	(2)	(3)	(4)
		RUPEES IN LAKHS.	
1 Permanent Works for improvement of agriculture.	67	0·69	0·82
2 Permanent Works for improvement of Rural Sanitation.	145	3·54	5·14
3 Village Roads (including small bridges and culverts).	1,786 miles.	17·41	22·18
4 Improvement to Schools and dispensary buildings.	534	14·46	17·73
5 Construction of Godowns ..	4	0·16	0·26
6 Miscellaneous—Other Schemes of common utility.	109	1·94	2·21

spent during the year was roughly 39 lakhs out of Rs. 48·96 lakhs allotted. The districts of Coimbatore, North Arcot, Salem, Tirunelveli and the Nilgiris deserve special mention as they have exceeded not only the original targets based on population but also the revised allotments made on the basis of requirements. In terms of total expenditure on works other than Rural Water Supply, the record of Coimbatore and North Arcot has been particularly good—being 11 and 7½ lakhs roughly.

The Government of India have intimated that the grant for 1955–56 will be the same as for the previous year, viz., Rs. 29·70 lakhs. The Collectors have already got on hand enough works to utilise this grant fully. About 425 works are to be started, over 2,000 remain to be completed and many more to be included in the programme for the current year. The implementation capacity of this State has greatly increased during the last six months and judging from the progress of last year, it should not at all be difficult to attain a target of an expenditure of at least Rs. 60 lakhs if not far more if available from the Grant in 1955–56 as against Rs. 39 lakhs spent in 1954–55. In fact, the Collectors have reported that they are committed to the extent of an expenditure from the Local Development Grant of roughly Rs. 73 lakhs towards works in progress, Rs. 25 lakhs under Rural Water Supply and Rs. 48 lakhs under other works.

Rural Water Supply Schemes

For the provision of protected water-supply in the villages in the State, there are at present three separate schemes, viz.,

(*a*) Rural Water Supply Works under the Local Development Works Programme.

(*b*) Rural Water Supply Works under the Comprehensive Scheme.

and

(*c*) National Water Supply and Sanitation Scheme.

Till 1954, all Rural Water Supply Schemes in the State were undertaken under the Comprehensive Water Supply Scheme financed entirely from the State revenues. No contribution was payable by the beneficiaries. In 1954, with a view to ensure peoples' participation in development works and to bring the State Schemes on a line with the Central Scheme of Local Development Works, it was decided to insist on a 25 per cent contribution from the people benefited in regard to well works under the Comprehensive Programme also. Harijans and other backward classes were, however, exempted from this obligation to pay contribution.

(*a*) *Local Development Works—Rural Water Supply.*—The Central Grant for 1954–55 was Rs. 29·70 lakhs. Two thousand five hundred and fifteen works, including 452 major works involving construction of over-head tanks and pipes, were programmed up to 31st March 1955; 224 works were completed and 1,735 works were under execution. Five hundred and two works have not been taken up so far and the others were either abandoned or eliminated. The Central Grant spent during the year was Rs. 19·02 lakhs involving a total expenditure of Rs. 29·72 lakhs, of which a sum of roughly Rs. 14 lakhs was spent on major works, with a Central Grant of Rs. 8·471 lakhs both in minor and major panchayats. Over 2 lakhs of rupees have been spent from the grant in Coimbatore and over one lakh in Ramanathapuram on major schemes. Out of 2,515 works mentioned above, roughly 400 costing Rs. 1·50 lakhs would exclusively benefit the Harijans. Of these 14 are major works. The comparatively smaller expenditure on Rural Water Supply Works is due to the fact that the preliminaries have taken considerable time in the case of well works such as site selection, trial pits, obtaining of materials like pipes, over-head tanks, etc., These works could not, therefore, be rushed through as rapidly as buildings or roads. If the balance of Rs. 10 lakhs which remained unspent in 1954–55 is permitted to be used during the current year, the total grant available will be Rs. 40 lakhs which it is hoped, can be fully spent during the year 1955–56, considering the fact that Collectors are already committed to an expenditure of Rs. 25 lakhs from the grant towards incomplete works.

(*b*) *Rural Water Supply Works under the Comprehensive Scheme.*—The State Government's allotment for the scheme during 1954–55 was Rs. 39·64 lakhs. The number of works is 5,499 which includes 21 major works. Of these 1,189 works have been completed, 2,275 works were under execution and 1,735 works were not taken up. The rest were either abandoned or eliminated from the programme. One thousand and forty-two works were undertaken for the benefit of Harijans and a sum of Rs. 7·48 lakhs was spent on them. A total expenditure of Rs. 36·43 lakhs was incurred during 1954–55.

Judging from the progress of these works during the last quarter of 1954–55, it is considered possible to sink 2,500 wells at an estimated cost of Rs. 50 lakhs during 1955–56. A special drive has been initiated to provide every cheri with a well and as a result, 1,379 wells for Harijans will be put under execution shortly, which is far in excess of what has been done in any previous year.

It is proposed, as a matter of policy, to utilise the Local Development Grant to the maximum extent possible for the provision of protected water-supply in panchayat areas only and to sink wells in smaller villages and in cheris under the Comprehensive Scheme.

(*c*) *National Water Supply and Sanitation Scheme.*—The Scheme recently drawn up by the Government of India is intended to provide water-supply and sanitation to villages with a population of less than 5,000 affected by cholera. A tentative programme has been drawn up so as to cover the areas worst affected in Tanjore, South Arcot, Tirunelveli, Tiruchirappalli and Ramanathapuram districts. The Government of India have formally approved the proposals and a provision of Rs. 75 lakhs has been made for rural water supply and Rs. 45 lakhs for sanitation. The Government of India's grant for this scheme is expected to be Rs. 60 lakhs. The scheme is expected to be started soon and it is hoped that a sum of Rs. 25 lakhs would be spent out of the total provision of Rs. 75 lakhs for rural water supply during 1955–56. The orders of the Government of India sanctioning the grant are awaited.

It might be worthwhile explaining that all contributions by way of cash, material or labour from the public have been freely and voluntarily given. The works executed have mostly been carefully estimated for by competent engineers and executed from start to finish under strict supervision. As far as possible, works have been given for

(*Continued on page 7*)

Earth Dam of the South

The civilisation of the south is as ancient as time and has largely centred and grown around the Cauvery. It precedes the Aryan era, and the pre-Aryan Dravidian culture, with its independent origin was so vital and refined that it retains to this day much of its identity, after thousands of years of co-existence with a powerful, competing intellectual influence. Waves after waves of new civilisations have thus penetrated, filtered and purified from the North, and nurtured into a peaceful harmony in the Cauvery valley. Deep down, like the Ganga in Aryavartha and the Nile in Egypt, the source and inspiration of all evolution and cultural synthesis in the South is this perennial life-giving stream. The history of water-utilization of the Cauvery thus forms a remarkable index of the physical growth and material prosperity of the section of humanity drawing their sustenance from the river and its tributaries.

The Cauvery valley is one of the most populous regions in the country. From the trend of water utilisation and the techniques of storage and diversion of water along streams as well as of water collection in tanks from minor catchments developed in the region, it is easy to infer that population pressure and hence the demand for water are features ever present in the river basin. No wonder therefore that Cauvery happens to be the most depleted waterway in the country.

The utilisation of sixty per cent of the Cauvery waters, however, has not still assuaged the thirst of the valley, nor the ingenuity of engineers is at an end in devising ways of tapping the patient river.

The process of development exploitation naturally started with the main river, at first with easy and inexpensive devices like anicuts across the flow, and canals taking off from the river channel. Then came the more elaborate, more ambitious and expensive schemes, like the Krishnarajasagar and Mettur Dams, long canals feeding lakhs of acres at a stretch, power houses and transmission lines bringing light and labour-saving and wealth-producing power to hundreds of square miles. With the exhaustion of the quick-yielding, high dividend projects, eyes were cast on less paying projects feasible of construction along the feeders to the Cauvery. The Lower Bhavani Project is one such which owes its origin to hard-pressed necessity of the region for larger and assured supplies of water for irrigation and for power.

History

The construction of a dam across the Bhavani to store the seasonal flood waters for irrigation during the long dry months of the year was proposed in 1834, more than 100 years ago. Many investigations were made after that. But the scheme was given up every time, generally because of the poor return on the capital outlay worked out on the basis of the prevailing economic conditions and policies. But the recent change in government into a national one and the acuteness of food and cloth shortage in the country after the second World War, underlined the necessity for expanding irrigation facilities and bringing under cultivation extensive tracts of land. The Lower Bhavani Project is thus one of the first to be taken up after the war.

The Bhavani River is a tributary of the Cauvery which forms the main source of irrigation to the Tanjore District, the 'Granary' of south India. It takes its source in the Silent Valley Forests of Malabar District on the Eastern slopes of the Western Ghats and runs in a south-easterly direction for about 20 miles and then, swinging round the nose of the hill, flows in a north-easterly direction, girdling the southern slopes of the Nilgiris range. Thus it catches the run-off from the Nilgiris also. The Northern and Eastern slopes of the Nilgiris are drained by a river, called Moyar, which flows into the Bhavani above the Lower Bhavani Dam. The river lies within the range of both the South-west and North-east monsoons and drains an area of 2,376 square miles. Though the river carries heavy freshets of the order of 50,000 cusecs, these last only for a short period. At other times, the flow is barely sufficient for existing irrigation of about 39,000 acres under two anicuts.

The name "Lower Bhavani Project" implies that another project on the Bhavani River by name "Upper Bhavani Project" was thought of. During investigations, two projects were found feasible; one on an upper site and the other 30 miles lower down. The Upper one was called "The Upper Bhavani Project". After considering the merits of both, the Lower Bhavani Project was preferred. The Project was sanctioned in September 1947 and preliminary works were taken up in 1948.

The Project Scheme

The project comprises (1) the construction of a dam across the Bhavani River (below the confluence of the Moyar River) about 22 miles from Mettupalayam Railway Station and (2) the execution of a canal taking off from the dam on the right flank. The capacity of the reservoir is about 28,000 million cubic feet. The Canal is 124 miles long. The scheme is intended to irrigate a little more than 200,000 acres of one dry irrigated crop, half of this area growing cotton and the other, food crops. This is localised in four taluks of Coimbatore District, viz., Gobichettipalayam, Erode and Dharapuram. The gramaphone Karur Taluk of Tiruchirapalli and The Dharapuram Tapoems of Bharathi famine-stricken areas previously. District is deficit in

also a large number of cotton mills in the district. The Lower Bhavani Project will greatly benefit the districts.

Masonry Dam

The dam consists of a central masonry portion in the river course for a length of 1,523 feet and earth dams on either side—about three miles (15,250 feet) on the left flank and about two and a quarter miles (12,069 feet) on the right flank. The foundation for the masonry portion had to be taken down 64 feet below the river bed at some places to reach hard rock. The dam houses nine river sluices, 6 feet by 10 feet for passing down supply for existing irrigation when such a need arises. It will also dispose of part of the floods, besides enabling heavy silt-laden flows to pass down and reduce silting up of the reservoir. To the right of the river sluices four penstock pipes, each of 8 feet diameter are located. These are to feed the machines intended for the generation of about 10,000 KW of power; but, the construction of the power house is deferred for the present. To the right of the penstock pipes are the five Canal sluices, 6 feet by 10 feet each to let in water into the new canal.

To the left of the river sluices is the spillway designed to discharge a maximum flood of 111,000 cusecs. Nine gates have been provided to allow for this flow over the spillway which runs for 396 feet. From the crest of the spillway, the overflowing water will drop through some 133 feet. The force of this fall will damage the toe of the spillway on the downstream side unless it is curbed and reduced to a safe maximum. For this, measures were devised by model experiments at the Poondi Research Station, Madras. A basin at the foot of the spillway creates a cushion of water which absorbs much of the destructive force of the falling water. Along with this other protective works have also been devised. The Masonry Dam wedges in for 357 feet on the left of the spillway and for 293 feet on the right of the ca 19 sluices into the earth dam on chemes side, thus safely anchoring the under t part with the rest of the dam. Supply Schen
the State revry dam incorporates all was payable bynds in dam construction. 1954, with a vieve been installed in it participation in nsion and contraction and to bring the S developed, strains caused and the temperature developed inside the dam.

Suitable diversion arrangements during the construction period were made by building masonry coffer dams, enclosing two-thirds of the river width on the left flank, excavating the foundation to required depth, building the masonry dam to above bed level, and then diverting the water over the built portion of the masonry to tackle the right third of the river.

Earth Dam

The earth dam on either side of the masonry portion rises to a height of 110 feet in certain portions. No earth dam in South India has been built to such a height till now. The earth dam is of the zone type and consists of seven parts according to the latest practices in earth dam design. The rocky layer is drilled and cement slurry forced under pressure to fill in all crevices within the rocks to prevent water getting underneath the dam.

Selected soils of requisite strength and porosity go into different layers of the earth dam. The sloping surface of the earthen dam on the reservoir is provided with dry stone revetment to prevent damage by water. The downstream slope is turfed and regular drains are provided at intervals to take away storm water without damage to the earth bund. The entire dam from end to end, is provided with a road-way 25 feet wide between kerbs, with parapet walls on either side. The volume of earthwork involved in the formation of the earth dam is about 162 million cubic feet. Most of the earth was collected from borrow area in the lake portion of the reservoir over an average distance of about 1¾ miles. Since such a large volume of work cannot be carried out by manual labour alone, a number of earth-movers, dumpers and excavators were used. A field laboratory established at the dam site carried out constant tests from hour to hour to ensure the required quality on the works in respect of watering, compaction, etc.

Canal

The length of the new canal that takes off from the right flank of the masonry dam is 124 miles with a normal bed width of 111 feet and full supply depth of 8.6 feet at its head. Being a contour canal, irrigation is only on one side. As a number of natural drainages are intercepted, about 191 cross-drainage works have been built. In addition, 106 bridges, 6 regulators and a number of direct and head-sluices have been provided.

The total length of distributaries is about 500 miles, involving about 6,000 masonry works. The ryots are given technical advice by field officers in the excavation of the distributaries, and in the use of water for growing different crops in the most economical way. Field channels are excavated up to 75 acre limit at Government cost to enable speedy development of the project. Land for these channels even down to 25 acres and below is acquired at Government cost.

Experimental lining is being tried in three distributaries to ascertain the saving in transmission and seepage losses.

Project Township

The project employed at the peak stage of construction 30,000 labourers a day. To house the labourers and staff, a modern colony was constructed on up-to-date planning lines. Nearly 2,000 buildings for all grades of officers and workmen and for housing the various offices, were built. Community buildings such as hospital, maternity wards, elementary schools, post office, police and treasury office, shops and places of recreation were also built. The cost of these buildings was kept to the minimum, by constructing many of the houses with soil cement blocks and roofing with asbestos cement sheets. The door and window frames were made of reinforced concrete, and the shutters with teakwood styles and galvanised iron sheet panels.

The township was provided with water-borne system of sewage disposal with independent septic tanks, and chlorinated pipe water supply. The town with the wide avenues, excellent sanitation, electricity supply and an internal telephone presents a neat appearance. There is a circuit house and a number of rest-houses for visitors, besides an information office. A well-organised cafeteria is provided in the camp and wholesome food is supplied to visitors and the staff on the basis of "No profiteering in foodstuffs".

The project has been completed and brought into use well within the period fixed for completion. The construction of the Headworks was in charge of one Executive Engineer, and the Canals under another Executive Engineer with necessary Assistant Engineers and other staff. The whole project work was under the direct control of the Chief Engineer (Irrigation).

The total cost of the scheme is about Rs. 10 crores and a return of about 3 per cent is expected.

Rehabilitation of Displaced Persons

In a water spread of 30 square miles, the reservoir has submerged only about 6,000 acres of private lands, the rest being reserved forest area and poramboke (waste) lands. About 1,000 families have been displaced from this area. All the private owned lands and houses in the reservoir bed were acquired at the market rate, plus 15 per cent solatium to cover compulsory acquisition. In addition the people who were displaced have been given free sites to build houses and land up to five acres for each family. They were also given the removable building materials on their old buildings at 25 per cent of the cost at which they were acquired. The transport of materials from the old villages to the new sites was done by the Government free of cost. The old villages that had gone under water were those that had developed in a haphazard way in the course of many years. But when the people were rehabilitated in the new area, well-planned villages were formed and it is now a pleasing sight to see these new villages laid out and developed neatly.

Project Benefits

The project began its first yield of benefits from September 1952. An area of about 5,000 acres was irrigated in 1952–53 and about 45,000 acres in 1953–54 including the second crop. In 1954–55 an area of 115,000 acres is proposed to be open for irrigation. Ultimately, when the full target of irrigation is reached, the project will produce an additional food crop of 35,000 tons and 15,000 tons of cotton every year. Indirectly, the lands which were all fallow and were worth very little, have now appreciated very much in value. And because of the greater man power needed to cultivate irrigated land, employment, and therefore income and living standards, are rising steadily in the territory commanded by the Lower Bhavani Project, a project which has the distinction of being the first to be completed after independence and within the period of the First Five-Year Plan.

(*By Courtesy "Bhagirath"*)

(*Continued from page 4*)

execution to the beneficiaries themselves. Thus a new spirit has been inculcated in villages and villagers have learnt to respect the dignity of labour as also how to construct buildings, roads and wells. A new spirit of enthusiasm of villagers for development works has sincerely been developed, and cordial co-operation between villagers and officials is also very noticeable.

[*The note released to the Press when Sri W. R. S. Sathyanathan, Commissioner of Land Revenue and Development, met the press representatives a ta Conference on 30th April* 1955.]

Wages to Agricultural and Skilled Labour

The index numbers of wages paid to the different categories of agricultural and skilled labour in the Madras State during the fortnight ended November 30, 1954 with the fortnight ended April 15, 1950 as the base or 100 were as follws :—

Classification of Labour.	*Type of Labour.*	*Rural Wage index.*	*Variation as compared with the index numbers for the previous fortnight.*
1 Ploughmen ..	Men ..	98·0	A rise of 1·4 points.
2 Sowers and transplanters.	Men ..	86·0	A fall of 1·2 points.
	Women ..	101·5	A fall of 1·6 points.
	Non-Adults.	110·3	A fall of 3·4 points.
3 Weeders	Men ..	91·4	
	Women ..	96·8	A fall of 3·2 points.
	Non-Adults.	88·6	A fall of 3·8 points.
4 Reapers and harvesters.	Men ..	86·5	A fall of 0·9 of a point.
	Women ..	89·4	
	Non-Adults.	80·0	A fall of 2·4 points.
5 Herdsmen ..	Men ..	121·9	
	Women ..	148·5	
	Non-Adults.	117·9	
6 Other Agricultural Labourers.	Men ..	98·3	A rise of 2·2 points.
	Women ..	100·7	A fall of 2·3 points.
	Non-Adults.	93·8	A rise of 0·9 of a point
7 Skilled labourer—			
(*a*) Carpenters ..	Men ..	101·7	A fall of 1.9 points.
(*b*) Blacksmiths ..	Men ..	104·3	A rise of 1·7 points.
(*c*) Cobblers ..	Men ..	118·7	A rise of 5·3 points.

Poet Bharathi's Works : Copyright released to the Public

The Government have decided that in respect of the poems of the late Sri Subramaniya Bharathi, the entire right of their use vested in the Government under the Indian Copyright Act should be released to the public, subject to the restriction that in so publishing them, the public should adhere to the authorised version of these poems published by Government.

Pending further orders, the collection of royalty in respect of the prose works of the late Sri Subramaniya Bharathi will be continued.

The Government have also waived the recovery of royalty from the gramaphone companies, which have with them stocks of unsold gramaphone records on which the poems of Bharathi have been recorded previously.

Prestressed Concrete with Special Reference to Palar Bridge

By SRI K. K. NAMBIAR, Chief Engineer (Highways)

In the construction of the Palar Bridge, now nearing completion, a new technique is being used—a technique which in recent times has made possible remarkable advances in structural engineering—based on the concept "Prestressing." This bridge is about 38 miles from Madras on the National Highway that leads to Tiruchirappalli. This is the first prestressed concrete road bridge in this country.

Although prestressed concrete construction has come into prominence only in the past decade or so the basic idea is not new. But it was Eugene Freyssinet, a Frenchman, who for the first time established the conditions under which it was possible. It was also Fryssinet who made its application practicable for large structures by evolving his double cone anchorage in 1939. The development of prestressed concrete dates from the time of this invention.

The most versatile and cheap material employed in construction is concrete. But its great shortcoming is that its strength in tension is much smaller than in compression—just a tenth of it. To overcome this weakness, the usual procedure has been to reinforce the concrete, i.e., put in steel rods to take the tension. This technique has proved useful but has not prevented concrete from cracking. What prestressing does is to put a structural member such as girder under compression prior to its being loaded so that the tensile stresses developed after the application of load are cancelled out. This results in the member being always in compression under anticipated loads completely avoiding cracking. Of course the concrete has to be of a high quality.

The possibility of obtaining concrete free from cracks during the lifetime of a structure has enabled prestressed concrete girders to span much greater distances or carry much heavier loads than has so far been possible with conventionally designed girders. Another advantage is that if unexpected overloading induces deep sagging and causes slight cracks a prestressed beam will recover its original shape and the cracks will be effectively sealed immediately on removing the load.

One of the most impressive characteristics of prestressing is that it enables long span beams to be constructed of short precast units much like a group of books can be lifted from a shelf by applying pressure to the ends.

Prestressed concrete structures generally require less concrete than standard designs—perhaps 25 per cent less. The saving in steel is likely to be greater—may be 60 per cent—but with steel of higher strength.

The process of prestressing consists of passing high strength wires through a concrete member and stretching them. Then, while still stretched, they are anchored against each end of the member, and their effort to return to their original length compresses the concrete. Thus the beam that withstands the prestressing forces that are initially slightly higher than requirements, demonstrates in advance its capacity. There are three patented prestressing methods making use of the above principle and they are: the Freyssinet system, the Magnel Blaton system and the Lee Macall system. The method used in this bridge is Magnel Blaton system.

When tenders based on reinforced concrete design were called for this bridge, quotations based on several alternative designs were also received. The lowest tender was for a bridge with a prestressed concrete superstructure. The conventional reinforced concrete structure required 740 tons of mild steel whereas the present design needs only 485 tons of steel though the latter is slightly costlier having to be imported now.

This bridge is 2,202 feet between the abutments and consists of 23 spans of 90 feet long. The piers are of plain concrete 6 feet wide at top and 7 feet wide at river bed. These are supported by well foundations consisting of two circular wells having 12 feet external diameter and 8 feet internal diameter. The average depth to which the wells have been sunk is 32 feet.

The deck is made up of four prestressed girders with 6 inches thick reinforced concrete slab cast on top of them. The girders are hollow in the shape of 'U' 61 inches deep and 41 inches wide. The bottom and sides of 'U' are 6 inches and 5 inches thick respectively.

The 'U' girders are first laid out in 9 feet lengths with 6 inches thick diaphragms interposed. Then they are prestressed with 256 wires of 5 mm diameter made up into eight cables of 32 wires each. The wires are stretched two at a time and anchored into sandwich plates bearing against the solid ends of beams by means of wedges.

As prestressed concrete was a comparatively new techinique in this country, the tender included a condition that one beam should be tested to destruction to demonstrate the behaviour of prestressed concrete under severe conditions of loading. Hence one prototype beam was tested and it revealed that the beam as constructed could withstand a load of twice the design load without any crack being shown. The beam could not be destroyed even after loading more than

(*Continued on the next page*)

Development of Electricity: Progress During March 1955

The number of villages electrified reached a new high, during the month of March. Out of a total number of 79 villages electrified during the month, 18 are under Pykara, 19 under Mettur, 28 under Papanasam and 14 under Madras Systems. 43 extension schemes were sanctioned by the Chief Operation Engineers and Chief Engineer for Electricity at an estimated cost of Rs. 15,03,588. 136·44 miles of high tension lines and 152·629 miles of low tension lines were constructed during the month under review.

The inflows in hydro-reservoirs were poor and the storages in Mukurthy and Papanasam lakes were depleted to meet the increasing demand in consumption of the Grid. The storage at Mettur was also reduced due to poor inflows. The hydro-systems were getting relief from the Madras Electricity Systems apart from the Madura Thermal Station being used to the maximum extent.

Work on Pykara Plant extension III stage, the South Kanara Scheme and the Madras Plant Extensions was in progress. Under the Periyar Hydro-Electric Schemes, excavation in the power-house area for the diversion channel was continued, and the road to the power-house was completed. Rock blasting for widening irrigation tunnel was progressing. Excavation for the formation of the channel for the diversion of flow at Forebay dam was also progressing.

Pykara-Coimbatore, Namakkal-Salem, Singarapet-Villupuram, Singarapet-Vellore, Coimbatore-Madukkarai, and several other transmission lines were in various stages of construction.

(*Continued from the previous page.*)

six times the design load. This is the second largest prestressed concrete girder to be tested to destruction. A report on this test was published as a paper in *I.R.C. Journal*, Volume XVII.

The total cost of the bridge is Rs. 25 lakhs. Cost of foundation is 5·9 lakhs. Cost of substructure is 3·2 lakhs. The cost of superstructure alone is Rs. 10·5 lakhs.

	Cement in tons.		Steel in tons.	
	R.C.	P.S.C.	R.C.	P.S.C.
Palar Bridge—				
Foundation	1,490	848	107·0	184·0
Substructure	507	945	17·5	16·5
Superstructure	1,129	1,270	616 0	284·5
	3,126	3,063	740·5	485·0

Savings in cement—about 2 per cent. Savings in steel—about 34·5 per cent.

The Secretariat Association put on board the drama "Nur Jehan" at Annamalai Hall on 23rd April 1955

The Role of Zoos in the Preservation of Wild Life

By SRI M. BHAKTAVATSALAM, Minister for Agriculture

I am grateful to the Indian Board of Wild Life for affording me the opportunity to open the first conference of the Zoo Superintendents in India, and it gives me great pleasure to welcome you here on the occasion.

When the Inspector-General of Forests invited me to inaugurate the plenary session of the Zoo Superintendents of the Indian Union, I accepted it with pleasure for more than one reason. Firstly this is a Conference first of its kind and it is a signal honour that Madras should be chosen as its venue. Secondly all of us, in Madras, are very proud of the Madras Zoo and its popularity is evidenced by the number of visitors patronizing the Zoo daily. You will be glad to know that about 1,000 persons visit our zoo daily not to speak of larger crowds on holidays. Thirdly wild life has held a fascination for me and I am interested in its conservation. Both as a Minister in charge of Forests and by natural inclination I consider it my duty to give necessary protection to the dumb denizens of the Wilds.

The reconstruction of a nation has many phases. Many problems of our country which were naturally neglected in the context of the supreme priority of the freedom struggle are now coming up to the surface demanding the attention of the nation builders. The preservation of wild life is one such problem. From a long term point of view, the preservation of the fauna of our country assumes as much importance as say, constructing a bridge over Palar or a dam across the Bhavani. The very contemplation of such an integrated programme has an aura of romance about it.

Wild Life Vanishing

Zoos as you are aware are popularly associated with wild animals. With the struggle for existence of man, followed by his inherent and ardent desire for pleasure, the wild life in this country is becoming a vanishing asset and a few of our notable animals are even on the verge of total extinction. The National Government have felt that the time has reached for them to take some positive steps to preserve the fauna of the country, and prevent their extinction and maintain the balance of nature. They have accordingly constituted the Indian Board for Wild Life to achieve the object. State Wild Life Boards have also been constituted correspondingly at State level. In this State an area of about 120 square miles of forests in Mudumalai in the Nilgiris district has been converted into a Game Sanctuary, where destruction of wild life is totally prohibited, and where opportunities are afforded to the public to see the wild animals in their natural environments.

The Role of the Zoos

The Zoos serve an auxiliary part of the national endeavour to preserve wild life. Species of wild animals are not only preserved there, but are also multiplied. They afford scope to the public who may not have the opportunity and means of going over to the game sanctuaries, to meet wild animals face to face which has a fascination of its own. They also serve to create in the minds of the people kindly feeling towards the animals they see in captivity and visualise their grandeur in their natural abode in the forests.

To conserve wild life resources we must have a fairly accurate idea of what we have to conserve and what we wish to conserve. In other words, we should know what our stock consists of, we should know where it is to be found, and we should have a knowledge of its ecology, numbers, and status. These questions cannot be answered straight-away except after careful survey.

Let us take the larger forms of Wild Life and consider certain species. Wild elephants, for instance, may have, as they have in India and elsewhere, an economic value, apart from the value of their ivory because they are used for transport purposes. Therefore, there is probably in such States a desire to conserve elephants for economic reasons and it is not desired to see the Wild Stock exterminated. A wild elephant is certainly out of place in a highly cultivated or an industrial area, but not out of place in his natural habitat, and so long as it is desired to conserve, wild elephants for economic reasons, so long should we retain sufficient of their habitat to make that conservation a possibility. I merely give this illustration as an instance of one reason for consideration of the problem from the economic point of view.

The Commercial and Aesthetic value

There is much wild life which we cannot claim as having to our knowledge any direct commercial value to the community, although its aesthetic value may be great. One can easily divide the classes of commercially valuable and aesthetically valuable wild life by taking into consideration the furbearing wild animals and the many attractive song birds which delight our hearts and soothe our nerves. People desire that both classes should be conserved, but for dissimilar reasons. Then again wild life is conserved for recreation all over the world—another reason different from those discussed—and the best method of presenting it is in the form of a zoo.

It is legitimate to presume that there being many reasons for the continuance of Wild Life, proper steps for its conservation should be taken and therefore one would expect to receive the support and approval of the public for any sound policy of conservation.

It will be difficult and even hazardous for me to venture to expound on the topic of zoos before a gathering comprised of Naturalists, Conservationists and experienced Superintendents of various zoos in the Indian Union. Therefore I will only content myself by mentioning that a zoo in every State is a necessity as it provides opportunities for self-education, besides creating love and sympathy for wild life. I have always felt that there is need for establishing within every Zoological garden an enclosure, neat and attractive, styled as 'children's corner' and stocking it with young harmless pets so that the children may as they grow up

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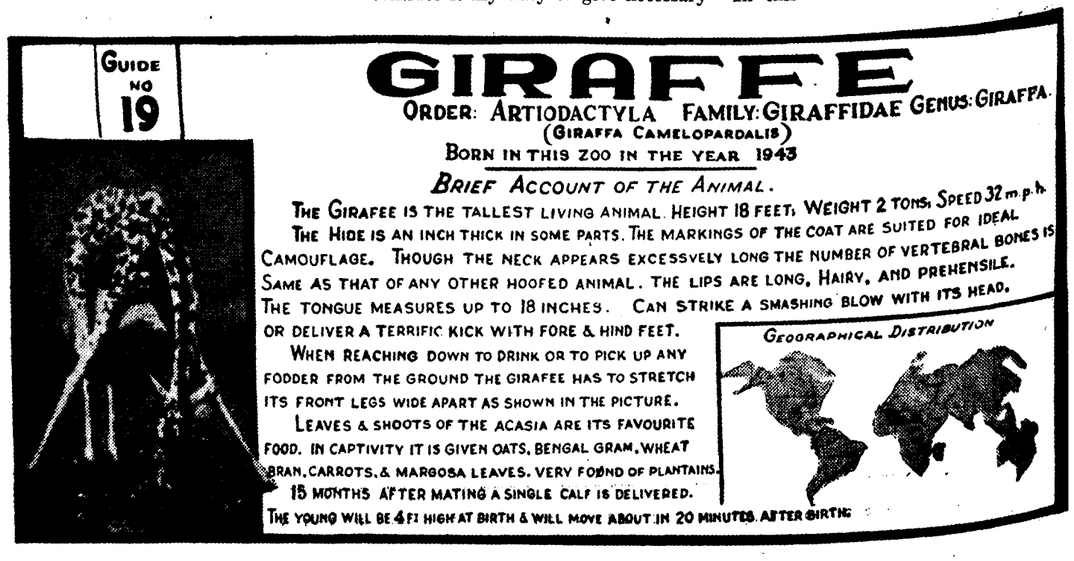


A Conference of Zoo Superintendents of the Indian Union was held in the City on 5th May 1955. The photo shows the Superintendent with Sri M. A. Chidambaram Chettiar, Mayor of Madras

Our Legislature

By SRI A. J. SABESAN, M.A., Secretary to the Council

The present parliamentary system of Government has evolved through historic struggles between despotism and the will of the people. The most perfect form of democracy yet, it is the sacred duty of all vigilant people to preserve that system against onslaughts, particularly from those who wax eloquent on the "superior" type of democracy, characterised by single list elections and "absence" of opposition. In that context, it would be interesting to our readers to read these series of articles on the working of our Legislature. In this first article of the series, the author deals with the first Session after the General Elections.

Periodical Dissolution

Lord Snell said of the British Parliament:

> "It is never outworn or senile, for it periodically renews its life on a completed franchise; and more than any other body, secular or ecclesiastical it reflects the virtues, the shortcomings and the character of the British People."

A periodical dissolution of Parliament is an essential feature of the Parliamentary system of Government and this gives the people at large an opportunity to pronounce for or against the policy put forward by a particular political party. The Parliament as reconstituted reflects "the mood of the nation at the time." Our Legislative Assembly is accordingly dissolved either in exercise of the power vested in the Governor or on the efflux of time, viz., five years from the date appointed for its first meeting. A general election is held and a new Assembly is constituted. The Legislative Council is not subject to dissolution and as nearly as possible one-third of the members thereof retire as soon as may be on the expiration of every second year in accordance with the provisions made in that behalf by Parliament by law. A general election is held when it is first constituted and biennial elections are held and nominations made to fill up the vacancies caused by the retirement of members as stated above.

The First Meeting

After the Legislature has been so constituted, tne members meet for the first time in the House of which they are members on the date and place notified by the Governor and intimated to them by the Secretary to the Legislature. The Speaker/Chairman, who is to allot the seats not having been elected, seats are reserved only for the members of the Government and others occupy any available seat in the House. The temporary Speaker/Chairman appointed by the Governor under Article 180 (1) of the Constitution bows to the empty Chair and takes his seat. (He presides till the Speaker/Chairman is chosen under Article 182 of the Constitution.)

In the House of Commons every member has to produce formal evidence of his membership in the shape of a certificate of return issued to him by the Returning Officer. In India, the Chair receives official information from the Returning Officers concerned in regard to the elected candidates and from the Government in regard to the members nominated by the Governor. Another difference is that in England the election of the Speaker precedes the swearing-in of members whereas in India it is the other way. Any member who has not made his oath or affirmation as member is not also deemed to have been duly nominated or be entitled to vote in the election of the Speaker or the Chairman as the case may be.

The Swearing-in

The first business of the new Legislature is therefore the swearing-in of members. Article 188 of the Constitution prescribes for every member of the Legislative Assembly or the Legislative Council an oath or affirmation in the following terms, viz:

> "I, A. B., having been elected (or nominated) a member of the Legislative Assembly (or Legislative Council) do solemnly swear in the name of God (or affirm) that I will bear true faith and allegiance to the Constitution of India as by law established and that I will faithfully discharge the duty upon which I am about to enter."

The temporary Speaker/Chairman takes his oath of allegiance before the Governor as soon as he is appointed as such. The Secretary to the House calls upon the other members to take the oath usually in the following order:

- Ministers;
- Leader of the official Opposition;
- Leaders of Parties;
- Ex-Ministers;
- Government Whip; and
- Other Hon. Members in the alphabetical order.

The forms of oath are handed over to them by the Secretary as the members reach their seats one after another. After taking the oath or making the affirmation before the temporary Speaker/Chairman, the members shake hands with him, sign the Register maintained for the purpose and take their seats in the House. Ministers do not take their oath under this Article in the House if they had already taken it before the Governor while taking the oath of secrecy as Ministers.

Members who are sworn-in after the first meeting of a new Legislature take the oath before the Speaker/Chairman.

Election of the Speaker

As soon as may be after the members have been sworn-in, they proceed to elect a Speaker/Chairman as the case may be. The Governor fixes a date for the holding of the election and the Secretary sends to every member notice of the date so fixed. In most cases efforts have been made to bring about uniformity in the election by an agreement beforehand among the various parties. In that case, the opposing candidates withdraw and the name of the remaining candidate is announced and he is declared elected. There have however been instances of contested elections in the Pre-Reform Councils and the Legislature under the Constitution. In such cases the election is conducted according to the method prescribed by the rules of the House.

After his election, the Speaker/Chairman-elect is conducted to the Chair by the Leaders of the House and of the Opposition or by two members belonging to two main parties of the House. He bows to the House and takes his seat. The Leaders of every section of opinion in the House join in congratulating him most heartily. Then the Speaker/Chairman expresses his thanks to the Assembly/Council for the warm reception of his election.

The Governor's Address

The preliminary business of the first session after the general election is now complete and what next follows is the Governor's Address, informing the Legislature of the causes of its summons on the analogy of the "speech from the Throne" in the Parliament of the United Kingdom. This is common to every first session of each year.

On the date and time appointed by the Governor for this purpose, both Houses assemble together in the Legislative Assembly Hall and occupy the seats available to them irrespective of their party denominations or the House of which they are members.

The Governor on arrival is received at the main porch to the Legislative Assembly by the Speaker, the Chairman and the Secretaries to the Legislative Assembly and the Council and led in a procession along the main entrance to the Assembly Chamber and conducted to the dais. The arrival of the Governor is announced by the Assistant Secretary to the Assembly. A deep silence falls on the House and the Members remain standing till the Governor takes his seat in the dais. The Governor then delivers his address. This is really a statement of Government policy, the views of the Government on important matters together with a broad outline of the legislative intentions of the Government as envisaged at the time. He then leaves the Chamber accompanied by the Speaker and Chairman and the Secretaries to the Assembly and the Council in a procession in the same order as before to the portico where the Speaker and Chairman see him off. Members remain standing till the Governor has left the Assembly Chamber and then disperse amid animated conversation and merry laughter.

The two Houses assembled together to hear the Governor's Address cannot be said to be a Joint session in the sense of a meeting of the two Houses for the purpose of transacting any business under the provisions of the Constitution. Neither the Chairman nor the Speaker presides on that occasion. It is a problem therefore as to how to maintain order at that time. On the 6th May, 1952, when the Governor rose to deliver his Address, a member of the Council rose to what he called 'a point of order' and made a speech. After making his speech, he and several members of the two Houses left the Hall. Such a conduct on the part of the M.L.C. involved was taken to be a breach of privilege of the House and a motion for admonition to him on this ground was subsequently moved in the Council but was not pressed. As a check on such interruptions and disorderly conduct, the rules now provide that when the Houses of the Legislature are assembled together, no member shall obstruct or interrupt the Address either before or after the Address or during its duration, with any speech or point of order or in any other manner; and such obstruction or interruption shall be regarded as a gross breach of order of the House and shall be dealt with by the Speaker-Chairman as such at the next sitting of the Assembly-Council.

Discussion on the Address

Then follows a discussion on the matters referred to in the Address akin to the debate on the King's speech in the House of Commons on days allotted by the Speaker-Chairman in consultation with the Leader of the House and the Business Advisory Committee. Such discussion takes place on a Motion of Thanks moved by a Member and seconded by another Member, in the following form:

> "That an humble Address be presented to the Governor that the Members of the Madras Legislative Assembly/Council thank him for the Address delivered to the Members of the Legislature on . . . . . ."

The mover of the Motion of Thanks has an exceptionally difficult task to perform. In moving the customary Address to be presented to the King for his 'gracious speech' in the House of Commons, an eminent Member of Parliament once said:—

> "I have to forego all the delights of controversy and of political vituperation and restrict my remarks to a few unprovocative generalities and to a dull unpartiality—a restriction which will win for me, I am sure, the sympathy of every ardent controversialist in the House."

Following the English practice the debate in the Legislative Assembly falls into two parts, viz., (1) a general debate on Government policy especially in relation to the contents of the Governor's Address and (2) a debate on the series of amendments generally regretting omissions from the speech usually of alternative policies advocated by the Opposition. Those who took part in the discussion on the main motion are not allowed to take part in the debate on the amendments. In the Legislative Council however all the amendments are now moved after the Motion of Thanks has been moved and seconded and the debate proceeds on both the main motion and the amendments.

An opportunity to the Opposition

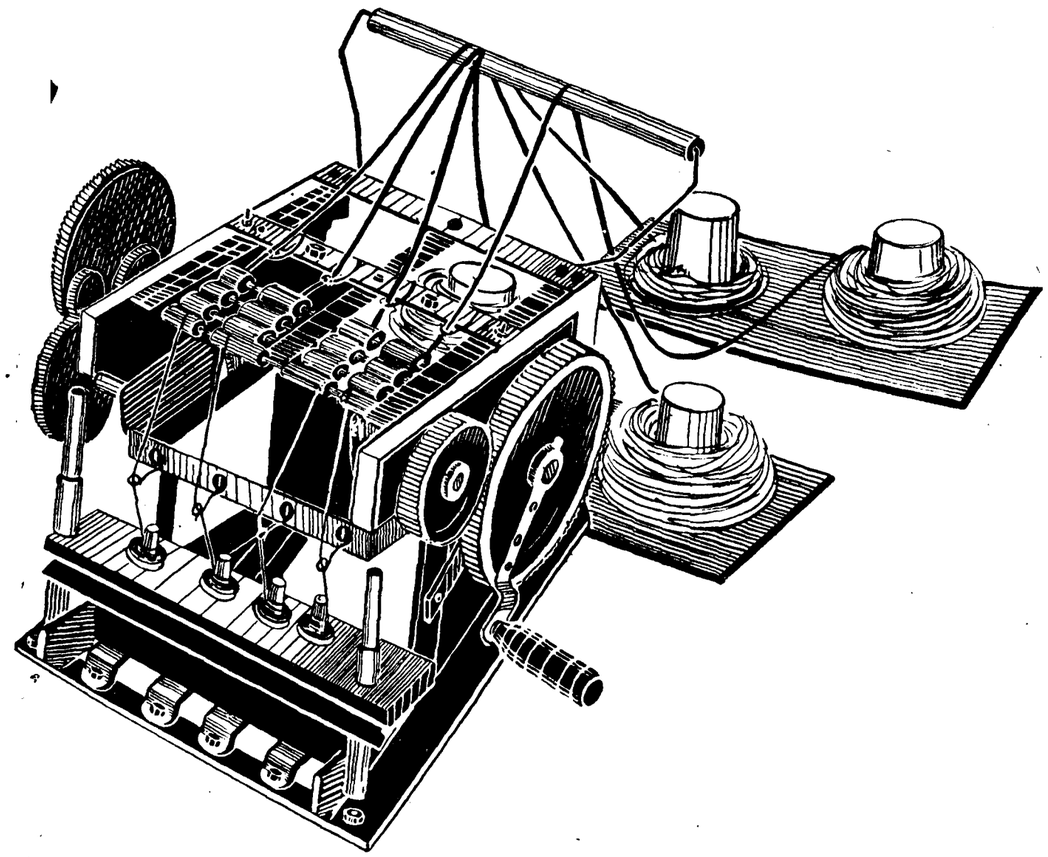
The essential nature of this initial debate at the beginning of the session is to give an opportunity to the Opposition in the House to raise major questions of policy. It also helps a new Government or the old Government carrying on in a new session, to judge whether the House approves that Government and their major policy or not.

The rules of debate relating to Government motions apply *mutatis mutandis* to the debate on the

(*Continued on page* 17)

Economics of the Ambar Charkha

By SRI J. D. SUNDRAM



The Charkha movement initiated by Gandhiji had two main objectives: provision of whole-time or part-time employment to a large number of people all over the country and complete decentralized production of an article of first necessity with a view to attaining self-sufficiency in it. Criticism of the movement by organized interests in general, and industrialists, economists and administrators in particular, has been and continues to be that the Charkha perpetuates obsolete methods of production, manufactures qualitatively inferior cloth at uneconomic prices, involves waste of national resources and hinders economic progress in all other directions.

The Charkha alone makes it possible to combine increased production of qualitatively comparable cloth with the provision of employment on a large scale; to generate as well as distribute simultaneously larger income over a significantly wider segment of the economy; and create thus just those conditions in which a socially desirable rate of capital formation, without distributing its austerity inequitably in the community, is possible. In other words, the Charkha alone makes possible economic progress without transitional social costs.

Family Equipment

The Ambar Charkha is the invention of Sri Eakambaranathan of Papankulam in Tirunelveli district in Tamil Nad. Eighteen inches long, sixteen inches broad and twelve inches high, the Ambar Charkha is essentially a family equipment and may be likened in size and in the scope occupied by it to a standard typewriter or a radio set. At its present stage of development, the Ambar Charkha has four spindles and is motivated by human power. It cannot, however, use ordinary handmade cotton slivers, and, therefore, carding and drawing machines have been specially designed to produce tubular cotton slivers for it. A set of carding and drawing machines can supply the daily cotton sliver requirements of four Ambar Charkas.

Basic Data

The spinning on the Ambar Charkha is light and even children and old men can operate it for 8 to 10 hours a day without strain. Its design and mechanism are simple and easy to understand. The operation of the Charkha to produce good, qualitative yarn does not require any special training or practice.

The average rated capacity of the Ambar Charkha is 3½ hanks of yarn of 14 counts per hour or 28 hanks of 14's per day of 8 hours. By minor adjustments the Charkha can be equipped to produce yarns in the range of 12's to 20's.

In quality, uniformity and tensile strength, the yarn of the Ambar Charkha is comparable with mill yarn, and, therefore, its introduction and development on an adequate scale may provide the means to keep handlooms in the country adequately supplied with their yarn requirements. The cost of the Ambar Charkha, according to present estimates, is around Rupees 80/100 each, and the cost of a Charkha unit is estimated at Rs. 500.

Mill Yarn and Handloom

Over 50 per cent of India's total mill yarn production during the period 1949–50 and 1952–53 was of counts 20 and below, and in 1949–50 and again in 1952–53, these counts accounted for 60 per cent and more of the total production. Yarns between 10's and 20's account for the major portion of yarns of 20's and below, and in 1952–53 they accounted for as much as 86·1 per cent of production. The off-take of yarn shows that the handloom sector is principal consumer of the mill yarn and since 1950–51 has accounted for over 70 per cent.

The handloom sector altogether depends upon the mills for their yarn supply, which has been on an average no more than 25 per cent of total production of low counts of yarn. In other words, healthy operation of the handloom sector of the textile industry depends entirely upon the availability of requisite volume of yarn.

Economic Significance

The economic significance of the Ambar Charkha lies mainly in its capacity to produce just that range of yarn, which constitutes the main strength of the mills. Alteration in the present Ambar Charkha to equip it to produce yarn ranges required by the handlooms in the country, on the one hand, and the creation of the necessary economic and legal condition in which its operations on a large scale is possible, on the other, can not only revitalize this threatened sector of the textile industry in the country, but also—this is more important—can immediately, or at any rate within a very limited period, provide employment for a considerable number of people.

Moreover, the provision of such large-scale employment is possible without sacrificing economy or productivity or quality of the product. As these have been the main points of criticism, they may be dealt with in detail.

Employment Potential

The employment potential of the Ambar Charkha shown below does not include indirect employment of the considerable number of handloom weavers. The indirect effects of the Ambar Charkha must, however, be constantly borne in mind in assessing the economic significance of the Ambar Charkha.

1. Average annual production of coarse cloth during the quinquennium 1948–53—170 crores of yards.

2. Yarn requirements for this production at four hanks of yarn per yard—680 crores of hanks.

3. Number of Charkha units required to produce this volume of yarn at 100 hanks per unit per day and 250 working days—2·72 lakhs.

4. Total investment for this number at Rs. 500 per unit—Rs. 13·6 crores.

5. Total full-time employment potential (at six persons per unit)—16·32 lakhs.

6. (*a*) Gross annual income at Rs. 1¼ per person per day and 250 working days—Rs. 61·20 crores.

(*b*) Gross income per head per month—Rs. 31–4–0.

7. (*a*) Net income (gross income minus depreciation at 50 per cent per year)—Rs. 54·45 crores.

(*b*) Net income per head per month—Rs. 27–13–0.

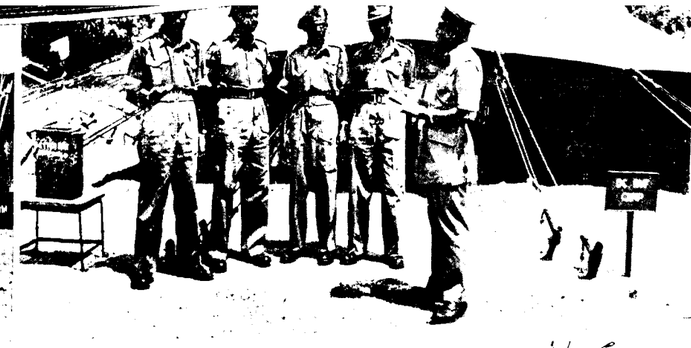
More Charkhas needed

The analysis of the employment potential is based on the assumption that consumption of coarse varieties of cloth continues at the present level—an assumption which is not valid. Firstly, the demand for coarse cloth in India is larger than that for any other variety; and any improvement in incomes is bound to be followed by an increase in the demand for it. Secondly, coarse cloth requirements of families (average 5 persons per family) in the low income groups (Rs. 1,000 to 2,000 a year) estimated at about 5 crores, would need a total production of 250 crores of yards to provide even 10 yards per capita.

Therefore, to produce a progressively rising volume of socially desired types of cloth adequate to meet the minimum requirements of the people, a considerably larger number of Charkha units would be necessary and consequently employment and income potential would be much larger than shown in the illustration.

Productivity

While the employment potentialities of the Charkha are usually conceded, it is claimed that it is uneconomic and involves wastage. The better to judge the social implications of mechanized and hand-powered means of productivity, the table below



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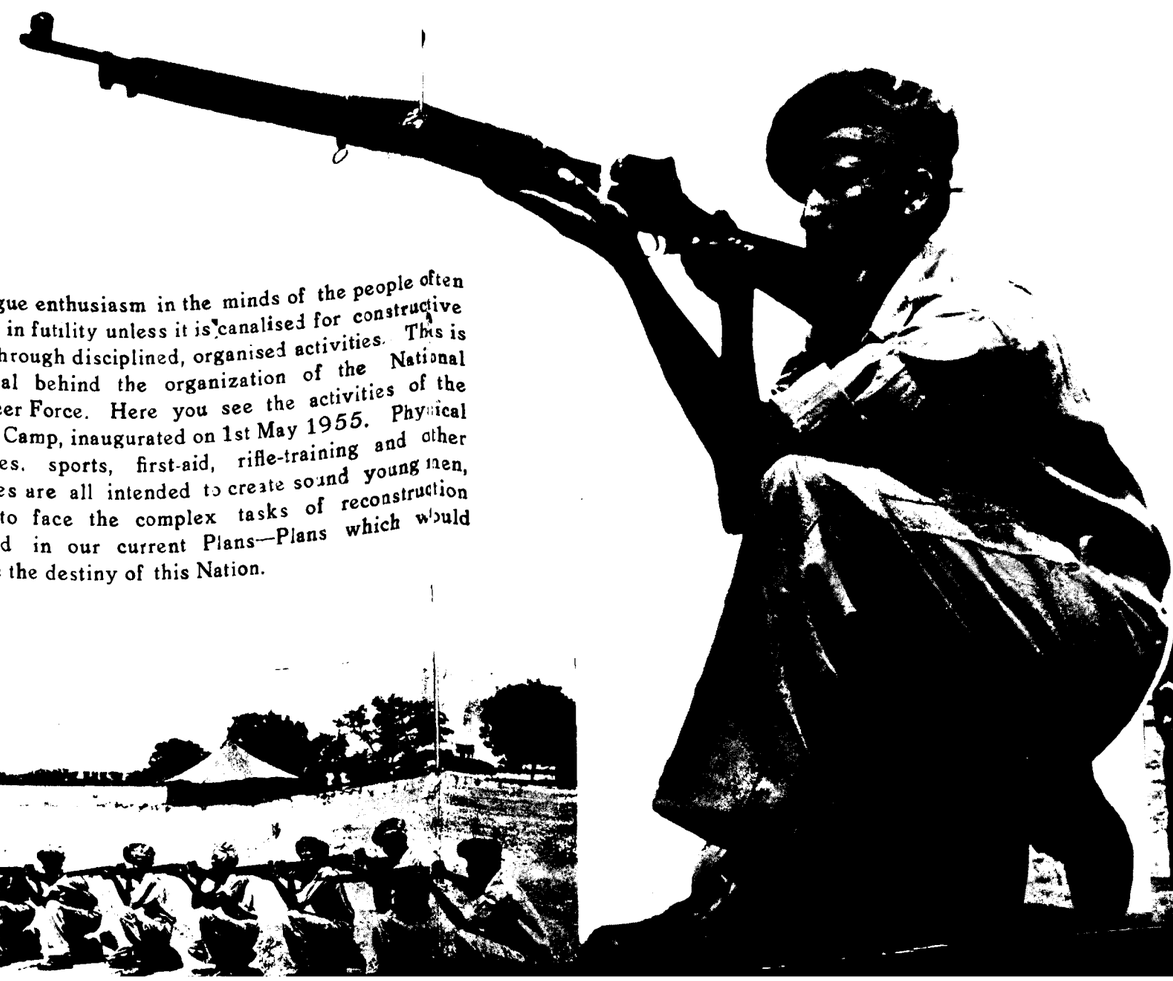
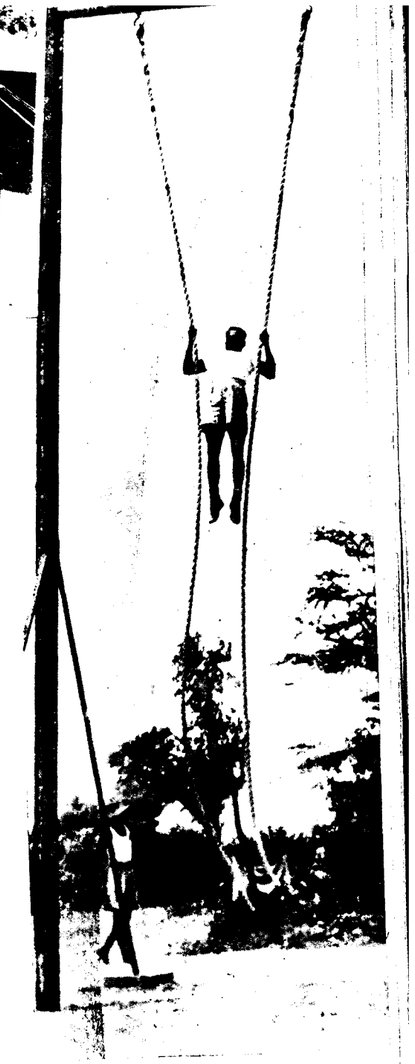
16C

THE NATIONAL VOLUNTEER FORCE





Vague enthusiasm in the minds of the people often ends up in futility unless it is canalised for constructive action through disciplined, organised activities. This is the ideal behind the organization of the National Volunteer Force. Here you see the activities of the Madras Camp, inaugurated on 1st May 1955. Physical exercises, sports, first-aid, rifle-training and other activities are all intended to create sound young men, ready to face the complex tasks of reconstruction involved in our current Plans—Plans which would reshape the destiny of this Nation.

presents comparative production data of the Ambar Charkhas and mills.

	Mills.	*Charkhas.*
	YDS.	YDS.
1 Productivity per rupee invested.	4·5	12·5
2 Productivity per man-day.	21·3	4·5
3 Employment per Rs. 1,000 invested.	6·75	12·0

The broad comparison of the productivity data shows that the yield per rupee of investment is heavi y in favour of the Charkhas or, in other words, a rupee could be made to go further and yield more in terms of output and social benefit. Secondly, the higher productivity per man-day in mills as compared with that in the Charkhas is more than offset by higher employment per Rs. 1,000 invested as well as higher output per rupee invested. Thus, production of coarse cloth by Charkhas and handlooms employs larger number, produces a large volume of cloth and ensures wider distribution of the benefits of industrial activity.

Transitional Problems

The introduction and development of the Ambar Charkha as visualized above may, however, present several transitional problems. Chief among them is that posed by the poverty of the average part-time spinner who does not have the financial or other resources to acquire an Ambar Charkha of his own. This need not, however, delay its introduction because the majority of the part-time spinners to-day are interested in improved charkhas that can produce larger volume of yarn and are also willing to work longer hours provided they are assured a higher monetary return. Given their readiness to work longer to earn more, distribution of charkhas by multi-purpose co-operatives on an instalment payment basis is possible as is shown below.

It was shown above that an Ambar Charkha can produce on an average 25 hanks of yarn per day of 8 hours. If a spinner works 10 or more hours in the interest of earning more and acquiring a more productive asset, he can easily produce six or twelve hanks more per day. On the basis of an anna per hank of yarn, he can, therefore, earn a minimum of Rs. 1-9-0 a day, and about 3 annas extra for every additional hour of work over the usual eight. This rate of earning gives him a sizable margin over his present earnings which vary between 8 annas to 12 annas a day.

Co-operative Framework

If the multi-purpose co-operative evolves a system which permits payment in kind and a spinner pays per day eight hanks of yarn, introduction of the Ambar Charkha can be smoothly effected. Acceptance of payment in kind also may not lead to a glut of yarn, because a multi-purpose co-operative is likely to act as a co-ordinating agency and will, therefore, be responsible for the regular supply of yarn to handloom weavers in its region.

In the conditions which are likely to exist, markets for the products of handlooms are both assured and progressively expanding, because incomes of the workers are likely to increase simultaneously. Therefore, higher output of yarn and cloth may well serve to meet increased effective demand for cloth.

The resources needed for the multi-purpose co-operatives to finance distribution of charkhas on the instalment payment basis are quantitatively small; and, once the basis of argument is accepted, the Centre or the Reserve Bank may be able to lend the required finance for a period not exceeding a year.

Rational Distribution

Of greater complexity is the problem of smoothening the transition from part-time to full-time spinning without giving rise to transitional unemployment among part-time spinners on the present charkhas. The gradual replacement of part-time spinners by full-time professional workers must be accompanied, side by side, with rational distribution of available employment opportunities by the multipurpose co-operatives.

In other words, the role of the multi-purpose co-operative in this transition is not merely the distribution of Ambar Charkhas and purchase and sale of yarn to handloom weavers, but also distribution or allocation of fields of work so that each one may be provided. In actual practice, this aspect of the problem is likely to present immense difficulties of enforcement unless co-operation is genuine.

Pricing of Khadi

Another equally complex problem that the Board may face is the pricing of the Khadi woven out of the yarn of the present charkhas and Ambar Charkha. Cloth from Ambar Charkha yarn is likely to be considerably cheaper than the present Khadi as a result of cheaper yarn and lower weaving charges, and its increased availability may make sale of the present Khadi at present prices impossible. It is for the Board to evolve an appropriate marketing policy which, while passing on to the consumer the benefits of cheaper production, does not deprive the producer of his minimum income.

This may be achieved by some form of graduated reduction in the prices of both the present Khadi and Ambar Charkha cloth during the transitional period. This problem is likely to be there so long as stocks of Khadi remain unsold and so long as part-time spinners continue. Though complex, this problem is essentially transitional, because, unlike the present Khadi, the production of the new cloth and yarn is likely to create a wider and ever expanding local market owing to a sizable increase in effective demand of spinners and weavers.

Graduated reduction of prices phased with the gradual change over from part-time to whole-time spinning may well provide an effective solution.

Policy Implications

The acceptance of the thesis developed above implies several vital changes in Government's outlook and policies. The economics of the Ambar Charkha detailed above necessitates a revision of the present outlook as regards the textile industry; that hands-pinning of yarn on charkhas progressively improved to accord with the nation's capacity to adjust itself to them, is the most effective economic as well as social policy, and that this will assure the nation its requirements of an essential article of consumption of requisite quality and quantity, and at the same time generate at each stage adequate additional income to buy the commodity; and that, consequently, the handloom

N.C.C. CAMP AT CHINALAPATTI

Decades and decades of acaulay inspired education created in our country a class of people divorced from the mother earth, from the hard realities of life around them. But now that the accent has shifted from "the white collar mentality" to the "gospel of dirty hands", we find a new generation growing up with new values. They are intellectually equipped of course, but they are also in harmony with the soil, with the sprouting seeds and the aroma of the earth that had thrilled the tillers in all climes and in all ages.....!

N.C.Cs.—MAKING A ROAD

Here, you see the young Collegeans free from the white collar, figuratively and literally. They are actually making a road and not turning the first sod, as the great visiting dignitaries would do in the ceremonial style. And you see the business-like road which they had finished (*bottom-right*), near Chinalapatti, Madurai, as good as any carried out by your experienced P.W.D. men or contractors.

sector is as important for social amelioration as for economic development, must be recognized and policies appropriately altered in accordance with the changed outlook.

This changed outlook will naturally lead to changes in policy. The cotton textile industry will then be divided into the mill and handloom sectors, the former in productive charge of all medium, fine and superfine varieties of cloth and requisite counts of yarn, and the latter of all coarse varieties of cloth and low counts of yarn. Once this broad division of the industry and spheres of production is effected, Government may examine the possibilities of undertaking the manufacture of Ambar Charkhas on a rationalized basis, because production tools must be made available at the cheapest prices.

Such a change in productive responsibility may help reduce costs of yarn and cloth production and, therefore, of prices. Moreover, during the initial stages, Government may assign appropriate priorities of transport for charkhas, and as an aid to transition, provide exemptions or concessions, in freight rates, sales, octroi and such other taxes. Thus, Government can help hasten the pace of the economic transition from a lower to a higher level without serious economic or social distress, by appropriate and judicious adjustments in policy and outlook.

Idle Resources used

Measurement of productivity, income and employment are tools of economic analysis to facilitate conservation and utilization of resources in accordance with a country's scale of social and economic priorities. Planning of economic development seeks no more than the utilization of idle resources of a country for maximum social advantage.

As India's resources to-day consist mainly of the vast, perishable resources in man-power, measures that direct these resources into productive channels may be construed as not only socially important, but also the most economic. Viewed from a different point of view, India has relatively smaller fund of investment capital than man-power. In such circumstances, per capita productivity per manday has smaller significance than productivity and employment per rupee invested because utilization of vast resources in man-power in productive operations results not only in an increase in total national output, but also ensures simultaneously a wider and more even distribution of the incomes generated in the process. Continued over a period of time, this process increases directly the capacity to save and invest.

In other words, this lays the true foundations for a gradual rise in the rate of capital formation to enable the economy to progress towards higher levels of per capita physical productivity, income and consumption. While the process is no doubt relatively slower, it avoids inequitable distribution of the benefits or burdens of economic progress and thus smoothens economic progress.

Economic Progress

The introduction of the Ambar Charkha, objectively analysed, can thus provide the true basis of gradual but certain economic development, and immediately, or at any rate over a relatively short period of time, provide increased output of socially needed varieties of cloth, qualitatively comparable with mill cloth, increased volume of employment and socially better distribution of a considerable volume as income—*Khadi Gramodyog.*

The Voters

Under section 23 of the Representation of the People Act, 1950, the electoral rolls of all Assembly and Parliamentary constituencies are revised every year. The number of voters in each district according to the final electoral rolls of 1954 are published below for the information of the public. The revision this year has been taken up and the draft electoral rolls will be preliminarily published from about the middle of June next when opportunity will be given to qualified persons; omitted to be included in the rolls to make their claims within the prescribed time and also for the filing of objections to any entries in the draft rolls.

Name of the district.	*Number of voters in 1954.*
1 Madras City ..	8,65,515
2 Chingleput ..	10,37,918
3 North Arcot ..	15,22,913
4 Salem	18,25,818
5 Coimbatore ..	17,98,041
6 South Arcot ..	15,67,040
7 Tanjore ..	16.69,369
8 Tiruchirappalli.	16,44,984
9 Madurai ..	16,51,616
10 Ramanathapuram.	12,24,495
11 Tirunelveli ..	14,03,419
12 The Nilgiris ..	1,62,833
13 South Kanara	9,29,424
14 Malabar ..	25,98,515
	1,99,01,900

(*Continued from page* 13)

Governor's Address. The discussion on minor issues on the lines of a Budget debate is discouraged. It has also been further pointed out that following the practice in the House of Commons the debate on the Bills mentioned in the Governor's speech should not be anticipated through their subject-matter being canvassed in the course of the discussion on the address.

On the conclusion of the discussion and the Government reply, the amendments and then the main motion are voted upon. The Speaker/Chairman communicates the Motion of Thanks as passed by the House to the Governor and also reports to the House the Governor's reply to the same. In the House of Commons, the Privy Councillors are selected to present the address in reply to the King's speech in person to the King.

The business of the session now gets into full swing. The sittings of the House within the session are continued from time to time by adjournment by the Speaker/Chairman as the case may be and the session continues till it is terminated by prorogation or by dissolution by the Governor.

The President's Police and Fire Services and Police Medals

On the 19th February 1955, at a Parade held on the Pudupet Grounds, Madras, the Governor of Madras presented the President's Police and Fire Services and Police Medals to the Officers and men noted below in the presence of a large and distinguished gathering :—

President's Police and Fire Services Medal for Gallantry

Sri P. Kunhiraman (Lance Naik and Temporary Havildar-Major No. 2500), Jamedar No. 80, Malabar Special Police, Malappuram.

Police Medal for Gallantry

Sri A. Ratnavelu (deceased), Police Constable No. 3347 of the Madras City Police (Posthumous Award ; presented to his widow Srimathi Lakshmi Bai).

President's Police and Fire Services Medal for Distinguished Service

Sri K. Sethumadhava Menon, Deputy Superintendent of Police and Assistant Commissioner of Police, Madras City.

Srimathi Lakshmi Bai (wife of the late Police Constable A. Ratnavelu), who was presented the Police Medal for gallantry by the Governor on behalf of her husband.

Police Medal for Meritorious Service

Sri H. Brown, District Superintendent of Police (Retired).

Sri T. Ramanujam, District Superintendent of Police, Chingleput.

Sri K. Govindan Nair, Subadar, Malabar Special Police, Malappuram.

Sri S. Ramalingam, Inspector of Police, C.I.D., Madras.

Sri K. G. Narayanaswamy, Inspector of Police, C.I.D., Madras.

Sri Usman Syed Ahamadullah, Inspector of Police, Madras City.

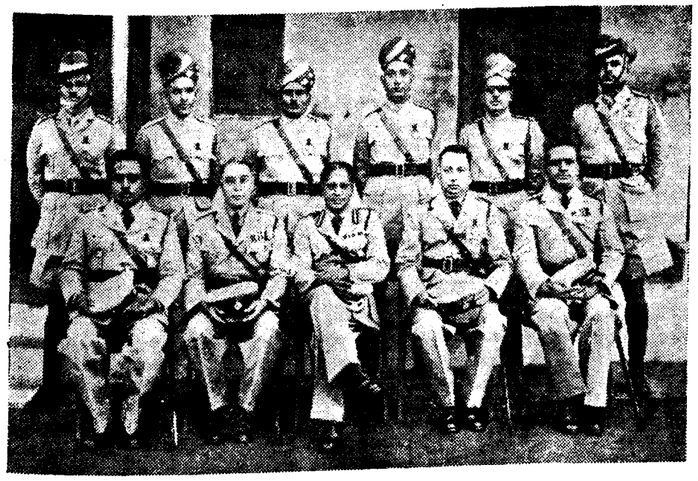
Sri T. A. Mariappa (deceased), Sub-Inspector of Police, the Nilgiris District.

ri A. Ratnavelu (deceased), P.C. No. 3347, Madras City Police.

Sri S. Ramalingam, Inspector of Police, Crime Branch, C.I.D., Madras, who was awarded the Police Medal for meritorious Service.

Srimathi Kamakshi Ammal, wife of the late Sub-Inspector T. A. Mariappa, who was presented the Police Medal for meritorious service by the Governor, on behalf of her husband.

PRESIDENT'S AND POLICE MEDALS FOR GALLANTRY AND MERIT, 19th FEBRUARY 1955.



Sitting :—Sri U. Gomathinayagam Pillai. Sri H. Brown. Sri V. R. Rajaratnam, B.A., I.P., Inspector-General of Police,. Sri T. Ramanujam. Sri K. Sethumadhava Menon.
Standing :—Sri K. Govindan Nair. Sri S. P. Nellainayagam. Sri M. Naina Durai. Sri K. G. Narayanaswamy. Sri U. S. Ahamadullah. Sri P. Kunhiraman.

Sri S. P. Nellainayagam, Inspector of Police, Special Branch, C.I.D., Madras.

Sri U. Gomathinayagam Pillai, Inspector and Officiating Deputy Superintendent of Police, South Arcot district.

Sri M. Naina Durai, Inspector of Police on Special Duty, C.I.D., Madras.

Sri T. A. Mariappa (deceased), Sub-Inspector, The Nilgiris district (died after the announcement of the award ; presented to his widow, Srimathi Kamakshi Ammal).

(*Continued from page* 11)

nurture love, affection and sympathy for Wild Life and this will go a long way in the conservation of Wild Life in the country, as the children of today are the citizens of tomorrow. I wish this question to be examined by all concerned and necessary action taken to achieve this goal.

Improvement possible

The condition of Zoos in general, as you will all agree, is capable of a lot of improvement. As they play an important part in education and development of a love for Wild Life, an attempt should be made to make the Zoos as representative of Wild Life as possible. The zoo should be a large area where animals can move about freely so that visitors can see them in their natural state and study their habits. Otherwise the very object of maintaining the Zoo is defeated. I am glad that the Board has felt the need for the maintenance of Zoos at a high standard of efficiency and has suggested the modelling of Administration of Zoological gardens of various States on the lines of Alipore Zoo at Calcutta.

I understand that the Second Session of the Indian Board for Wild Life held at Calcutta in January-February this year considered the question of exchange of animals between the various Zoos in the country and abroad and felt that the procurement of animals for the Zoos has been a serious problem, particularly from foreign countries. I am glad to mention that the Board is taking necessary steps to overcome this difficulty. It is true that all our Zoos are mostly stocked with the indigenous species, and foreign species will certainly be a good addition.

While much importance may be attached to the scientific and educational value of the Zoos, the laymen's point of view should not be overlooked. I would like you to give your earnest consideration to the provision of amenities to the public visiting these institutions for recreational purpose. Posters in the streets and public conveyances showing the location of the Zoos in cities will be a welcome factor to encourage the public to pay a visit to the institutions. Charts of the plan of the Zoos with pictures of the important exhibits, and information about their location, transport facilities, etc., can be of immense value in popularizing zoos. I do not wish to dwell too much on this subject and leave it to the ripe experience of the Superintendents to consider the question of implementing them.

You will all be glad to know that the Madras Zoo is celebrating its Centenery this year and I hope the Superintendents of other Zoos who are assembled here will visit the Madras Zoo and give the benefit of their advice for the improvement of the Zoo. Gifts of animals not represented in this Zoo will be most welcome on this occasion.

It is my most pleasant duty now to declare the Conference open and to wish it every success. May the denizens of the forests and the dumb animals under your charge also benefit by this Conference. Jai Hind.

[*Speech of the Minister for Agriculture on the occasion of the inauguration of the first Conference of the Zoo Superintendents of the Indian Union held in the City on May* 2, 1955.]

Preventive Sera and Vaccine : Free supply to N.E.S. Areas.

The Government have directed that vaccines and sera produced at the Institute of Veterinary Preventive Medicine, Ranipet, be supplied free of cost for use in the National Extensional Service areas.

It may be recalled that free supply of vaccines and sera has already been ordered to be supplied for use in the Community Project areas.

The National Volunteer Force

The Role of the Youth

Free India is on the march. It is necessary for us to remember that freedom has its privileges as well as its responsibilities. There is no doubting the fact that free India's progress and prosperity would very largely depend on how its youngmen are trained to face the problems of immense magnitude that they would encounter and in whose solution they will play a major role. What pattern the country would follow to a great extent depends on how our young men would canalise their latent powers of vigour and creativity for the progress of the nation by developing qualities of self-confidence, fearlessness and discipline.

The National Volunteer Force inaugurated on the first of May all over India is a recognition of the need to guide our young men in their responsibilities towards building a new India. Their undoubted talents, immense intellectual prowess, unquestionable sense of discipline, unalterable faith in self reliance have to be organized, so that under expert guidance they become an asset to the nation. The National Volunteer Force has been created exactly to attain these objectives. On May 1, the Hon'ble Finance Minister, Sri C. Subramaniam, inaugurated the Madras Branch. The Minister in his speech laid great emphasis on the need to develop qualities of fraternity and self-reliance. He appealed to the trainees to regard themselves as members of the same family. He called upon them to inculcate self-confidence among the people.

The Camp—a unifying Force

A look at the activities of the camp would show how the 500 trainees, who will undergo training at Madras for a month, are getting trained with great zeal and enthusiasm in the ways and means of reconstructing the nation. Drawn from various walks of life and from different social and linguistic categories, they are a heterogeneous mass, but by the fraternal manner in which they are getting trained, forgetting barriers of all descriptions, they proclaim with one voice their determination to carry on their endeavours with unity of thought, belief and action.

Sri C. Subramaniam, Minister for Finance, who inaugurated the National Volunteer Force Training Camp near Fort St. George on 1st May 1955, chatting with some of the volunteers.

The National Volunteer Force, as we saw it in action, is voluntary in every sense of the term. There is no compulsion, either from within or from without. Though their activities are patterned on the regimented life of the army, the unique feature of the National Volunteer Force is that discipline here is cultivated and not imposed, spontaneous and not coerced. It is significant that they do not come under the Army Act. There is no coercion here but there is absolute freedom given to the trainees to develop their own sense of discipline. What they undergo is not a regimented, rigid, strait-jacketed, artificial kind of uniformity, but a discipline that is spontaneous, self-propelling and self-reliant. The National Volunteer Force as we saw it in action, in practical demonstration, was a kind of democracy, inspired by its three principles liberty, equality and fraternity. The officer-in-charge of the camp told us that infractions and deviations of discipline which are rare, are controlled by the trainees themselves. When some trainees unwittingly commit acts of indiscipline, other trainees control them and guide them and they are quickly brought under control.

What impresses one most, looking at their activities is the cheerfulness, vigour, enthusiasm—all spontaneous, with which they are getting trained. The officer told us that the trainees of their own volition practise at night—the retiring time, all that was taught to them during the course of the day.

Busy Programme

The trainees go through a busy programme, all through the day. Their activities start at 6–30 a.m. with physical training and end with games in the evening. Facilities are provided to play all kinds of games like Volley Ball, Foot Ball, Hockey, etc. They are given mass drill and rifle training also. Activities of the camp are not confined merely to physical exercises. Expert men give them lectures on the Five Year Plan, Social hygiene and First aid, etc. The national language is taught to them by a trainee himself. The intellectual part of the activities of the camp is designed to impress on the minds of the trainees, some of whom are illiterate, the magnitude of the tasks facing the nation, the manifold reconstruction programmes the Government is engaged in and as to how they themselves could co-operate to make the development programmes a success.

The camp is not without its recreation club. Facilities are provided for the trainees to relax, when they have finished with their daily programme of intense activity. Various indoor games like playing cards, carroms are provided. Also, some of the leading English and vernacular dailies are provided to keep the trainees abreast of the latest developments in India and the world. Medical facilities for those who are wounded or injured, etc., are also provided.

It would be virtually impossible for the camp comprising 500 trainees to run efficiently without dividing it into nicely drawn out categories and groups. The 500 trainees are divided into 'four companies' each consisting of 125 trainees. Each 'company' is sub-divided into five platoons of 25 trainees each. Each company is commanded by a Junior Commissioned Officer and each platoon commanded by a non-Commissioned Officer.

Each trainee will be given a certificate of merit after completion of training and Rs. 15 for pocket expenses. The outstanding among the 500 trainees will be invited to Delhi at Government expense to take part in the Republic Day parade when they will receive certificates of merit.

The Spirit of Camaraderie

What impresses one most is the spirit of camaraderie and *esprit de' corps* that they maintain. Here is a fine example of what India's youth can do for their country, at each step, a symbol of resurgent India progressing towards a destination of peace and prosperity for all. An efflorescence of youth, brave, fearless, undaunted and unflinching in their determination to make the country prosperous by their selfless service and disinterested zeal for service to the people. This is one other example of what India's youth can do when they are disciplined, organized and guided.

Rural Price Index numbers for the month of February 1955

The index numbers of rural prices for the month of February 1955 (with the year ending 30th June 1936 as base or 100) for the several centres were as follows :—

Rural Centre.	*District.*	*Index number (base : July 1935 to June 1936 : 100).*
Puliyur	South Arcot	369
Agaram	South Arcot	347
Thulayanatham	Tiruchirappalli	444
Eriodu	Madurai	358
Gokilapuram	Madurai	392
Kinathukadavu	Coimbatore	389
Koduvalli	Malabar	470
Guduvancheri	Chingleput	388
Kunnathur	Chingleput	393

Milk Day Celebrations at Cuddalore : The Collector Sri A. Uthandaraman, I.A.S., distributing milk to the disabled poor

N.C.C. Camp at Chinalapatti

The Spirit of Social Service

Community Projects have caught the imagination of our people and there is successful and satisfactory response everywhere. Our leaders wedded to the cause of establishment of a welfare State in India, have often emphasised and exhorted the need and importance of Social Service from all our people, irrespective of their social status and position. To inculcate this spirit of Social Service among the students of our country, several organizations are formed in the Schools and Colleges, namely, the National Cadet Corps and the Auxiliary Cadet Corps. It has now become a regular feature in the N.C.C. and A.C.C. organizations to conduct Social Service Camps annually. In order to facilitate the much needed Social Service, the N.C.C. and A.C.C. organizations of schools and Universities seek the help of the National Extension Service.

The N.C.C. Cadets of the Senior Division of Second Circle consisting of the colleges of our State have camped at Chinalapatti, Madurai district to construct a road from Chinalapatti to Athur, which is about 4 miles long, about two and half miles from Chinalapati to Sembathi-Dindigul road and one and half miles from this road junction to Sembathi-Palni road junction. The strength of the Camp is 36 Regular and N.C.C. Officers, 600 N.C.C. Cadets, 60 J.C.Os. and N.C.Os., 50 Junior Division N.C.C. Officers and 130 A.C.C. Teachers. With the civilian staff, the total strength of the Camp is about 1,000 and is commanded by Wing Commander P. C. Ramakrishnan, Circle Commander No. 2 Circle Cadet Corps.

N.C.C. CAMP AT CHINNALAPATTI : Cadets engaged in making a road

The Villagers Join

The task was taken in consultation with the Director of Community Projects, Sri N. E. S. Raghavachari, who inaugurated the laying of the road on 25th April 1955. The need for this road connecting the adjacent villages to the main road was long felt by the villagers. The villagers had jubilantly joined the Cadets to work along with them for the completion of the road. Several villagers in whose fields the road runs have agreed to give up the land free without compensation. The road is 24 feet broad with trenches of trapeziam shape, six feet wide one and half feet deep and two feet at the bottom. The help of two bulldozers for road clearance was availed of and villagers have blasted the few rocks that lay on the road and the trenches.

Healthy Competition

The Camp is organized into two Battalions A and B, each with 300 Cadets for administrative purposes. Each Battalion has got 3 Coys. divided into platoons and sections. There is keen and healthy competition between the two battalions in the construction of the road. The work starts at 5-30 a.m. in the morning and each Battalion is allotted a particular length of road everyday to be finished. The Cadets start working at 5-30 a.m. and generally

(*Continued on the page* 24)

N.C.C. CAMP AT CHINNALAPATTI : Auxiliary Cadet Corps teachers learning squad drill

Medical Uses of Quinine

By LT.-COL. SANGHAM LAL, F.R.C.S., Director of Medical Services, Madras

Efficacy known Early

It has been said that the virtues of the cinchona bark were known to the tribal medicine man of South America who has possibly employed extracts of the plant growing in Peru for centuries before the Spanish colonization. The name of the bark is reported to have been given in 1638 as a result of its efficacy in the legendary case of the Countess of Cinchon, the wife of the Spanish Governor of Peru.

The barks of the various species of cinchona contain about twenty alkaloids which resemble one another in their chemical and pharmacological properties. Of all the alkaloids, the laevorotatory quinine and the detororotatory quinidine are the two which have found maximum use in clinical practice. Quinidine is a very valuable drug in the treatment of irregularities of the heart where the stimulus production for the heart's contractions has run amock. There are certain individuals who have recovered from auricular fibrillation who must have a maintenance dose of quinidine to avoid the possibility of a recurrence of the irregularity. There was a lawyer in South India who, during the War years was more worried about the availability of his ration of quinidine than of his ration of rice.

Best "Specific" for Malaria

Quinine has long been known as the best example of a "specific" in treatment of Malaria. It is because the malarial organism is infinitely more susceptible to the action of quinine than other living cells. Several theories have been offered to explain the exact action of quinine on the parasites. There is no need to go into them now. But there is no doubt about the very dependable action of quinine on the asexual forms of the parasite.

Apart from malarial therapy, quinine has been used in small doses as a "bitter" an hour before food to improve subnormal appetite. Many tonics therefore contain small amounts of quinine. For several decades it has been used in combination with ergot to promote uterine contractions after child-birth. In combination with Urea hydro-chloride it has been used as a sclerosing agent in the treatment of internal piles by injection.

Certain Toxic Effects

There are certain toxic effects of quinine which may develop in some persons, even with small doses, a manifestation of the curious 'idosyncracy' they have to quinine. The symptoms of Cinchonism are noises in the ears, skin rashes, vomiting and diarrhœa.

The cinchona bark of commerce is obtained almost entirely from India and Java. During the last war, supplies of quinine from Java and Malaya became unavailable to the Allies. This led to an intensive search for new synthetic anti-malarials. Thousands of them were "screened" by estimating their efficacy in laboratory animals infected with malaria. Of them, chloroquine, camaquin, mepacrine, paludrine and primaquine are the best known and most useful. The introduction of these synthetic anti-malarials has made us ponder and ask ourselves the question whether there is any further use for quinine at all. In fact, Pharmaceutical Journal of 12th July 1947 said :

> "One is left to conclude that as cinchona cultivation will continue in Java, the development of further plantations need not be encouraged."

But that was at a time when the newer anti-malarial drugs had not been tried out completely. We now know that the early claims that paludrine could effectively suppress malarial paroxysms with just one tablet are untenable.

Clarifiers of the New Quinine Factory at Cinchona on the Anamallais

The Quinine refining unit of the New Quinine Factory

Most workers in the field are agreed that in the treatment of acute paroxysms quinine is still the most dependable drug.

This becomes obvious when we realise that the drug is most effective against the organisms in their least resistant 'amœboid' forms. Whenever possible, one prefers to start the treatment with quinine although it may later be replaced by the newer anti-malarials.

Quinine, the most Dependable

In the grave emergency of cerebral malaria which should always be considered as the cause of coma when other known causes of unconsciousness have been carefully excluded in the tropics, quinine by the intravenous route is the most dependable treatment. The drug is usually administered very slowly in a large volume of saline.

There is considerable evidence in recent literature to show that the relapse-rate in benign tertian malaria is least when the treatment employed has been quinine followed by pamaquin or primaquin. It has been shown that such combined treatment is definitely superior to any of the synthetic anti-malarials in keeping down the relapse-rate.

Great advances have taken place in the control of malaria both by chemo-prophylasis and by dealing with the insect vector, the mosquito. In Brazil chloroquine has been incorporated into common salt distributed by Government agency. Even so, the use of residual insecticides for the attack on the mosquito has been considered the best method of malaria control. In South India exceedingly gratifying results have been achieved in Wynad and the Anamalais. It is certainly going to take a very long time to completely rid our vast continent of malaria. We are therefore not likely to find the manufacture of quinine superfluous or unnecessary.

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return after 12 noon. The Cadets get their morning tea before 5-30 a.m., breakfast at 8-30 a.m., lunch at 1o' clock, evening tea at 3-30 p.m., and dinner at 7-30 p.m.

The messing arrangements, inspite of the acute shortage of water in this place, is really laudable. The 6th Madras Medical Coy. N.C.C. attends to the medical and sanitary requirements of the Camp. The Cadets and the officers are living in tents. The technical service of 3rd Madras Engr. Pl. N.C.C. and 2nd Madras E.M.E. Sec. N.C.C. is of very great value in this road work. Thanks to the service of the 5th Madras Signal Section N.C.C. of Annamalai University, the work-spot and the other areas connected with the Camp are all linked by telephone.

The Devangar Educational Association of Chinalapati have rendered very valuable service to this Camp by throwing open their school buildings and the grounds for the Camp use. The District Board of Madurai has allowed the secondary school at Chinalapati for housing the A.C.C. Teachers' undergoing training.

Military Training

Military training is also a part of this Social Service Camp. One third of the Camp period of 21 days is devoted for military training of the Cadets. Fifty Junior Division Officers of N.C.C. are attached to this Camp for a refresher course of 21 days, in Drill, Arms Drill, Weapon Training, Map Reading, Field Craft, Section leading and other military subjects.

One hundred and thirty A.C.C. teachers are also attached to this Camp for basic training for 14 days in Physical training, Squad Drill, First Aid, Hygiene, Sanitation, Citizenship, etc.

Cost of Living : Mofussil Centres.

The cost of living index numbers for low paid employees for the different mofussil centres for the month of March 1955 are furnished below.

(Base : year ended June, 1936 100).

Centre.	*Cost of living index numbers for March* 1955.
Cuddalore	325
Tiruchirappalli ..	348
Madurai	323
Coimbatore ..	369
Kozhikode ..	393

Once Upon a Time They Were Drunkards

A Human Problem

There are certain issues and problems which can take a lot of retelling. For instance, there are issues which involve the lives of human beings. That is not like a mathematical problem. You can't of course listen to a problem in mathematics more than once and yet pretend to be interested in it wholeheartedly. But when you discuss or assess the results of prohibition in a particular locality, men with a heart can never say they are bored. Because pictures of individuals pop up in their minds. After all most of us have come from villages. And who does not have in his mind the picture of at least one or two miserable specimens who, sodden with liquor, became the object of derision and contempt in the village. Who does not remember the distant howling of a "song", the conversation with all the animate and inanimate objects on the way and the chorus of shouts of the urchins : "So and so is coming from the toddy shop. Let us have a look."

Sri K. Kamaraj Nadar, Chief Minister, inaugurated the Kinnigoli Rural Co-operative Bank in South Kanara during his recent tour of the district

Tainted Money

Yes it was entertainment for village urchins. But what an entertainment! It was entertainment at the expense of a miserable human being, who for the moment at least had ceased to be human. This stressing the obvious is called for because auditorium-wise economists and publicists have a way of forgetting human beings while discussing about "ways and means". Of course money has to be found for reconstruction. But if that money is to be raised after the deliberate adoption of a policy which tends to debase human beings, then that money is tainted and no amount of good "ends" can justify that "means". Mahatmaji taught us that lesson and in our frantic attempts to raise money we should not forget that basic tenet.

Now let us peruse, cursorily though, through the pages of reports sent by Amelioration Officers from all parts of this State. All of them are human stories : short stories in form, but real sagas in content.

Says the report from Madurai :

"Subbiah Samban, son of Mari Samban, aged about 58 years, belonging to S. Melapatti village in Tirumangalam taluk is an ex-addict. He used to drink to his heart's content and create scenes. His family suffered a lot during the pre-prohibition days. After the introduction of Prohibition, a great change has taken place in the ex-addict's behaviour. He has purchased two acres of dry land and he and his family are leading a peaceful life now."

Can't you visualise the husband and wife sitting on the pial of the house and discussing about the future of their children ?

He earns more

From Tirukoilur circle, Tiruchirappalli district comes this story :—

"Sri Ponnuswami, a member of Thensiruvalur Co-operative Society in Kallakurichi taluk has benefited much on account of Prohibition. Before the introduction of Prohibition, he was an addict and used to spend all his earnings towards intoxicant drinks. There was no peace in the house and his wife and children suffered a lot. Now his socio-economic condition has improved very much and has purchased lands worth Rs. 2,500 in addition to having a net cash of Rs. 500 with him. He has cleared all his debts and is leading a happy family life."

Yes, once upon a time the children feared the very presence of the father. Imagine the tragedy, children cowering in fear when the father made his appearance at the house steps. But now those dark days are just faint memories !

He Builds a House

Now comes this shortest of short stories from Malabar (North circle) :

"Kunhiraman Nair of Katcheri amsom, an ex-addict, has constructed a beautiful house after the introduction of prohibition." Only one who has dreamt about constructing a house of his own can appreciate the human story behind that one-sentence report.

(*Continued on page* 27)

Farmers' Forum—Voice of Indian Agriculture

By Sri S. K. SWAMY

Farmers who form about 80 per cent of the country's population need their own association to discuss their problems and do certain agricultural operations on a co-operative scale. It is gratifying to note that a start has been given to a sort of farmers' organization.

The foundation for the "Farmers' Forum" was laid at Srinagar under the presidentship of Dr. Panjabrao Deshmukh, Union Minister of Agriculture. The National Farmers' Convention which was held in New Delhi from 1st to 5th April 1955 was a landmark in the history of Indian Agriculture. There were over 300 delegates present in the Convention representing different parts of the country. They showed much enthusiasm and interest to form the Farmers' Forum.

The organization of Farmers' Forum is a necessity among our farm group and we must be glad that such an organization has been given a start now. The Central Government has taken this proposition to form the organization on an uniform line throughout the country. It will be easier in the future if the Forum is established on a similar framework in all parts of the country.

Non-political, non-sectarian

Farmers' Forum is a non-political, non-sectarian organization of the agricultural producers and all who are interested in the promotion of their welfare. It will provide them with a means to sit together, study the problems of Indian agriculture and evolve solutions for the same. It offers Farmers' co-operation for the advancement of Agriculture. In short, Farmers' Forum represent the Voice of Indian Agriculture.

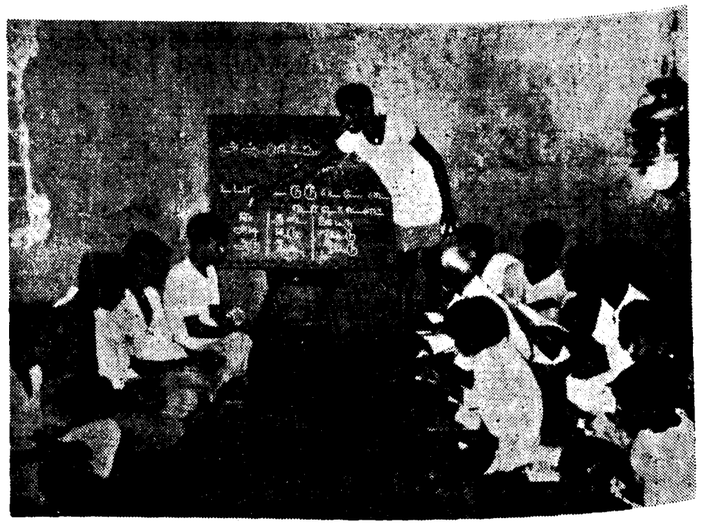
The different activities of the Forum will begin at the village level, then brought up to taluk, district, State and then at the end to the Centre. The Forum should be made by the farmers and for the farmers and it should represent the group of people interested in Agriculture. The success depends upon the contribution given by the Forum members in the form of service, support and money. The idea that Forum is the organization of their own and meant to fulfill the needs of the members should be well understood. The initial interest, sacrifice and support given by the members will form the proper foundation.

The motto of Farmers' Forum is "Listen—Discuss—Act—Co-operate for your good and good of the State."

In Madras State, Sri M. Bhaktavatsalam, Minister for Agriculture, has already begun the work in this direction at a Farmers' meeting held at Trivellore in connexion with the Avadi Congress Session. At the beginning, a few districts may be selected where Farmers' Forums could be organized. The experience gathered in the first step will be a guiding post to spread the Farmers' Forum throughout the State.

Concerted Action

The present-day situation in agriculture is full of problems and farmers have to get together to discuss those important matters and send their constructive suggestions to the Government. Today the representation of the farmers in forming agricultural policy and enactments is very poor and those localised agricultural associations that are found at present are quite scattered in different parts of the State. When Farmers' Forum is organized on a village, district and State level it will give proper representation to each and every farmer of our State.



Students of the Sir Theagaraya College in the City engaged in Social Service Work. The picture shows a student conducting an adult education class in a neighbouring village

Co-operation is one important factor in the Forum. Farmers are at great loss by getting their requirements on a retail rate and selling their produce on a wholesale price. Purchase and sales Co-operatives get the farm and farm family requirements at a cheaper rate; and provide marketing facilities for the agricultural produce. Cattle Marketing Co-op, Grain Co-op and Fruit Co-op may be formed. Sales Co-operatives may get the requirements of farmers on large scale and supply them at a cheaper rate. Farm machineries can be used on a co-operative scale.

Farmers' Forum helps to promote the social and cultural interest of the agricultural producers and village women.

The Government is very much interested to see the growth of the Forum. It is up to the farmers to see that it is well established for their own good and good of the State.

Our National Anthem

It may be recalled that certain interim instructions were issued in 1948 with regard to the playing of National Anthem on special occasions. Since then Government of India have decided that "Jana Gana Mana" should be the National Anthem and they have approved two versions of the same for this purpose, namely, a full version (playing time approximately 52 seconds) and a short version of 9 bars (playing time approximately 20 seconds). The texts of the two versions are as given below:—

Full Version

Jana gaṇa mana adhināyaka jaya he Bhārata
bhāgya—vidhātā,
Panjāb Siṅdhu Gujarāta Marāthā Drāvida
Utkala Baṅgā,
Viṅdhya Himāchala Jamunā Gaṅgā
ucchhala jaladhi taraṅgā,
Tava shubha nāme jāge tava shubha āsisha māṅge,
Gāe tava jaya gāthā,
jana gana maṅgala—dāyaka jaya he
Bhārata bhāgya—vidhātā,
Jaya he jaya he jaya he jaya jaya jaya jaya he

Short Version

Jana-gana-mana-adhi nayaka, jaya he Bharata—bhagya vidhata.

Jaya he, jaya he, Jaya he, Jaya jaya jaya, jaya he.

The Government of India have laid down that these versions should be played only on the following occasions:—

Full version.—(i) On all occasions when the President is present in person (including broadcasts by the President on National Days); (ii) on all occasions for Governors and Rajpramukhs when they attend ceremonial parades within their State; and (iii) at Republic and Independence Day Parades when the National Flag is broken. *Short version.*—On all other occasions (these will mostly be military functions).

In contra-distinction to the occasions on which the two versions should be played as noted above, the Government of India have further decided that the National Anthem could be *sung* (with or without the accompaniment of the instruments) on occasions which although not ceremonial are nevertheless invested with significance because of the presence of Governors, Rajpramukhs or Ministers. Government consider that this practice is not only desirable but should actually be encouraged. There would also be no objection to the *singing* (as distinct from *playing*) of the standard version of the National Anthem by educational institutions, during certain solemn functions such as Founders Day, Annual Day, etc.

(*Continued from page* 25)

Just one more report from South Malabar circle and we will close for the time being:—

"Sri D. P. George is a fitter aged 50 and an ex-addict. He is married and has to support his aged father, aunt, wife and children. His monthly income prior to prohibition was Rs. 75 and he was unable to maintain his family with the minimum requirements of food and clothing with the amount. He was never free from the burden of indebtedness. But since the advent of prohibition he was forced to leave the habit of drinking and a new phase has set in his family life. Now he is leading a happy life. He feels that if prohibition had not been introduced he would not have been able to lead this happy life."

No discourses could be more eloquent than these human stories.

Students of the Sir Theagaraya College in the City engaged in Social Service Work. They are constructing a road in a neighbouring village

Courtallam

By Sri V. SANKARANARAYANAN, Executive Officer, Kutralam Temple

Divinity and Beauty

Courtallam or Kutralam is a famous Hindu shrine in the western part of the Tirunelveli district. It is, in addition, a popular health resort and beauty spot of State-wide prominence. Possessing as it does, a temple of hoary antiquity, magnificent water-falls and arresting mountain scenery, it has attained great repute as a place of pilgrimage from time immemorial while the monsoonish weather that prevails during the months of June to September attracts crowds of visitors from all over the State and beyond.

Situated at an elevation of 550 feet on the southern arm of a deep bay in the Western Ghats, Courtallam Hills towering along the western side of the district present for the denizen of the plains the most fascinating object of the landscape. Above Sivagiri and southward as far as the northern boundary of the Tenkasi taluk, the Western Ghats rise with great suddenness from the plains to the watershed, which measured by a horizontal line, is only some three miles or four from their base. Along the sky line, the range averages 5,000, feet many peaks running up to cover that height. Southward from Kadayanallur, the main range drops rapidly to Aryankavu Pass. Recovering again, they climb gradually upwards until above the valley of the "Five falls River", they reach 5,000 feet culminating in the splendid peak of Panchantangi 5,135 feet above Courtallam.

From June to September, the hills which overlook the Courtallam bay are overcast with storm clouds beaten up through the Aryankavu Pass by the winds of the south-west monsoon and at a time when the rest of the district get practically no rain, heavy showers are constantly falling along the slopes of the hills and over a few square miles of the country at their foot. Rain or no, the winds blowing through the hanging clouds reduce the temperature by 10 to 15 degrees below the average of the district and substitute a delightful climate for raging winds and sand-storms.

Kutralam Falls—The Spa of the South

The Water-falls

During this season as also from November to January, the period of north-west monsoon, the water-falls (Vada aruvi), one of the most striking natural beauties of the place, is in full floods. It is by this cascade of nearly 300 feet that the river Chittar makes its final descent into the level country. Seen from the foot, the river comes first into sight rushing headlong from a forest above a sheer precipice. Nearly half way down a deep trough in the face of the rock known as "Pongumakadal" (boiling sea) breaks the fall and it is beneath the mass of water issuing from this basin and in the pool at the foot of the hill that people delight to bathe.

A committee of medical men appointed in 1811 by the quandom East India Company reported as follows :—

"The falling of the water after the first shock is over, gives an indescribable feeling of pleasure, by its constant beating, it quickens the circulation and produces a fine glow all over the body and has besides the further good effects of dispelling languor, raising the spirits, exciting appetite and promoting digestion in a superior degree to any other kind of bathing. In consequence of these virtues together with the delightful climate, it has been the happy means of rapidly restoring many to health and comfort, who, previous to their visit to Courtallam appear to be hastening to their graves." Dr. Caldwell, in his history of Tirunelveli district, describes the water-fall as one of the finest fresh water bathing ghats in the whole world. Mr. Stuart in his short history of Tirunelveli pays an equally felicitous compliment. With Hindus, the water-fall is equally efficacious as a means of washing away sins. Courtallam as a health resort is at first the discovery of Europeans who, mainly officers, planters and businessmen used to flock here during the season till sometime ago. Kutralam is called the famous SPA of the South.

The Derivation of the Name

The name Kutralam is derived from குற்றால் (Kutral), the name of a forest tree under whose refreshing shade GOD seated himself.

திமலனும் பிரமசாரி திண்மலை யென்னு [ஞானக்
குமரிபா லகிலந் தான்றக் குற்றாலங் [கோவிதாரம்
சமருகமென்னு நாமந் தருவரை யாத்தி [நீழல்
அமர்தலாற் றிருக்குற்றால மானது மூலட் [டானம்.

(Sthalapurana 10-10.)

The Sthalapurana gives another etymological derivation also. Kutrālam is composed of two words (கு+தாலம்), the former meaning 'evil (of birth)' and the latter 'that which burns or washes'. So Kutrālam means the place where the evil of birth is burnt or washed away.

தொன்மையாந் தீவினைத் தொடர்ச்சி குவ் [வநாந்
தன்மையாப் போழ்ந்தெரி தழனத்தால [மா
நன்மையாரியந்தமிழ் நாமம் பெற்றது
சென்ம நோயறுப்பது திருக்குற்றாலம்.

(6-51 Sthalapurana.)

The temple is dedicated to Sri Tirukutralanatha Swami or Tirukutachalapathi, i.e., Lord of three peaks and Sri Kuzhalvai Mozhi Amman—the sweet mouthed damsel.

Hoary Origin

Tradition attributes the origin of the temple to Saint Agasthya. At the time of Siva's marriage in Mount Kailas, the guests and visitors so crowded the mountain that the earth's balance was disturbed, the south rising up and the north lowering down. At Siva's bidding, Saint Agasthya went to the south to right the balance. At Tirukutachallam (Courtallam), he found a Vishnu temple and himself bearing the marks of Saivite was turned away by the Vaishnava priests. He then went off to the Subramania temple at Ilanji to ask his advice and accepting it, he returned the next day with a namam and thulasi beads and easily obtained admission. By his touch. he then converted the idol of Vishnu into a Sivalingam, and in the course of conversion, the conch (சங்கு) in Sri Vishnu's hand grew in the temple and the chakra (சக்கரம்) into the Siharam (சிகரம்). The temple is hence conch-shaped, a peculiarity, and not a square or rectangle as other sister temples are. The tradition of conversion is described in detail in Sthalapurana but it lacks confirmation by historical evidence. None of the numerous inscriptions found in the temple makes any reference to it, the earliest amongst them relating to a Chola King Parantaka I (Parakesari Varman) of the early 10th century, nor is there available any other piece of internal or external evidence. The inscriptions record, among others, the varied services of many Chola and Pandya rulers to the temple who flourished between the 10th and 15th centuries.

Soul-stirring Songs by Saints

Saint Tirugnānasambanda (7th century) glorifies the Lord of Courtallam in two pathihams (பதிகம்), one of which relates to (குறும்பலா) (short jack tree) the sthala vriksha of the place. Even prior, Poet Kapilar of the III sangam age refers to Kutralam in his (அந்தாதி). Later saints Appar, Manickavasagar, Pattinathar, etc., have poured forth their feelings of ecstacy in soul stirring songs about Kutrāla Koothar (dancer). Saint Arunagiri praised God Subrahmanya of Kutralam in his *Tirupugal*.

During later centuries, the Polygars of Chokkampatti have rendered yeoman service to the temple by providing it with two large mantapams, one containing the flag staff (கொடிமரம்) and the other named Tirukuta Mantapam in front of the temple. Within the temple is a sub-shrine dedicated to Parasakti, the powerful guardian deity of many families far and near.

Three years ago, a dumb Brahmin girl absorbed in deep meditation in her holy presence, suddenly gained the faculty of speech and began to sing Her praises.

On the face of the water-fall-rock are carved a number of Sivalingams. During festival days, the Lord of Kutralam is taken to a mantap near the Falls with musical pomp and then to the falls for bath. Daily pooja is offered to the falls and the Sivalingams on the rock. Yearly three festivals are celebrated—Chitra Vishu festival (April), Aipasi Vishu festival (October) and Arudra festival (December-January).

Within a furlong of the temple, there is a sub-temple known as Chitra Sabha—Hall of pictures, dedicated to Sri Nataraja (Siva as dancer). The walls are ornamented with paintings of deities and devotees, puranic incidents and religious events. This sub-temple follows the Malabar style of architecture inside. In front, there is a teppakulam with an elaborately decorated gopuram, the polygars of Chokkampatti being responsible for these as well as for the copper roofing of the sabha.

Nature at her Best

Higher up the hills, are two more falls, Shanbagadevi aruvi and Tèn-aruvi "Honey Falls" within one and a half and three miles respectively. "Five Falls" in the west and "Tiger Falls" or "Pasupatha Shastha" aruvi in the east are within easy reach. Dame nature shows herself at her best at all these spots. "Tiger Falls" have been recently artistically improved by a munificent benefactor. The old Shastha Temple here has given place to a new attractive modern design of building. Fine dressing rooms and waiting sheds, bathing pool and regulated falls are some of the features of the improvement besides general re-modelling of the place, adding to the scenic effect.

Lodging Facilities

'The Europeans were the pioneers in the construction of residential houses—spacious bungalows with ample curtilage and these have changed hands since their exit. In later times, numerous buildings sprang up. There are also many houses providing lodging to the floating crowds at daily, monthly or season rates. Hotels exist in good number and there is at least one big house offering lodging and boarding on upto-date lines.

The peculiar climate of the hills suggested the cultivation of exotic products, nutmegs, cloves, spices and cardamum, cinnamon and coffee and mangusteens but the produce not being marketable, inland or overseas, due to lack of quality, the venture failed. The "Estates" have now passed into the hands of several Indian owners who cultivate these products except cinnamon and coffee, with indifferent success.

Conveniences Attended to

The Water Falls Association, a mixed body of officials and non-officials under the headship of the District Collector attends to the convenience of the visitors at all bathing ghats. Dressing rooms are provided near the Main falls and Five falls. Spacious terraces with ample protection are constructed at the foot of these falls in both the ghats where people can now bathe peacefully with out the former fear of hidden "dug outs", unwary slips, or false steps in the rugged rocks.

Flora and Fauna

To the botanist and the sportsman, the jungle around is a delightful material. In the early 19th century, Dr. Wright explored and collected 1,200 species of flora and he calculated that at least 2,000 species are to be

found. As regards fauna, sambhur and Ibex are common. Spotted deer also is found. Tiger makes occasional descents and depredations.

To the poet, Kutralam is a perennial source of inspiration the vast panorama of nature's wealth—the hills and dales, running brooks, and ringing streams, silvery cascades and their roaring music, the carpet of verdent green decked with scintillating flowers of varied hues, giant trees and dwarf plants, white clouds and blue sky, feasts the mind with the sublime and the beautiful—an eternal reminder of an All Powerful Force.

Courtallam is a rapidly progressive village enjoying some of the modern amenities. Post office, telephone system, village school, library, reading room, park, sports, electricity, motor service, fine roads radiating in all directions and finally a Panchayat to develop civic welfare. The nearest railway station is Tenkasi, three and a half miles northeast.

BIBLIOGRAPHY

Tinnevelly District Gazetteer—H.R. Pate, Vols. I and II.

"Kutrala Sthalapuranam"

"Kutrala Kuravanji" by Tirukoota Rajappa Kaviroyar.

"Kutrala Sthala Varalaru" by A. C. Shanmukhanainar, *Advocate and Trustee.*

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Ilai Thottam : (3) Keerai Inam : Feature ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Thursday, 2nd June 1955—
Farm Forum ; Discussion ;
Folk Songs ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Friday, 3rd June 1955—
Grama Kalakshepa Mandappattil : Peria Alwar Kathai ;
Market rates and water-level readings ;
Topical discussion ; Weather Report.

Saturday, 4th June 1955—
Talk in Tamil arranged by the Department of Co-operation, Government of Madras ;
Athi Poru Maraiyai : Song ;
Valluvar Perunal ;
Weekly Review of Market rates ; Water-level readings ;
Topical Discussion ; Weather Report.

Sunday, 5th June 1955—
Dal Grass : Discussion ;
Grama Kathai ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Monday, 6th June 1955—
Hides and skins : Discussion ;
Sathya Jothi : Song ;
Irulil Oli : Feature ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Tuesday, 7th June 1955—
Farm Forum : Discussion ;
Grama Pattum Katchiyum ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Wednesday, 8th June 1955—
Cold Bath : Discussion ;
Min Inam Odi : Song ;
Listeners' letters ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Thursday, 9th June 1955—
Farm Forum : Duscussion ;
Musical Bouquet ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Friday, 10th June 1955—
Lavani ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Saturday, 11th June 1955—
Cottage Industries : Khadder Self-sufficiency : Discussion ;
Kuttu Vilakku : Song ;
The Adult Literacy Class ;
Weekly Review of Market rates ; Water-level readings ;
Topical Discussion ; Weather Report.

Sunday, 12th June 1955—
Cauliflower Cultivation : Discussion ;
Desa Nalam Peruga : Song ;
The Pial School of Political Science ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Monday, 13th June 1955—
Fowl Pox : Discussion ;
Folk Songs Lesson ;
The Village Women's Forum ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Tuesday, 14th June 1955—
Farm Forum : Discussion ;
Grama Panchayattil : Kallu Tiruttu Vazhakku ;

Tuesday, 14th June 1955—*cont.*
Market rates and water-level readings ;
Topical Discussion : Weather Report.

Wednesday, 15th June 1955—
Blood Pressure : Discussion ;
Moonru Kadalum : Song ;
Ellam Terindavar : Play ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Thursday, 16th June 1955—
Farm Forum : Discussion ;
Ilai Thottam : (4) Tulasi ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Friday, 17th June 1955—
Karaha Attam ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Saturday, 18th June 1955—
Talk in Tamil arranged by the Department of Medical Services, Government of Madras ;
Valluvan Tanda : Song ;
The Adult Literacy Class ;
Weekly Review of Market rates ; Water-level readings ;
Topical Discussion ; Weather Report.

Sunday, 19th June 1955—
Methods of preparing manure : Discussion ;
Kootturavu Kondu ; Song ;
The Village Welfare Association ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Monday, 20th June 1955—
Feeding the fish : Discussion ;
Sathya Jothi : Song ;
Irulil Oli : Feature ;
Market rates and water-level readings ;
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Tuesday, 21st June 1955—
Farm Forum : Discussion ;
Grama Patasalaiyil : Asu Kaviroyar ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Wednesday, 22nd June 1955—
Prevention of Tuberculosis : Discussion ;
Vazhvai Kalaiyakka : Song ;
Listeners' letters ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Thursday, 23rd June 1955—
Farm Forum : Discussion ;
Have you heard this song ?
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Friday, 24th June 1955—
Grama Nataka Sabaiyil : Udavi Natakam—Play ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Saturday, 25th June 1955—
Kashmir : Agriculture in Kashmir : Discussion ;
Inimai Tamizh Mozhi : Song ;
The Adult Literacy Class ;
Weekly Review of Market rates ; Water-level readings ;
Topical Discussion ; Weather Report.

Sunday, 26th June 1955—
Castor Cultivation : Discussion ;
Otrumaiyai : Song ;
Ayan Sthree Part Angammal : (3) Serial Feature ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Monday, 27th June 1955—
Rinderpest : Discussion ;
Velli Panimalai : Song ;
Thol Muttai : (3) Tiruhu Kombu : Feature ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Tuesday, 28th June 1955—
Farm Forum : Discussion ;
Oyil Kummi ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

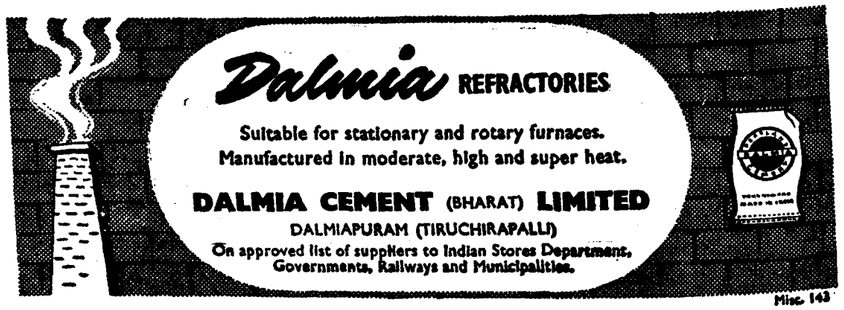
Wednesday, 29th June 1955—
Skin Protection : Discussion ;
Ilai Thottam : (5) Tea Ilai : Feature ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Thursday, 30th June 1955—
Farm Forum : Discussion ;
Mangalakkalai : Song ;
Makkal Tiruppani ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Family Planning Scheme : Central Government's Aid

One of the recommendations made by the Family Planning Research and Programme Committee, constituted by the Government of India, is that grants should be made to State Governments and to voluntary organisations for Family Planning Programmes to the extent of Rs. 14 lakhs during 1954–55 and Rs. 16 lakhs during 1955–56 in order to promote Governmental and voluntary effort in this field. So far as initial non-recurring expenditure is concerned, the grant given by the Central Government will cover the full cost of technical equipment and of furniture other than normal office furniture. The recurring grant to State Governments in connection with the proposed Family Planning Programme will be on a sliding scale. The total period of Central financial assistance will be limited to a period of three years.

The proposals put forward by local bodies will be considered as part of those sent up by the State Governments in whose territories they are constituted. The pattern of assistance indicated in this note will apply to local bodies also.



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COVER PAGE: Colossal Poems can be written—in concrete! This is Palar Bridge in Chingleput Distric the first prestressed concrete bridge in India. Looking at it, you feel a sense of joy, the joy that comes to those who contemplate reconstruction in a by way.

Miss Florence Rose, Executive Secretary, Meals for Millions Foundation, California, visited the City recently. This photo was taken when the Guild of Service gave her a reception. The visitor was shown the type of meals supplied to the children studying in the Children's School attached to the School of Social Service conducted by the Guild of Service.

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Training Programmes in Agriculture

The Government have appointed a Special Committee of Officials with the Director of Agriculture as Chairman to report on how best, co-ordination of the various training programmes in Agriculture in public and private institutions could be effected.

The other members of the Committee are: (i) Director of Rural Welfare, (ii) Director of Animal Husbandry, (iii) Joint Director of Industries and Commerce, (iv) Director of Public Instruction, (v) Headquarters Deputy Director of Agriculture (Research) (Secretary and Convener).

This action follows the recommendation made at the fourth Session of the Permanent Agricultural Committee of the International Labour Organization, held in May 1953, about the need for co-ordination of the training programmes. The recommendation was as follows: "The work of the various public and private institutions in each country which deal with vocational training should be co-ordinated, while ensuring free-play to initiative and adaptability to the requirements of the different types of farming, regions and localities."

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Progress in C.P. and N.E.S. Areas

The Progress reports from the various Community and National Extension Service Blocks in the State for a month alone would fill the whole pages of an issue of 'Madras Information'. They might look like dry statistical reports to superficial readers. But these are statistics with a difference. Behind those statistics are green fields, pure water supply, maternity hospitals, village roads, minor irrigation works, dispensaries and reading rooms—amenities for which our villages have been crying for generations. Immediately these facts and figures transform themselves into live reading material, excelling any of the hot stuff emanating from your favourite publishers. The reports below record the progress in certain selected spheres in the Community Project and National Extension Service Areas for the month of March 1955.

CHINGLEPUT

Tirukalikundram Block: About 50 students of the Madras School of Social Work camped at Tirukalikundram for about a week and did intensive social work in Kolpanthandalam and Poonjeri villages of Tirukalikundram Development Block. These villages were cleaned and some of the houses plastered by the students. This has roused much enthusiasm in the village-folk and has caused a special awakening in them.

Kadambatur Block: A cattle show was held in Kilacheri and two poultry units were formed, one at Kosavanpalayam and the other at Polivakkam in Kadambathur National Extension Service Block. A Co-operative Building Society and a milk supply co-operative society were also organised in this block during the month.

NORTH ARCOT

Mandakolathur Block: A special meeting of more than 50 elementary school teachers was held on 12th March 1955 at Vedamadimangalam. The Block Development Officer and his staff took part in the proceedings. Various topics connected with Agriculture, Animal Husbandry, Co-operation, and Engineering were discussed.

Under the auspices of the Animal Husbandry Department a one day cattle show was held at Santhavasal on 14th March 1955. More than 300 good animals of various species were gathered in the show.

Tiruvannamalai Block: *Agriculture*: Planting of paddy as per modified Japanese method—8,305 acres; Experimental plots laid out 19; Green manure crops raised—3,102 acres; Sesbania for Green Manure—300·84 acres; Rural compost manufactured—109·5 tons; Oil Engines hired out and distributed—9; Cotton seeds distributed—406 lb.; Fruit trees seedlings and grafts distributed—600.

SOUTH ARCOT

Panruti Block: A Katcha road to a length of four furlongs was constructed. Loans were granted up to Rs. 10,000 for purchase and installation of oil engines for agricultural purposes. On 18th March 1955, Sri W. R. S. Sathianathan, I.C.S., laid the foundation stone for the dispensary at Thirunnavalur.

A Conference of Project Executive Officers and Block Development Officers was held in the Secretariat on June 6, 1955. Sri M. Bhaktavatsalam, Minister for Agriculture, presided.

Kurinjipadi Block: A Cattle show and agricultural exhibition were conducted. About 5,000 ryots attended. A party of 20 ryots led by the Extension Officer for Agriculture went on excursion to Mettur dam and Coimbatore to study the improved Agricultural methods and cattle breeding carried on there.

Chinnasalem Block: Radio houses, Reading rooms and Community Halls were constructed in 18 villages within a period of six weeks. New buildings to house the leprosy clinics each at a cost of Rs. 1,000 have been constructed at Kachirapalayam and Chinnasalem.

TANJORE

Tiruturaipundi: A sum of Rs. 3,081-8-0 was made as final payment in respect of the works relating to the metalling of Talanayar-Alangudi road. A sum of Rs. 545-13-3 was drawn towards the formation of road from Manakudi to Vadagoor. A sum of Rs. 314-15-6 was drawn towards the formation of road from Panangadi to Sooramangalam. A sum of Rs. 119-2-0 was drawn towards the formation of road in Manuneedhikandam village. A sum of Rs. 80 was drawn for fixing R.C. pipes in Pangal-Uthirangudi road. A sum of Rs. 319-7-0 was drawn for the formation of road from Kannupillaikattalai to Tiruvidamarudur. The execution of the well works relating to Tirumalam-Vellapallam and Mahimalai have been completed and payment made during the month. The execution of the Overhead tank work at Manekudi is nearing completion. Thirty-six cheris were also cleaned during the month.

One hundred and five compost pits were dug during the month and 72 tons of compost were prepared. 8·50 acres were brought under P-2 16F Cotton in rice fallows.

Vedaranyam Block: Five acres of lands have been reclaimed by bulldozer. Thirty-one improved ploughs were distributed. 260 lb. of Sesbania seeds was distributed. During the month 25 villages were visited by the Extension Officer for Animal Husbandry and there were talks with the villagers on topics like improvements of livestock, backyard poultry, growing of fodder crops, etc. 99 cattle were treated, and 54 castrations performed. Four adult literacy schools were opened. Four Mathru Sanghams were organised and play materials worth Rs. 400 were distributed. Play materials worth Rs. 1,000 were distributed to 9 Recreation clubs. Books to the value of Rs. 400 were distributed to the library at Vadamalai Multi-purpose Co-operative Society.

TIRUCHIRAPPALLI

Musiri Block: Thirty road works were in progress and a sum of Rs. 11,570-4-0 was paid for in this month for the Government share of the work while the work turned up by labour amounts to Rs. 6,193. A sum of Rs. 7,748-8-0 was paid for Local Development (R.W.S.) works during this month. Six works were executed under Public Health and a sum of Rs. 1,264 was incurred.

Iron ploughing was done in 20 places and Mhote wheel demonstrations were done in 25 places. A sum of Rs. 42,570 under short term credit loans and a sum of Rs. 11,300 under Minor Irrigation were disbursed in the month.

Perambalur Block: Agricultural implements worth Rs. 1,566-8-0 were purchased for distribution to ryots at concessional grades. Pesticides worth Rs. 887-15-3 were purchased and supplied to the Co-operative Societies for distribution to the ryots at concessional rates. Books worth Rs. 1,294-14-0 were purchased and distributed to ten libraries. A sum of Rs. 1,611 was spent towards the supply of seven radio sets to 7 villages.

Karur Block: A community hall constructed by the villagers at Karudayampalayam at a cost of Rs. 3,000 was opened at the Minister for Agriculture Sri M. Bhaktavatsalam on 20th March 1955. The building meant for the use of the leprosy relief work was also opened by the Minister on the occasion. A total sum of Rs. 40,701-13-9 was spent during this month on various items of work.

MADURAI

Thirumangalam Block: Forty-seven compost pits were dug and forty-eight unhealthy pits were rectified. 32 bags of cotton seeds were distributed. 1,468 cart loads of earth was used to level up the streets in the villages. Seven trench latrines, 6 urinal pits and 19 cess pools were constructed. 24 Harijan cheris were cleaned. First aid medicines were supplied to five

Sri V. T. Krishnamachari addressing a Conference of Secretaries to Government and Heads of Departments on matters relating to Planning at the Committee room of the Secretariat on June 14, 1955.

Co-operative Societies and eight other credit societies have also come forward to provide first aid facilities. Five societies issued loans to the value of Rs. 36,065 during the month. 18 well works were completed and a sum of Rs. 6,459 and Rs. 969 has been spent from the L.D. and R.W.S. funds respectively. Six miscellaneous works costing Rs. 12,980, three bath rooms, 3 latrines and 1,770 yards of drainage costing Rs. 10,204 have also been completed in the blocks during the month.

Usilampatti Block: Two hundred and eleven compost pits were dug and 303 unhealthy pits were rectified. 300 tons of manure was procured and 176½ lb. of seeds were distributed. 14 trench latrines were formed and 34 urinal pits were dug up. 74 Harijan cheris were cleaned. 20 well works were taken up during the month and 19 well works were completed. An amount of Rs. 21,844-8-0 was spent during the month.

Periyar Community Project: The expenditure on work during March 1955 was Rs. 47,019. A sum of Rs. 75,065 was spent by way of "Loans" and a sum of Rs. 60,642 was spent on other items.

Estimate: 42 estimates were prepared by the engineering personnel and 38 estimates were sanctioned. Four estimates were scrutinised and sent to other departments.

General activities: The Primary Health Centres at Vellalore and Kallandiri were opened during the month. The Minister for Agriculture visited Kattaimedu on 13th March 1955 and declared open the newly constructed school building and inaugurated the Veterinary First-Aid Centre Building at Alanganallur.

Kallupatti Block: During the month, 10 fertiliser demonstrations on ryots' field on cholam crop were laid out, and 124 demonstrations have been so far laid out. 96 compost and manure pits were dug and 127 unhealthy manure pits were rectified. 150 tons of compost were prepared. 22 spraying demonstrations were conducted. 250 lb. of MUI cotton seeds were arranged for distribution. 51 Rural water-supply works and 69 other works were paid for during the month. The number of works completed during this month alone is 36. A sum of Rs. 17,910-11-0 was paid for 51 well works during the month, out of which the Government of India allotment spent is Rs. 12,598-2-0 and that of the State Government being Rs. 5,312-9-0. Under miscellaneous works, works such as reading rooms, Community Halls, Platforms, etc., a sum of Rs. 11,068-13-9 was spent during the month.

SALEM

Attur Block—Seed Farms: Village seed farms with C.O. 13 paddy is being successfully run at Nagiyampatti and Gengavalli villages.

Compost pits: Compost pits including Farm Yard Manure pits—232 to prepare 606 tons.

Animal Husbandry: 61 non-contagious cases were tried, 27 castrations were done, and 354 Ranikhet vaccinations were also carried out.

Two recreation clubs were started and 6 community entertainments organised. Three new libraries were also opened.

Peddanaickanpalayam Block: Two road works and improvements to one of the four schools have been completed during the month. The remaining works, viz., 5 roads, 4 community halls, 3 new schools and 3 improvement to schools are in progress.

COIMBATORE

Kangayam Block: Fifty acres of cotton crop was saved from rat damage by the use of Zinc Phosphate. Five fertiliser demonstration plots were laid out in irrigated cholam crop. The Extension Officer for Animal Husbandry toured for 20 days and visited 20 hamlets. The Officer visited 34 holdings, contacted the ryots, discussed with them the methods of improving the village cattle according to the conditions prevailing, the food schedules to be adopted for calves for early maturity and for other livestocks in their farms, etc., and requested them to adopt such measures in their farms.

Under the head 'Village Communications' 42 works have been taken up for execution and 17 were completed. A sum of Rs. 61,933 was paid during this month. Total expenditure under this head is Rs. 69,342 for 1954-55. For these works Rs. 27,169 was received as contribution.

Erode Community Project: During the month, 5,072 maunds of fertilizers, 3,735 maunds of town compost and 160 maunds of green manure were distributed to the ryots. Fruits have been cultivated on an extent of 10·24 acres and vegetables on an extent of 47·95 acres.

Orders were placed with the companies for the supply of 341 oil engines and pumpsets. Of this, 315 oil engines and pumsets have so far been supplied. There is sufficient supply in the Lower Bhavani Project canal and channels and also in the wells.

Five Electricity Schemes—Savandapur, Edayankattuvalasu, Pudupalayam, Peria Agraharam and Thaluvampalayam—have been completed. The work relating to Unjalur-Kolathupalayam is in progress and a sum of Rs. 1,22,911 has been spent over this work. Besides the above, a sum of Rs. 3,01,972 has been spent on extension of Electricity in the Lower Bhavani Project area from the Pyakara systems.

Lower Bhavani Project: Five hundred and eighty-seven compost pits were dug in the month. 5,965 lb. of seeds and 26 implements were distributed. 64 acres of additional area were brought under cultivation. 117 soak pits, 3 rural latrines, 1,861 yards of drains, and 14 wells were constructed during the month. Twelve recreation centres were started and 3 community entertainments organised.

RAMANATHAPURAM

Srivilliputhur, Rajapalayam and Sivakasi Blocks: Sixty-seven sweeping campaigns were conducted in Srivilliputhur and Sivakasi Blocks. Drainage was constructed in Rajapalayam Block up to a total length of 1,897 feet. Rs. 8,200 was distributed in Rajapalayam Block and Rs. 7,230 in Srivilliputhur Block was disbursed to ryots for the purchase of manures.

Under Animal Husbandry, 461 cases were attended to, in the three Blocks.

Five road works are in progress in Srivilliputhur and Sivakasi Blocks. 15 Adult Literacy schools were started during the month.

MALABAR

Tellicherry Block: In Tellicherry National Extension Service Block, a Khadi exhibition was conducted during the period of the festival at the Jagannath Temple, Tellicherry, under the auspices of the National Extension Scheme. Another major exhibition demonstrating the activities of the National Extension Scheme on

(*Continued on page* 18)

New House for old at Five Rupees

The Summer camps of students and scouts are about to begin. The Bharat Scouts and Guides expect there will be an assemblage of 1,200 to 1,500 scouts. The success of these camps depends on the contribution they make for the improvement of the village way of life and work. This contribution has not only to be useful but also visible to all. Its greatest value arises from the response it will excite in the villagers themselves. To this extent, the labour of the campers has to be in the nature of a catalytic agent starting a change for good in the trend of work and life in the village.

The Individual Benefit Approach

The programme of work has to be accordingly drawn up. Various types of work have been tried so far, road making, deepening of tanks, construction of community buildings demand strenuous or skilled labour often too much for campers. While these works add to the amenities of the village, their catalytic effect is small, for reasons first, that these works are complete in themselves and second that since, their benefit is public, individual interest is weak and personal contribution unsustained. In works which benefit the individual directly, and the community generally are different. Not only the individual benefited is more willing to contribute but more anxious to nurse the beginning made. This was demonstrated by the project undertaken by the students of Madras School of Social Service.

In the villages of Punjeri and Kulupanthandalam (as in all villages) they found that the majority of houses were of mud walls, which were not plastered, and of roofs, which had not been thatched. As soon as they began plastering, the owners and relations spontaneously joined with the result that 55 houses in the two villages were within four days transformed from hovels to houses, with whitewashed walls and roofs thatched with newly cut hay.

Great Schemes of National reconstruction involve a lot more than precisely drawn up schemes and grants sanctioned. Imagination, an emotional awareness of the dreams and aspirations of the people, a psychological insight into the behaviour of men as groups and individuals are all required to make the new great schemes a success. Bearing this in mind, it would be of interest to read these two notes circulated by Sri J. M. Lobo Prabhu, I.C.S., Collector of Chingleput, to the concerned officers on certain aspects of village reconstruction. Summer camps of students and Scouts are of course about to close, but still the note would be of interest as guide for similar activities in the future.

Apart from labour, the only contribution made was about Rs. 5 per house for the cost of lime, paint and thatching hay. The villagers have since proceeded to decorate and improve on the start made, some shopkeepers spending as much as Rs. 100 so that their shops and houses are now an example in brightness and cleanliness. A party of journalists organized by the Government of India stated that there had been a miraculous change, not only in the appearance of the houses, but in the appearance and spirit of the people. There was a sense of pride in existence, which contrasted sharply with the attitude of the inmates of the untouched houses. At the same time, applications have poured in from others that their houses also may be transformed.

Cleanliness and Beauty

The reconstruction of houses has therefore to be a large part of the programme of campers this year. The Development Officers should have precise plans and adequate materials ready in advance of the camps. They should also acquaint the villagers of what is proposed to be done, showing them, where possible, what has already been done in the Punjeri and Kulpanthandalam villages. On an average 50 campers should complete 50 houses in four days. Roadside houses may be preferred as they have greater demonstration value. Financial provision up to Rs. 5 per house may be made, which will far exceed the contribution in labour rendered by the campers and the villagers.

The aim should be to introduce a marked degree of cleanliness, orderliness and a touch of beauty in what is now squalid, neglected and disorderly. Campers with artistic capacities should be asked to decorate the inside, and even the outside of houses. Where the inmates desire and are prepared to find the materials, the walls may be raised, doors enlarged and windows introduced. After roadside houses, the preference should be given to the reconstruction of Harijan houses.

Mobilising the Invisible Instincts

This scheme of house improvement has been found to mobilise the invisible instincts and resources of the people. It may start a general movement for better housing in villages, as the example, specially of Harijans in the proud possession of their houses, is likely to be in the nature of a challenge. The camps of 1955 therefore have a great promise, which the Development Officers should strive hard to realise. Copies of this note are being sent to all authorities in charge of camps so that they may prepare the campers in the work, and contribute any new features they consider useful. Better and brighter houses will not only symbolise the work of the campers, but also inspire people to a sense of new values in their work and life.

Labour day in Community Development Areas

A feature of the Community Development has been the concourse of large numbers of people at public meetings. At Uthukottai, where some thousands had assembled, it was discussed and agreed that the enthusiasm natural to such large meetings could be turned to create something concrete. It was decided that villagers within a circle of three miles should be assembled once a week in every village of the circle, in turn, to carry out community and other projects. For a beginning it was decided that the existing houses with rough mud walls and decaying roofs are unsightly and unhygienic, and the villagers assembled will address themselves to the task of plastering the walls with mud, white-washing them and re-roofing with new straw. One day's labour of the assembled villagers was considered sufficient for the purpose. The response should be good, as individual interests, naturally more important are served by community efforts organized. The following scheme was, therefore, drawn up and will be tried in all the Community and National Extension Service Blocks :—

(1) The Block Development Officers will group villages within a circle of three miles into Labour Circle.

(2) They will draw up a programme, by which the labour forces of all the villages in the circle will assemble once a week in different villages in turn.

(3) Lime for white-washing, Green Paint for painting doors and windows and thatch for roofing will be supplied to each village according to requirements as a grant-in-aid in return for the labour employed.

(4) One mid-day meal will be provided to the assembled workers, as an additional grant in aid for the work done.

(5) The Chairman of each village sanghams will be responsible for assembling the work force from his village for the Labour Day in the village selected for the week.

2. The success of this scheme will depend on the enthusiasm generated. This requires first complete preparation of a plan of works including assembling of materials for each Labour Day by the Block Development Officer and the Village Level Worker, second target-consciousness to finish the work of each village on the appointed Labour Day. To the extent this simple item of work of great material and psychological importance is completed and no unsightly houses left in any Community Development area, there will not only be a symbol of co-operative achievement, but a stimulus for other items, which can be completed with the enthusiasm and work of neighbouring villages.

Government Transport News: April 1955

Strength of Fleet: Three Royal Leyland Tiger buses have been registered during the month under review to increase the strength of fleet from 407 to 410.

Opening of new routes, extensions and diversions of the existing routes: On a representation made by the residents of the Lattice Bridge area, the last service on Route 19 leaving Broadway at 21·00 hours via Tiruvanmiyur has been extended to Lattice Bridge.

Specials and hires: In connection with the Brahmotsavam festival at Mylapore, on 2nd April 1955, sixteen buses were operated from 20·00 hours till morning to clear the traffic.

Specials were operated from Parrys to Guindy on 3rd April 1955, 10th April 1955 and 17th April 1955 to provide transport facilities to the race-goers.

To cater to those attending the Kirthigai festival which fell on 24th April 1955, one special bus was operated between Vadapalani and Kodambakkam.

Buses were hired out to the Public as usual.

General: The fifth meeting of the City Transport Advisory Committee was held on 11th April 1955 when matters relating to traffic problems were discussed.

The Joint Transport Commissioner attended the meeting of the General Committee of the State Road Transport Undertakings at New Delhi on 13th and 14th April 1955. He also visited the Alywn Metal Works at Hyderabad on his way back from Delhi on 17th and 18th April 1955 in order to collect information in regard to the tender made by that firm for bus body kits for 50 Leyland " World Master " Chasses.

The Ceylon Commerce Minister and party visited the Government Transport Central Workshop on 26th April 1955.

Sangeetha Nataka Sangam

The Government of Madras have appointed Srimathi Rukmini Devi Arundale as the Chairman of the Madras State Sangeetha Nataka Sangam for a term of three years and the Secretary to Government in the Finance Department as the ex-officio Treasurer of the Sangam for a period of three years from May 28, 1955.

The following persons have been appointed as the members of the General Council of the Madras State Sangeetha Nataka Sangam : (1) Sri V. C. Gopalratnam, B.A., B.L., (2) Sri M. P. Periaswamithooran, (3) Sri S. Venkateswaran, I.C.S., (4) Sri T. M. Narayanaswami Pillai, M.A., B.L., M.L.C., (5) Sri R. P. Sethu Pillai, (6) Sangeetha Kalanidhi Chittoor Subramaniam Pillai, (7) Sangeetha Kalanidhi Musiri Subramania Iyer, (8) Dr. V. Raghavan, M.A., PH.D., (9) Rajah Muthiah Chettiar of Chettinad, (10) Sri Gopinath, (11) Sri E. Krishna Iyer, B.A., B.L., (12) Sri T. K. Shanmugam, (13) Sri P. Sambanda Mudaliar, (14) Sri S. S. Vasan, (15) Sri B. N. Reddi, (16) Isaiarasu M. M. Dandapani Desigar, (17) Sangeetha Bhupathi-Sangeetha Kalanidhi Maharajapuram Viswanatha Iyer, (18) Natya Kala Kesari Vazhuvoor V. B. Ramaiyya Pillai, (19) Srimathi Balasaraswati, (20) Nagaichuvai Selvan T. N. Sivathanu, (21) Kalaivanar N. S. Krishnan, (22) Sri V. Nagiah, (23) Sri P. Sambamoorthy, B.A., B.L.

The Government have sanctioned a grant of Rs. 2,500 to the Madras State Sangeetha Nataka Sangam towards its initial expenditure for the year 1955–56.

Another Road is Laid

Students—the Earlier Type

There was a time when our students in schools and Colleges were not quite unjustifiably accused of snobbery, their sense of superiority over others and their pretensions to vanity that erected a Chinese Wall as it were between them and their uneducated fellowmen. Indeed it was thought that the chasm that divided them from the people would be very difficult to remove for it was believed that they (the students) lived in their own world, unconnected with the harder facts of life and were hardly troubled by any sense of responsibility towards their less fortunate fellow beings, around. It was commonly believed that they built around them an unreal world of exclusiveness and were indifferent towards problems and activities which concerned ultimately their own future and rarely could they be expected to identify themselves with the interests of the common man. They looked down upon those who toiled for their life, whose only means of livelihood were their rugged and coarse hands and their hard sinews made harder by their toil. The spade that turned the sod and the plough that furrowed the earth were not for them and who would dirty his hands with slime or mud—it was 'infra dig' to work like a common labourer—so thought the young aspiring mind browsing on the pages of the book.

The New Spirit

With the dawn of Independence a new spirit came and a new outlook opened the eyes of the learned young, and the dignity of labour caught the imagination of young minds more than the books. With greater attention paid by Colleges to social work emphasising the need for the students to abandon their artificial aloofness from their downtrodden and neglected fellowmen, a profound transformation has taken place in the attitude of the students to the common man. The resounding success of the social service programmes involving manual labour on the part of the students is a clear evidence of the fact that students no longer suffer from unhealthy inhibitions from which previous generations had been suffering. There has been a slow eradication of prejudices based on false ideas of prestige and they have taken to social work with a zeal which is amazing.

The Dreamy-eyed Wields a Spade

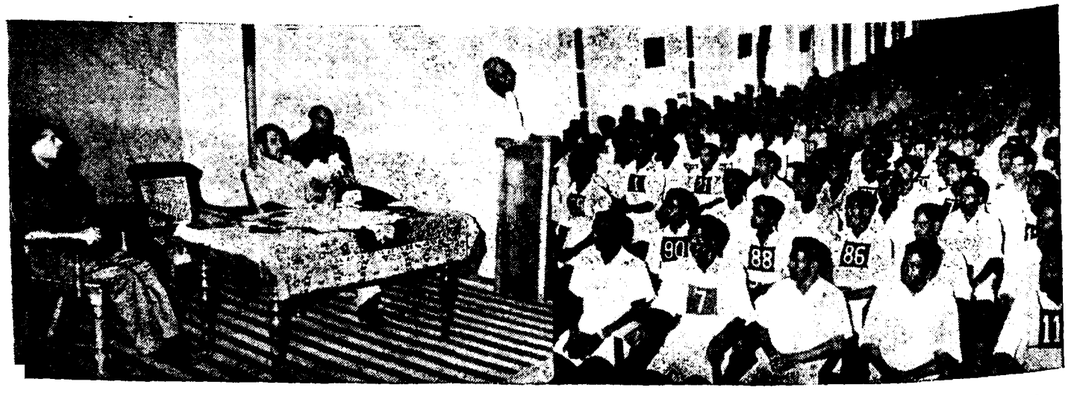
A decade back it would have been unthinkable that students would engage in activities like laying a road. But to-day it is no longer an impossibility but a reality. Witness for instance what the students of the Theagaraya School and College have achieved at Vanianchatram. A two-and-a half mile road connecting a group of five villages with the main road leading to Red Hills has been laid entirely by the efforts of these youngsters. Against the background of the green fields and tall palmyra trees one could see young men armed with spades battling with a rugged soil and turning what was once a heap of mud, rock and thorns into a level stretch of road. A visit to the youth camp revealed what enthusiastic effort by young men could achieve. Meet Sri Chenniappan the leader of the whole group of 100 students who explained the activities of the camp. He is a slim, smart young man with dreamy eyes and a sun-burnt face. With the spade he was carrying, he demonstrated to us the work he was doing with a dexterity that showed that he knew his job thoroughly well. There was a look of determined optimism and joy in his face when he asserted with self-confidence that the work he and his colleagues were doing will succeed, no matter what obstacles came their way. They had to contend, he explained against the vagaries of nature. A day's rain could spoil a week's work they had done. But with a tone at once resolute and firm he expressed his determination to carry on despite nature's merciless vagaries. This enthusiasm was reflected in the whole group and was not merely confined to the leader.

At each step the work was a test for their qualities, of discipline, agility, presence of mind and courage. But they have proved themselves equal to the task. The job certainly was not an easy affair—weeds and thorns had to be removed and trees uprooted. The road they were laying covered an area running through zig-zag devious paths. Further there was the question of the co-operation of the villagers. The response of the villagers was given readily, so we understood, and this is due, the leader explained, to the approach made to them which was one of equality and not one charged with the patronising air of benign charity.

Training ground

Good use is made of the funds which run to the tune of Rs. 6,300, allotted bythe Government to the camp. The tudents' mess at the camp site have all facilities including recreation. The adult literacy classes that they are holding will go a long way in acquainting the villagers with the traditional 3 R's. But far more important are the effects on the students themselves. It has provided an excellent training ground for them, to develop a keen sense of awareness to the nation's problems and a consciousness of responsibility for its progress. The experience has widened their vision and given them a golden opportunity to learn how to be good and useful citizens and how to be among the people, and help those who need it, in removing ignorance and poverty by their own efforts and work by their own willing hands.

The success of the camp is the happy consummation of a magnificent co-operative effort. It is a laudable venture that shows what students can do if they are properly organized. The road these young men lay is the road to prosperity through co-operative endeavour.



Auxiliary Cadet Corps—Training for the third batch of Teacher, Officers was inaugurated at College of Engineering, Guindy by Lt.-Col. Paul, Principal, on 27th May 1955.

Rural Electrification

The number of villages electrified during April 1955 in the various systems was as follows :—

Pykara System	11
Mettur System	8
Papanasam System	8
Madras System	5
Total ..	32

The names of villages and the particulars of taluks and districts are given below :—

	Taluk.	District.
Pykara Electricity System.		
Sindalangudu	Dindigul	Madurai.
Kuruduguli	Ootacamund ..	Nilgiris.
Begambur	Dindigul	Madurai.
Sirkarpudur	Udumalpet ..	Coimbatore.
Mallar	Udipi	South Kanara.
Padur	Do.	Do.
Narasingapuram ..	Dindigul	Madurai.
Vadipatti	Nilakottai	Do.
Velayudampalayam ..	Pollachi	Coimbatore.
Bembatti	Ootacamund ..	Nilgiris.
Belthal	Do.	Do.
Mettur Electricity System,		
Vengili	Vellore	North Arcot.
Turinjapuram	Tiruvannamalai ..	Do.
Raipur	Do. ..	Do.
Savalpondi	Do. ..	Do.
Chengam	Chengam	Do.
Madianur	Tirukoilur	South Arcot.
Adikaripatti	Salem	Salem.
Kothakuppam	Vellore	North Arcot.
Papanasam Electricity System.		
Paravai	Madurai	Madurai.
Vallikulam	Ambasamudram ..	Tirunelveli.
Namasivayapuram ..	Do. ..	Do.
Watrap	Srivilliputtur ..	Ramanathapuram.
Pudupatti	Do. ..	Do.
Chatrapatti and Samsigapuram.	Do. ..	Do.
Murugalkurichi ..	Nanguneri	Tirunelveli.
Therku-Nanguneri ..	Do.	Do.
Madras Electricity System (Distribution).		
Koladi	Saidapet	Chingleput.
Devanur	Chingleput ..	Do.
Karunguli	Muduranthakam ..	Do.
Mathuranthakam Town ..	Do. ..	Do.
Kalembakkam ..	Tiruvallur	Do.

A large number of rural extension schemes were progressing. The following are the particulars of new lines constructed and energised during the month in the several systems :—

	Length in miles. H.T.	L.T.
Pykara Electricity System	4·96	16·92
Mettur ,, ...	2·89	23·97
Papanasam ,, ...	14·0	43·0
Madras ,, ...	6·71	6·39
Total ..	28·56	90·28

Village Co-operatives and Development Work

The Scope of Assistance

The extent to which co-operatives could assist in local development works in the National Extension Service and the Community Project Areas was discussed by the Registrar in December 1954, with the Commissioner for Land Revenue and Development, the Director of Community Projects and the Secretary to the Commissioner, Board of Revenue. The object in view was that co-operative Societies which have established themselves firmly in villages should play an important part in the promotion of rural welfare formulated by the Community Projects and the National Extension Service Administration.

It was generally agreed that in executing the several works under the local development schemes such as sinking and deepening of irrigation wells and tanks, construction of and repairs to roads, construction of community halls, excavation of canals, etc., the village co-operatives which are in a position to undertake such works should be persuaded to do so. For achieving this object, the Deputy Registrars were asked to select suitable village credit societies in their circles and see that they assisted in the execution of local Government works. The societies were instructed to adopt necessary amendments to their by-laws for enabling them to undertake the works and a set of model by-laws was also framed for the purpose. The Deputy Registrars have been making preliminary arrangements such as selection of societies, adoption of necessary by-laws, etc., but as the works during the financial year 1954–55 had already been sanctioned and entrusted to private contractors, the societies could not make much headway.

They Undertake Works

Some of the societies have undertaken local development works such as sinking and deepening of wells, construction of community halls, roads, village latrines, culverts, maternity centres, etc., as indicated in the concluding paragraph. So far, in 22 Deputy Registrars' circles, 62 societies have been selected for undertaking local development works. Some of them have already amended their by-laws making provision for enabling them to undertake the works and the rest are taking steps to amend the by-laws. The Registrar suggested to Government that village co-operative societies might be entrusted with the execution of works under the Community Project and the Community Development programmes in the same manner as the beneficiaries, their representatives, village development committees and local bodies when such works do not involve a high degree of professional and technical skill, are now entrusted. The Government have accepted the suggestion and directed that, other things being equal, and subject to their capacity, for executing works, the village co-operative societies be also entrusted with the execution of these works without calling for tenders.

The Progress So Far

The progress so far achieved in this direction is indicated below :—

(1) *Vellore South Circle (North Arcot District)* : The Karpoondi Co-operative Society has undertaken the construction of a cheri road at an estimated cost of Rs. 720. It has completed works to the value of Rs. 491 and it is expected that the work will be finished by the end of May.

(2) *Kumbakonam Circle (Tanjore District)* : The Achalpuram Multi-purpose Co-operative Society is constructing a mud road about a mile and a half long at an estimated cost of Rs. 500. Besides, the following local development works have been undertaken by the societies in this circle :—

(*a*) Repairs to irrigation channels in Mannigramam.

(*b*) Construction of two culverts and bore well at Kalanivasal.

(*Continued on page* 15)

Sri K. Kamaraj, Chief Minister, inspecting the Thottada Weavers' Industrial Co-operative Society in Malabar during his recent tour of the district.

Our Legislature

The Question Hour

By Sri A. J. SABESAN, M.A., Secretary to the Council

Question-time is one of the outstanding features of our Legislature when it exercises its function as a "grand inquest" of the nation "a Board of control over the Government" and as such the most attractive part of the daily sitting for the visitor. This hour has become very popular with the members also as it gives them an occasion to turn a searchlight upon every corner of the public service, to draw public attention to a grievance, in brief, to bring almost every Department of the Government under review and to make themselves felt by the Ministry of the day. The House ordinarily meets at 11 a.m. and unless it unanimously decides otherwise, the first hour of the sitting is spent on the asking and answering of questions except for preliminary business of a formal or ceremonial nature, which do not occur every day, e.g., swearing-in of new members, motions of condolences on the death of members, etc. The subjects covered range from proposals under the Five-Year Plan to the assignment of lands in a remote village.

Questions fall into three categories (1) *Starred Questions* or questions requiring an oral answer in the House on which supplementary questions might be put. (2) *Unstarred Questions* or questions requiring a written reply on which no supplementary questions are put ; (3) *Short Notice Questions* or questions which, in view of their urgency or public importance, are answered within the prescribed period of notice under the orders of the Speaker/Chairman with the consent of the Member of the Government concerned.

Method of asking Questions

A member desiring to put a question gives notice of the same in writing to the Secretary. The period of notice prescribed by the rules is seven clear days before the date of the meeting when he wishes the question to be answered. A member may give notice of a question even before he is sworn in. In so giving notice of the question, a member who desires an oral answer to his question distinguishes it by an asterisk. Questions requiring long statements or statistics are not to be starred. In the case of the Legislative Council the Chairman is further given power under the rules to direct that a question be treated as unstarred, if in his opinion, a written reply would be more appropriate.

Scope and range of questions

The questions are then examined as to whether they are in conformity with the rules summarised below as to what may be asked and the form in which they are to be asked and the decision of the Speaker/Chairman as to their admissibility is final.

Questions addressed to Ministers must relate to public affairs with which the Minister is officially connected or to a matter of administration for which he is responsible. It will not be in order to ask questions for instance, raising matters under the control of the Local Boards and Universities except in so far as they relate to public affairs with which the Minister is officially connected, or in regard to matters within the jurisdiction of the Union Government and other State Governments. Individual and private or purely parochial grievances not involving any public concern also cannot form the subject of questions in the Legislature.

Questions are not admissible which ask for information which the members might have obtained for themselves from published reports (e.g., Census Reports and Administration Reports), for such information is equally available to the member and is not a matter within the special cognisance of the Minister.

Questions are intended for obtaining information and must not for this reason supply it or ask for an expression of opinion. Statements of fact should be limited to what is necessary to make the question intelligible, and arguments, inferences, ironical expressions or defamatory statements must be avoided. A question may be put about the intentions of the Government either legislatively or administratively, but not about policy too large to be dealt with within the limits of an answer to a question or matters relating to the proceedings of the Council of Ministers.

The fact whether the attention of the Government has been drawn to a specific article in a specific newspaper is not a matter of public concern. Where it is proposed to interpellate upon the allegations contained in a newspaper, the questioner should embody the allegations in his question so that he makes himself and not the newspaper responsible for the accuracy of the statement.

Questions which would prejudice the position of a person who was about to be brought to trial before a Court of Justice or relate to the conduct or character of a person except in his official capacity or reflect on the conduct or action of the Governor are not in order.

In the House of Commons a question may not refer to the debates or answers to questions in the current session. In our Legislature a question which has once been fully answered or anticipates a question of which notice has already been given will be inadmissible.

Questions dealing with matters within the jurisdiction of the Speaker/Chairman should be addressed to the Speaker/Chairman by private notice. No written or public notice of questions addressed to the Speaker/Chairman

B.C.G. Vaccination

The attention of the Government has been drawn to certain correspondence in the Press regarding the Mass B.C.G. Vaccination programme in the State. A careful study of the recent literature on the subject and the considered opinion of the techinical experts leave no room for doubt regarding the wisdom of the inoculation drive. The following extracts provide a definitely affirmative answer to the question—"Does the attenuated bovine tubercle baccillus create an immunity against the normal human infection ?" :—

Experiment by Nature

(1) One of the most convincing proofs is from an experiment carried out by nature unaided by man. Hyge (School Medical Officer in Denmark) in 1947, has reported in a school, of age group 12—18, an unsuspected case of open Tuberculosis in one of the teachers who remained in contact with her pupils for about two months. Of the exposed girls, 106 had been B.C.G. vaccinated and 94 were unvaccinated. Of the vaccinated group, two acquired Tuberculosis and of the unvaccinated, 41 developed Tuberculosis.

(2) Aronson (Pofessor of Micro Biology, Phip's Institute, Philadelphia) and Palmer (Medical Statistician of the United States Public Health Service), in the U.S.A. (1935–38), showed that the incidence of Tuberculosis among about 1,500 vaccinated was 40, and among 1,500 unvaccinated, was 185.

(3) Ferguson of Saskatchewan, Canada, reported in 1946, in the Canadian Journal of Public Health, that among 1,005 B.C.G. vaccinated nurses 0·9 per cent acquired Tuberculosis, whereas, of 759 unvaccinated Tuberculin negative nurses, 3·8 per cent acquired Tuberculosis, i.e., about four times as many. He concludes—"The serious situation that had been developing with regard to excessive incidence of Tuberculosis among nurses and Sanatoria employees, who did not react to Tuberculosis on entering the environment, during the period 1930–38, has not been present, since vaccination of negative reactors was begun in September 1938. The nursing schools in Saskatchewan no longer have anxiety and worry with regard to excessive Tuberculosis developing among their negatively reacting staff."

(4) R. Stevenson Doig (School Medical Officer, Stornoway, Lewis, England) reports in the Lancet of 2nd April 1955, that 3,000 persons were vaccinated in 1950, and by September 1954, none had been notified as tuberculous, whereas of 1,188 positive reactors in 1949, 29 had been notified and of 2,814 negatives, 9 had been likewise notified. In view of this, he states that he is convinced that B.C.G. confers immunity of a High degree.

(5) Observations in different countries indicate that unvaccinated tuberculin negative subjects are more likely to develop active tuberculosis than comparable vaccinated people, in the ratio of about 6 : 1. Irvine (B.C.G. Adviser to the Oxford Regional Board) in 1954 arrived at this figure, by studying results of ten surveys in the different parts of the world during the years 1940 and 1953. Heaf, Professor of Tuberculosis in the University of Wales, reports in the Lancet of 12th February 1955, that the surveys done so far indicate quite definitely that B.C.G. vaccination does offer considerable protection against the development of primary tuberculosis.

The most important argument in favour of B.C.G. vaccination is, that primary infection with active human bacilli may result in progressive disease ending in death, in an appreciable number of cases. That is why, primary infection with human bacilli should be avoided at all costs and a certain preliminary immunity should be produced with the attenuated B.C.G. vaccine.

It has been suggested that there is really no need for the vaccination programme as 80 per cent of the population of India gave a positive reaction to the tuberculin test. That such a statement is totally incorrect, is shown by the following sample figures based on the testing of several lakhs of people in our own State :—

Place.	Percentage positive in age groups. 0—6	6—14
Coimbatore—Urban.	14·4	44·5
Rural.	10·5	25·2
Udipi—Urban ..	16·4	39·6
Rural ..	17·7	33·3
Salem—Urban ..	16·3	37·7
Rural ..	12·0	29·8

It will be seen from the above tabular statement that well over 50 per cent of the individuals under the age of 14 are in need of the protection offered by B.C.G.

Mass X-ray examination of the population has shown that among the persons naturally infected, no less than 2—3 or even 4 per cent in certain localities, shows evidence of active disease. It is from this group that more than 500,000 deaths from Tuberculosis per year occur in India. Of the remaining, many are potential subjects of Tuberculosis.

The following facts give a definitely negative answer to the question—"Is there danger in mass inoculation by live B.C.G. ?"

No danger

(1) Repeated attempts by many workers have been made to try to restore virulence to the organisms in B.C.G. vaccine. None of these attempts have so far succeeded and the organisms have remained in attenuated condition.

(2) In Europe, between 1951–53 more than 16 million persons were vaccinated in the Mass vaccination campaigns of the WHO with no untoward results—(Bulletin of the WHO, 1955—Volume XII).

(3) In India, since the campaign started in 1949, 16,725,175 persons have been vaccinated and no untoward results have been reported among them also.

(4) In Madras City and the mufassal, a follow-up of random samples among the vaccinated children has shown no harmful effects.

Preliminary enquiries regarding the case of a child from Coimbatore Municipality, reported in the papers, suggest that her illness had no relation to B.C.G. or small-pox vaccination. However, Government is deputing a panel of senior specialists to study the case in detail and submit a report.

Latest Information from England

The Government have received the following latest information from the Government of India in respect of the progress of B.C.G. Vaccination in England and it is released for the information of the public.

There has been a national movement throughout England and Wales during the last few years under the auspices of the Ministry of Health and all school children between the ages of 13—14 are being inoculated against tuberculosis. It is considered by the experts in England that the first five years after leaving school constitute the most important period during which the boys and girls need some extra protection against tuberculosis and this protection is afforded through B.C.G. Vaccination. As most casualties in the young occur in early adult life, the inoculation helps them to get an early immunity. The B.C.G. Vaccination service is being given in all the Ministry of Education Establishments as part of their service. Many cities in the north of England and cities like Colchestor in the south have already been completed and the inoculation is now going on in the London schools, apart from the work that has been completed in parts of London.

It is the considered opinion of the Public Health Department of the London County Council that B.C.G. Vaccination is in no way harmful at any age. On the other hand, it is considered to be the best way known to medical science, at present, of protecting anyone against any but the most severe exposure to tuberculosis. Accordingly, the London County Council has offered this safeguard free of charge to all children in its schools before they complete 14 years of age.

Nearly Three Lakhs of Automobiles in India

That 155,234 privately-owned automobiles, 38,728 buses and 91,425 trucks are plying in the various States of India was revealed in a written reply by Sri O. V. Alagesan, Deputy Minister for Railways and Transport, to a question by Pt. D. N. Tiwary in the Lok Sabha on March 22, 1955.

The following statement was laid on the table of the House showing the number of private cars, buses and goods vehicles taxed in the various States during the last quarter of the financial year 1952–53 :—

State.	Private cars.	Buses.	Goods vehicles.
Assam	4,728	1,317	4,577
Bihar	6,783	1,417	3,978
Bombay	37,315	4,511	15,061
Madhya Pradesh	4,500	1,277	3,460
Madras	23,227	6,128	9,319
Orissa	2,097	656	2,110
Punjab	2,865	1,413	3,004
Uttar Pradesh	10,112	3,975	6,119
West Bengal	27,278	8,425	25,918
Hyderabad	7,090	1,343	3,110
Jammu and Kashmir	260	496	1,212
Madhya Bharat	2,081	541	903
Mysore	5,590	1,063	1,630
Pepsu	1,500	802	763
Rajasthan	4,959	2,112	2,916
Saurashtra	1,966	445	1,530
Travancore-Cochin	3,438	1,612	2,131
Ajmer	1,040	126	198
Bhopal	321	80	347
Bilaspur	3	6	4
Coorg	232	86	293
Delhi	7,135	490	1,586
Himachal Pradesh	55	..	30
Kutch	270	70	260
Manipur	96	12	423
Tripura	40	71	142
Vindhya Pradesh	230	241	368
Andamans and Nicobar Islands.	14	6	15

(*Continued from page* 10)

(*c*) Repairs to road at Sarabojirajapuram.

(*d*) Excavation of channels in Keerambiar.

(3) *Erode Circle* (*Coimbatore District*),—The Kavandampalayam Multi-purpose Co-operative Society has undertaken three small well works and the works are in progress.

(4) *Malabar South Circle*.—Two drinking water wells were sunk by the Kuthanur and Kannanur Multi-pur-pose Co-operative societies in the Palghat Community Project area.

(5) *Tuticorin Circle* (*Tirunelveli District*).—The Valampatti Multi-purpose Co-operative Society has undertaken the construction of the Valampatti-Arunachalapuram road and the voluntary labour valued at Rs. 50 has been contributed by the members of the society.

(6) *Tiruchirappalli North Circle*.—The Thaluthalai Co-operative Society has undertaken construction of a community hall at an estimated cost of Rs. 5,500 and has completed the work except plastering and roofing.

(7) *Tirukkoyilur Circle* (*South Arcot District*).—The Dagantheerthapuram and Thottapadi Multi-purpose Co-operative Societies have undertaken works connected with the construction of a radio house and a reading room respectively at an estimated cost of Rs. 1,200 each and the works are in progress.

The enthusiasm with which some of the village co-operatives come forward to undertake local development works is indicative of their desire for village development, and given the necessary facilities, they will be able to play a vital role in the promotion of rural welfare in social and economic spheres

is permissible. As a matter of convention questions about the Speaker/Chairman and his staff have not been encouraged.

The old rules contained a provision, as in the House of Commons, that a question addressed to a non-official member must relate to some Bill or Resolution or any other matter connected with the business of the House for which that member is responsible but it was omitted in the revision of the rules in 1937.

List for the day

Questions which are in order and for which an oral answer is required are arranged according to the Ministers to whom they are addressed and entered in the list of questions for the day. An endeavour is made to include in the list of questions for a day only so many such questions as judged by ordinary experience can be answered within the space of one hour. No limit has however been fixed as to the number of questions a member is entitled to ask on each day.

Procedure in the House

When the questions are taken up in the House, the Speaker/Chairman calls out the name of the member putting each question in the order in which the questions appear in the printed list and specifies the serial number of his question. Thereupon, the member stands in place and says "I put the question." Member giving notice of the question may authorise some other member to put the question on his behalf during his absence. The Minister to whom the question is addressed then makes his reply. After the answer has been given, the Speaker/Chairman makes a sufficient pause to give members a reasonable opportunity of putting supplementary questions. This supplementary may be asked by the member who put the original question on the order paper or by some other member interested in the topic under interrogation. If two or three members rise, the Speaker/Chairman usually calls the orginal questioner. He is entitled as Mr. Baldwin once put it "to wring the last drop out of the orange before any one else comes in."

Supplementary questions are intended for further elucidating any matter of fact regarding which an answer has been given. The rules relating to the subject-matter of questions apply also to supplementary questions. A Minister to whom a supplementary question is addressed may ask for notice or decline to answer it on the ground that to answer it would be against public interest. No discussion is permitted in respect of a question or any answer given to a question.

Within these restrictions, one supplementary question is followed by another in quick succession. Often a question produces a barrage of supplementaries in an attempt to catch the Government off its guard, and the chase of the Minister continues until the interpellating member succeeds, in eliciting something more from the Government than the mere information which the rules concede or draws from the Government a pronouncement as to their intention to remedy the grievances placed before them or a statement of the reasons which preclude them from interfering. When the Speaker/Chairman finally decides that the hunt has gone on sufficiently long, he passes on to the next question.

Some supplementary questions and answers characteristic of this hour are given below:

Minister: When the time arises for such consideration, I shall decide what I should do.

Member: May I take it that the Minister has not made up his mind on that matter?

Minister: What I said does not imply that.

Member: May I know what it does imply?

Minister: The hon. Member knows the English language as well as I do.

* * *

Minister: I cannot answer that question. (Several voices: Why not? A voice: He dare not.)

Member: May I know whether the Minister is aware that the vote of this House is binding on him and the other Ministers?

Minister: I do not think the vote of the House means what the hon. Member says (Laughter and cries 'Oh Oh').

Minister: That is a matter of opinion, Sir. It is not a fact on which asupplementary question can be asked by an hon. Member.

Member: It is not a matter of opinion.

Minister: Mr. President, it is for you to rule on that point and not my hon. Friend.

Hon. President: I do not find any seeking for an opinion there. (Swarajist cheers).

* * *

Member: In view of the fact that the ordinary engineers are not familiar with the work connected with these temple buildings, may I know whether the Government will continue to appoint sthapathis and put them in charge of renovation of these temples?

Minister: The Government will consider the suggestion of the hon. Member, Sir.

Member: Have the Government any proposal to establish a training school to train people in temple architecture, Sir?

Minister: No. Sir.

* * *

Member: May I know whether the nam e of Kodaikanal is in the list?

Minister: When the hon. Deputy Leader of the Opposition resides there, I don't think Government's interference is necessary to develop that place.

* * *

Member: Sir, Will the Hon. the Chief Minister be pleased to take active steps to solve the unemployment problem among the hon. Members of the Assembly? (Laughter.)

Minister: Sir, I knew that the hon. Member Sri when he rose would ask some such question. But I am not prepared with an answer. (Laughter.)

* * *

Member: While even the natural law demands that both husband and wife should be together, why should the Government of Madras think of separating them in Government service? (Laughter.)

Minister: Sir, Government do not ever think of separating husband and wife. But I do not know whether the natural law demands that both husband and wife should be in service. (Renewed laughter.)

All starred questions which are not reached and all unstarred questions with the answers thereto are included in the printed proceedings of the House. Occasionally however questions are taken over to another day at the request of a Member or Minister.

(Continued on page 32)

Sri Madheswaraswami Temple

By SRI K. R. VENKATACHALAM, Executive Officer

This holy shrine is situated in Madheswaranmalai Village in the heart of the Eastern Ghats on the southern border of Karnatakadesa. It is at a distance of 50 miles east of Kollegal and 33 miles west of Mettur Dam, in Salem District. The Temple is surrounded by a prakaram with Mantapams on all sides. The Sannidhi is facing towards west and the main Gopuram in the prakaram facing south. Towards north there is a gate by name Alambadi Basawan Gate. The main Temple consists of (*a*) Garbagraham, (*b*) Ardhamantapam, (*c*) Mahamantapam and (*d*) a front Mantapam consisting of 25 anganams. Besides this Temple, there are holy places here such as Salur Mutt, Seshan Udayar Temple, Anthara Ganga and Nagamalai, etc. The founder of Salur Mutt is reported to be one Samsara Sangappa who followed Sri Madheswarar to this place.

Earlier Days of Sri Madheswar

It has been ascertained that Sri Madheswarar's Sanskrit name was Nirmaya Ganeshwara and that he was the 7th Jagathguru of the Great Basaweswara's Sunyasimhasana of Kalyan in Beedher District in Hyderabad State and that he came from northern Karnatakadesa about 650 years back. As for as we know Sri Madheswarar was residing during His youth at Suthoor Mutt, Suthoor Village on the bank of Kapini River, Nanjangud taluk, Mysore district. There are two memorials of Sri Madheswarar at Suthoor, one is Pooja Gathigai and the other is (Ragi Kallu). It is said that Sri Madheswarar as a disciple was entrusted with flouring Ragi for use in the Mutt and that the huge ragi stone used to turn round of its own accord due to the undisputed Mahimas of Sri Madheswarar. The same ragi stone is still available and is kept in Someshwara Temple in the same village.

The Gathigai mentioned above is in Suthoor Mutt. His Guru, Sri Siddananja Desikaru noticed the Divine Power in His disciple and began to worship Him. Sri Madheswarar never liked this, fell out and proceeded to Sri Prabhulinga Betta near Kunthur Village which is at a distance of about 7 miles from Kollegal. On the Betta is the Temple of Prabhudevaswami and at the foot of the hillock is a memorial, viz., Sri Madheswarar's Feet cut on a rock and on which a Mantapam has since been erected. Sri Jagathguru Adhiganeshwara was His Guru at this place. Here also Sri Madheswarar exhibited His Mahimas and the Divine Power in Him. He used to convert by His Mahimas, stones, rocks, rubbish, etc., into fragrant beautiful flowers and cured incurable diseases for several people merely by His Grace (authority—Prabhudevar Sahithya and Niranjana Vamsa Ratnakara—Kanarese Granthas).

Divinity Recognised

History repeated itself at Prabhulinga Betta also. The Guru took cognisance of His Sishya's Mahimas and Divine Powers, honoured Him and advised Him that He should not serve him any longer. Thereupon Sri Madheswarar decided to go to a secluded place and accordingly chose Madheswaranmalai a remote and inaccessible forest, with one Samsari Sangappa, one of His Sishyas (authority—Sri Madheswarar's Sangithya). At Madheswaranmalai Sri Madheswarar constructed a hermitage now known as Salur Mutt and requested Samsari Sangappa to feed the visitors. In the site where the present Temple is, Sri Madheswarar used to sit on performance of Yoganishta and finally attained samadhi.

Voluntary worship by the Cow

It is narrated that after a lapse of time, a cow owned by one Jungai Gowda of Alambadi (a village which was at a distance of about 10 miles from Madheswaranmalai and now become uninhabited), used to go to the spot where Madheswarar obtained samadhi and offer its milk voluntarily. This was noticed by Jungai Gowda who ascertained the truth and also constructed the (present garbhagraha) Temple.

Offerings Pour-in

In 1774 A.D. Hyder Ali Khan of Srirangapatam granted a Thambara Sasana for the management of the Temple. On 31st October 1812, the East India Company granted a Sanad in Tamil for the management of this Temple. Sri Madheswarar has been a favourite Deity for the Royal Family of Mysore. In 1814 Mummadi Krishna Raja Wadiyar, the then ruler of Mysore offered a gold Kolagam to the Deity and Her Highness (Ranivasa) offered silver vessels, etc. In 1935 late Nalmudi Krishnaraja Wadiyar, who also visited this Temple offered a big Car and several gold jewels. The present Rajpramukh Sri Jayachamarajendra Wadiyar Bahadur, G.C.S.I., G.C.B., is a great devotee of Lord Madheswara. He has been graciously pleased to visit this Temple five times within a period of three years. His first visit was on 26th November 1951, on which he worshipped the Deity and laid foundation for a free Choultry at Madheswaranmalai. He visited second on 18th February 1953 and also performed the opening ceremony of the newly formed Ghat road from the foot of the hill. This road was recently formed by the Temple Authorities by securing the aid of the Madras Government.

The Rajpramukh was pleased to visit this Temple with his Family and the child prince, on 4th December 1953, and arranged to have the Choultry declared open by his mother, Her Highness The Yuvarani of Mysore and handed over the same to the Temple Authorities. The fourth and the fifth visit of His Highness and the Royal family to the Temple were on 22nd November 1954 and 20th February 1955 respectively. Besides the above, he has offered somecostly gem set, gold jewels, etc., and also arranged for the performance ofregular sevas throughout the year.

(Continued on page 32)

Geriatrics—The care of the Aged

By DR. VISHNU SARMA, M.A. (Cantab), M.B., B.CHIR., M.R.C.S. (Eng.), L.R.C.P. (London),
Civil Assistant Surgeon, The Government Raja Sir Ramaswami Mudaliar Lying-in Hospital, Madras

"Old age, a second child, by nature curst with more and greater evils than the first weak, sickly, full of pains, in every breath; railing at life, and yet afraid of death."

—*Churchill Gotham,*
Bk. 1. Line 215

From Western standards we die quite young. Many of us never reach the British standard of old age—namely, 65 years for a man and 60 for a woman. That is the time when they become entitled to their old age pensions.

Old Age, a Serious Problem

While it is true that most of us die young, times will come when we shall linger to a ripe old age. Better standards of medical care, newer drugs to combat disease, public health measures to wipe out killers such as malaria, typhoid and kalaazar, better economic and housing conditions which will eliminate anæmia and other deficiency diseases—all these will mean that we shall live longer and there will be more of us. This will take some time and immediately we are bothered about more pressing problems. Yet, old age is a very serious problem causing great anxiety to the British people. In Britain to-day one in seven is an old person, a pensioner. It will not be long before, that those over 60 will outnumber those below 20 years of age. If old people remain non-productive living as parasites on the State, a very unfair burden will be placed on the younger members. Economic stability will suffer. It is not that the old people are infirm or unable to work properly or that they are happy to remain idle. Far from it, they are keen to carry on, but the State has to draw a line somewhere and at these arbitrary age limits people have to retire.

Every person when he becomes old (reaches pensionable age) should be submitted to a test of both his mental and physical powers. One should seek to discover whether or not he is suited to continue his occupation. It is important that those who are eminently fit to do so, should be encouraged to carry on, because the sudden cessation of activity precipitates and quickens the process of 'ageing'. The person used to intense activity finding himself with nothing to do becomes discontented and restless. Technical and professional men find other types of work unsuitable and disagreeable. A human being must have something to do, something he or she enjoys doing. Unless the aged can be kept occupied they soon become a burden to themselves and to society.

Many deformities and disabilities afflict the aged. Two vitally important conclusions have been reached by scientific investigations. One is that one-third of all old people admitted to a hospital die within a month, mainly because of the serious diseases which strike at this period of life. Of the others more than a one-third may be completely rehabilitated with appropriate medical care and exercises so that they can return to their previous occupation.

Growing old—Can it be arrested ?

Our modern concept of old age is not just the passage of years but the efficiency with which a person's mind and body works. Many who are old are young in spirit and capable of more intense and useful activity than many who are in their bloom of youth. What makes a person old ? Can the process be delayed ? By devising ingenious experiments it is possible to estimate the acuity of a person's senses, his power of movement and his capacity to co-ordinate mental and physical activity.

By a detailed study of the tissues of the aged, scientists are trying to discover the bio-chemical basis underlying the process of growing old. The secret is probably contained in the intricate molecular activity which goes on within tissues such as muscle. It appears that these molecules become in-elastic after prolonged use and lose the resilience of youth. Can such a process be prevented or at least delayed ?

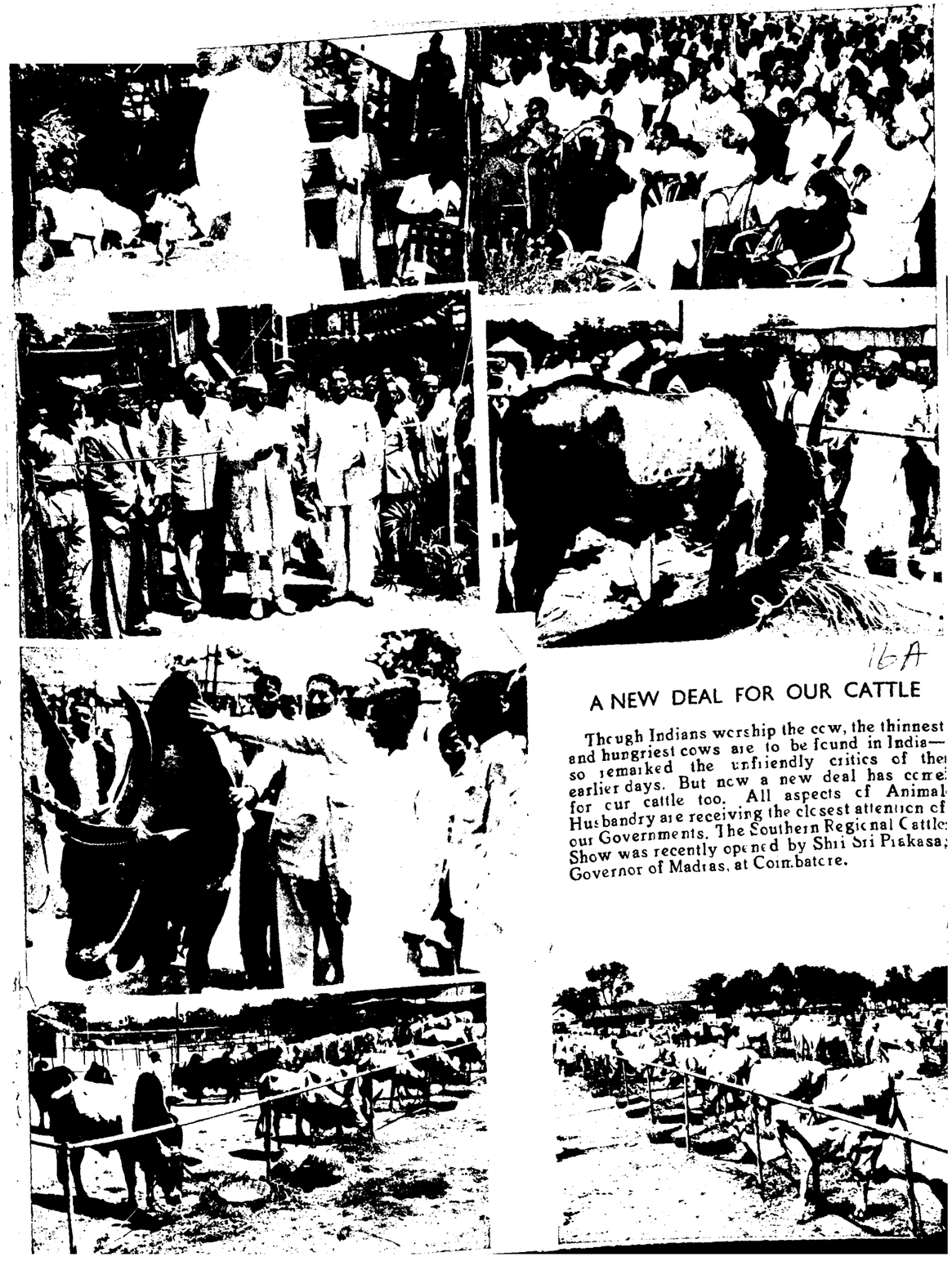
The last war showed that with encouragement the old and the infirm can also contribute richly to national advancement. Why should they not do so in times of peace as well ?

The second thing is this. To confine an old person to bed perpetually is to despatch him quickly to the grave. Prolonged bed rest in old age is lethal. Contrary to the widely accepted belief, it is better to allow a person to be up and about than be passively in a bed.

The Will to Live

Old people are prone to fall and break their bones. The wrist and thigh bones are the commonest ones to be injured. Breaking a thigh bone is a serious matter because it usually means a prolonged confinement to bed in a plaster-of-paris cast. With modern medical care and skilled nursing it is a bit difficult to die in a hospital bed. So they linger in their beds as cripples and soon deteriorate, losing the will to live. An interesting experiment is being tried at the Accident Hospital in Birmingham, the foremost centre in the world for treatment and early rehabilitation of the injured. The old people provided they stand the slightest chance of pulling through, are operated upon and their broken hip and thigh bones are repaired by internal mechanical fixation using specialised orthopædic techniques. I have seen this done to a lady of 99. Usually most of them pull through and are made to be up and about on crutches within ten days driven by a team of enthusiastic physiotherapists. The old

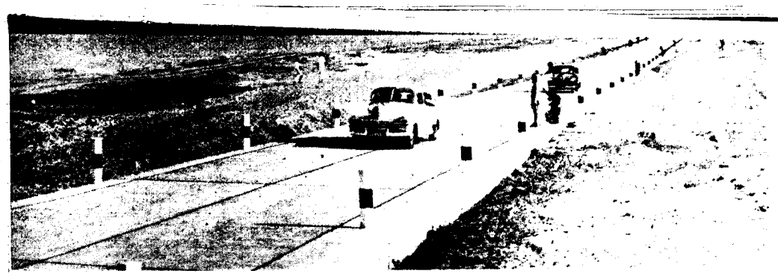
(*Continued on page* 30)



16A

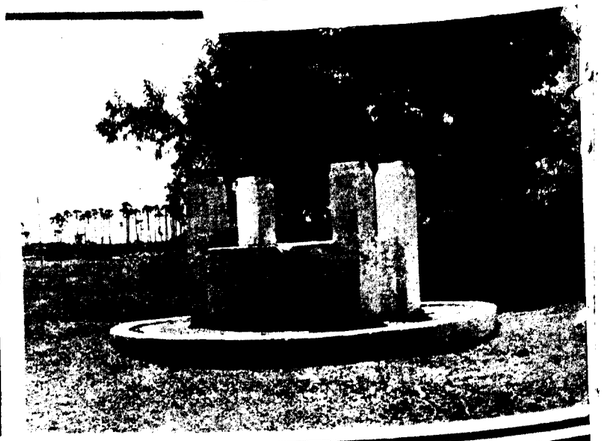
A NEW DEAL FOR OUR CATTLE

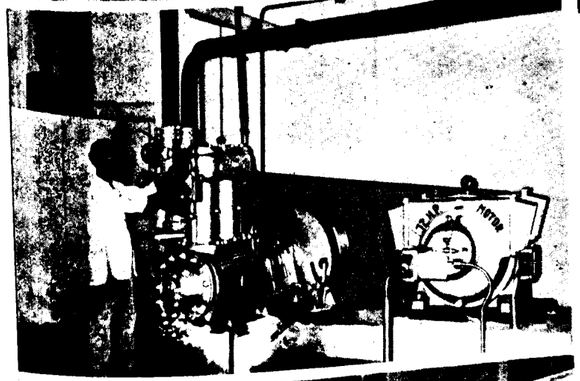
Though Indians worship the cow, the thinnest and hungriest cows are to be found in India—so remarked the unfriendly critics of the earlier days. But now a new deal has come for our cattle too. All aspects of Animal Husbandry are receiving the closest attention of our Governments. The Southern Regional Cattle Show was recently opened by Shri Sri Prakasa, Governor of Madras, at Coimbatore.



BLOCK 16B

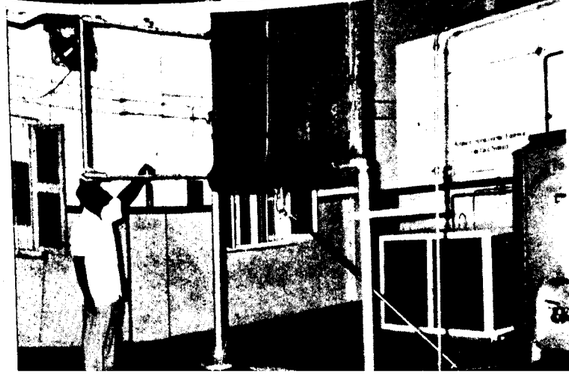
Thirukalikundram Block in Chingleput district was visited by Sri K. Kamaraj, Chief Minister, in the first week of June 1955. He opened the Vallipuram Causeway (*top left*) and visited other spots of activities in this block.

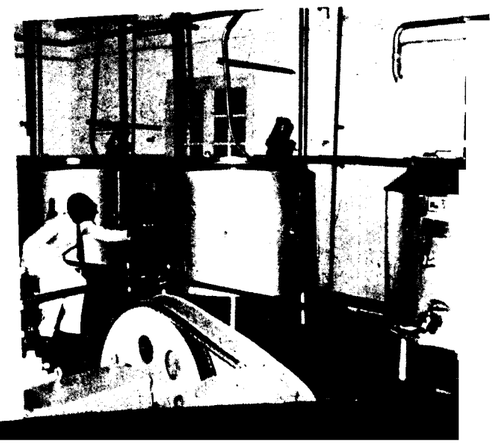




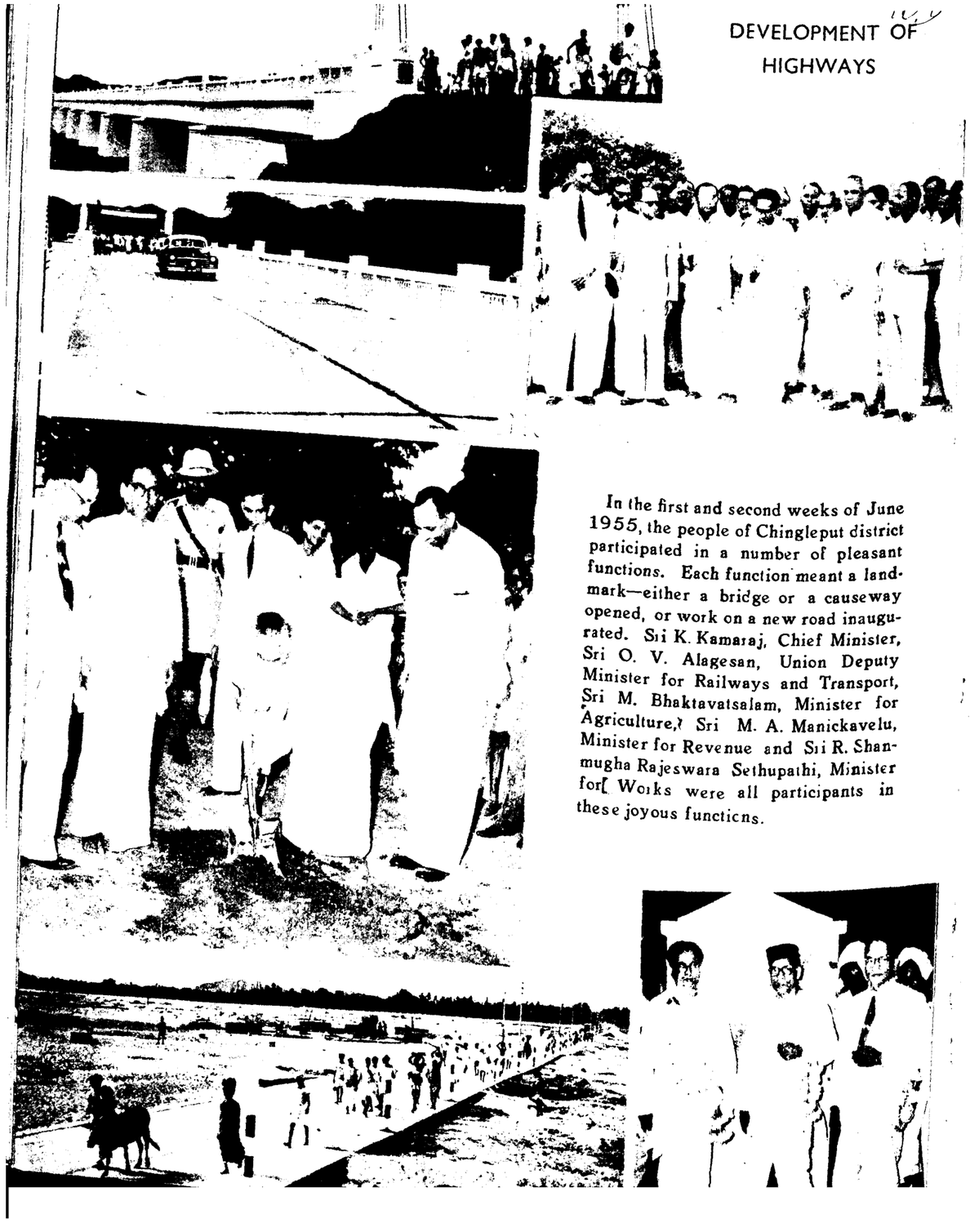
TONED MILK 16C

The manufacture of toned milk was inaugurated at th Government Milk Factory, Saidapet, by Sri M. Bhakta vatsalam, Minister for Agriculture on 13th June 1955 Sri K. Kamaraj, Chief Minister presided. The tone milk is made by toning buffaloes' milk with an additio of an equal quantity of water and proper proportion c skimmed milk powder to the standard and quality c fresh cow's milk.





DEVELOPMENT OF HIGHWAYS



In the first and second weeks of June 1955, the people of Chingleput district participated in a number of pleasant functions. Each function meant a landmark—either a bridge or a causeway opened, or work on a new road inaugurated. Sri K. Kamaraj, Chief Minister, Sri O. V. Alagesan, Union Deputy Minister for Railways and Transport, Sri M. Bhaktavatsalam, Minister for Agriculture, Sri M. A. Manickavelu, Minister for Revenue and Sri R. Shanmugha Rajeswara Sethupathi, Minister for Works were all participants in these joyous functions.

Mass Communication in Madras State

By SRI M. N. PARTHASARATHY, Radio Engineer, Madras State Broadcasting Department

Communication may be defined as anything that conveys a meaning, that carries a message from one person to another. The message exchanged may be an idea, a feeling, an attitude, a philosophy of life, a skill in fact anything which one person believes is important to another. People communicate when they feel the need to secure a new adjustment to other people or when they wish to influence other people. Communication is successful to the degree that it effects the desired adjustment or influences other people. It is thus the very essence of education, of religion and of all other institutions basic to society. The group, the community, the nation, the civilization exists only by virtue of the means of communication.

Fifty or sixty years ago verbal language was almost the only means of conveying messages to any large group of people. The use of printed material or travel were the only way that space could be overcome for the masses of people. But times have changed. There is no longer a single way of conveying the subject-matter. The advent of the motion picture, the radio and the television have given us a wide choice of the media of conveying message or of communicating.

A complex world

It is a truism to say that those of us who are alive today live in a world that is enormously and increasingly (and alarmingly too) complex. Development and invention in recent decades have introduced problems into the life of the average citizen that were totally absent a generation ago. Rapid transportation and communication especially have created new domestic and international social problems. People nowadays are brought into contact with citizens and other people far removed from the communities in which they were born or they live. Even those who do not move out of the routine of the simple life of their own small communities have now essentially the same experiences through the use of the motion picture, the radio and the television as their fellow citizens who travel. Consequently all of us are now subject to the impact of new ideas and attitudes and views which differ from our own and hence require a type of rapid intellectual and emotional adjustment which was beyond imagining 25 or 30 years ago.

The maze in which the average citizen lives today has created a greater need for fuller understanding of the world in which he lives and of his human beings. Such an understanding can be gained only through education in its broadest terms. But the swiftness with which life changes now makes it impossible for any school or college, however good, to prepare our people fully for the responsibilities of later life. Nothing less than continuing education through mass media can provide the type of understanding among our people that will be needed if they are to live effectively in the evolving social life of our times. It is in this connection that the mass media of communication like motion pictures, the radio, television, have their maximum usefulness. These mass media can literally turn every living room in every occupied building into a class-room.

By education no formal education is meant. Education seems to be synonymous in many minds with courses, curricula, texts, etc. Broadcasting can do a job of educating without any of these conditions. When the emphasis is taken from these and placed where it belongs, on the subject-matter, the materials, the information given out, then the entire field of broadcasting will take on a more intimate character and become more meaningful. Adult education can be carried on by other means of communication than the spoken word in the class-room.

Influence of the mass media

Here in India, the two truly modern mass media of communication have had a very powerful influence. The printed word has a very limited range on account of the widespread illiteracy in the country. Television as such has not developed yet on a large scale. The radio has run a highway to everybody's door. The motion picture and the radio have penetrated to the remotest of our villages and have become a part of their daily individual as well as social life.

Radio and film exert a peculiar hold over the mind and the imagination of their audiences. What this hold is and how it obtains its effect has never been satisfactorily explained. The disembodied voice of the radio exerts a peculiar fascination and a degree of identification that is quite unusual. It is perhaps so because listening to the radio is in a sense intellectual rather than emotional. The crowd psychology prevailing in a public meeting or theatre is missing. Its reach, its power to dispose in large measure, of the disadvantage of physical isolation, its convenience, the easy circumstance under which listening is possible; its resources of technique, the power of its variant modes of firing our imagination and exciting our interest; its human resources, the experts, the public figures, the celebrities it can summon, the stimulus of a new voice and the growing fascination of a personality conveyed by a present voice and an absent person; its conquest not only of space, but of time too, its power to bring us a verbal picture of events and ceremonies as they occur, all these are unique and unrivalled resources which qualify it for being the ideal medium for mass communication in this country not only for education, but for entertainment also. The influence of radio in the field of entertainment is too well-known to need more than passing reference. Radio broadcasting is probably the most revolutionary factor that has ever been brought into the field of entertainment.

Community listening

The radio receiving set has necessarily to be located in a home or a community centre. It therefore becomes the

centre where the family group and their friends and neighbours gather at leisure to listen to the radio. The Government of Madras as early as 1938, started the experiment of providing such radio receivers in the villages. The villager by the very nature of things could not afford to have a radio of his own and it became necessary for the State to provide this means of modern communication by which the adult villager could become educated. The installation of radio receivers in villages for community listening formed part of the programme of social reform inaugurated by the Madras Government in 1938. When alcoholic drinking was prohibited in this State, the addict had to be provided a counter attraction. What could be better than the radio as a counter attraction to the confirmed addict? It started on a small scale with the installation of a hundred radio receivers in the districts in which Prohibition was enforced. Since then, the villagers of Madras have greatly cultivated the habit of listening to community receivers so that there has been a continuous demand from the villages for such receivers.

In course of time, it was found uneconomical to install in the villages the commercial type of receivers selling in the market. A community receiver specially suited for the needs of the villages in Madras was designed and developed by the State Broadcasting Department after continuous research and experimentation. These receivers were assembled in the laboratory and workshop of the department and sent out for installation in the villages. It was possible to economise considerably on the cost of installation by this means. Where villages were not electrified, sets operated by the six volt storage battery were installed. Field service stations were opened, depending on the concentration of the sets, to attend to the periodical charging of the batteries and also to the servicing of the receivers when they become defective in the course of their working. The aim was to see that even the remotest and most inaccessible of places were provided with community radio receivers as they are the places which require them most. No labour or expenditure is spared in maintaining the community receivers even in such places as remote islands in the Arabian sea, a hundred miles off the mainland or in the higher altitudes of the Nilgiris and Kodaikanal which can be reached only by walking as long as 15 miles.

In order to make the villager have an abiding interest in the set installed in his village and also to lessen the financial burden on the State, it was decided to make the villager share along with the State the cost of installation and maintenance of the sets. He has to pay in full the initial cost of installation and a portion of the annual expenditure on the maintenance of the set. Perhaps, Madras is the only State in India which is imposing this financial burden on the village listener. Yet, this is the State which has the largest number of community receivers in India. There are nearly 2,200 such receivers in this State today. It has now been felt that still greater facilities should be provided for community listening and the Government of India have volunteered to subsidise to the extent of 50 per cent of the cost of installation of community receivers. The Government of Madras have decided to avail themselves of the subsidy offered by the Government of India and are taking active steps to implement their decision.

Besides community receivers in the villages the Government of Madras have also provided a number of mobile vans with audio-visual equipment. The vans which are equipped with a 16 mm. sound film projector, an amplifier, a radio receiver and a magic lantern tour the countryside constantly. Films, educative and entertaining, are exhibited in the villages. Special publicity for specific items of importance is given. Instruction is provided on infectious and contagious diseases and the means to combat them. For this purpose, special films are produced by the State Government.

These media of communication have been utilised for the education and entertainment of the masses within the past 15 to 20 years. It is worthwhile to take stock now in order to plan for the future. Listeners are the backbone of the radio. But the listening audience is highly heterogeneous. Rural audiences have different preferences from metropolitan audience; old people have different preferences from the young; men from women, the illiterates from the literates, etc. The radio has therefore to cater to a variety of tastes in varying measures. Besides, the listeners though appreciative are largely indifferent. The listener must finally be free from his work and be in a mood to listen to the radio. All these contradictory facts have to be compromised while putting up programmes of instruction and education to the radio listener. It is a matter of great difficulty to assess what is the type of programme that is particularly required for any specific purpose. There is vast scope for research in this direction to make the utility of the radio as a medium of mass communication more effective.

With all its utility and potentialities, the radio, as a medium of mass communication, has also its shortcomings and hazards. The one-way traffic of radio communication, the listener's unequal status, his incapacity to interrupt or answer back, his subservience to the speaker are its greatest shortcomings as well as the greatest hazards. We adapt ourselves so readily to our environment that we tend to lose the sense of wonder in a context that is familiar. But for this fact, we might well stand aghast at one distinctive phenomenon of mass communication especially characteristic of radio, viz., that the minds and wills of men unknown to us and far removed in space are seeking to play on our emotions and direct our thinking.

(*Continued from page 5*)

culture, Cottage Industry, Women's Welfare, Social education, etc., was also conducted at the Jagannath Temple for a period of 10 days and the same attracted many people.

In the Palghat Community Project area, an agricultural exhibition and a cattle show were conducted at Kannambra on 20th March 1955. The Kalamandir Troupe, Madras, under the leadership of Sri K. P. G. Panicker staged a drama called "Nammude Nattupuram" in the selected villages of the Project Areas.

SOUTH KANARA

Manjeswar Block: Twenty-three compost pits were dug, 10 maunds of Chemical fertilisers were distributed, 11 demonstration farms were started, and 37 acres were brought under vegetables. Seventeen Agricultural Committees were formed. Under Village Communications, 3 miles of Pucca road, ½ mile of Katcha road, 1¼ furlongs of foot path, 5 culverts and 13 foot bridges were completed during the month.

Byndoor Block: During the month, 124 compost pits were dug, 45 maunds of fertilisers were distributed, 124 maunds of seeds were supplied to the ryots, and one demonstration farm was started. A sum of Rs. 10,860 was disbursed to 94 ryots as loans under short term credit facilities for the purchase of seeds and manure.

Municipalities and Public Health

By SRI A. B. SHETTY, Minister for Health

The Chairmen and councillors of muncipalities have very important duties and responsiblities to discharge in regard to the development of their towns and the promotion of the welfare of the citizens there. You have been given a definite voice in the formulation of planned programmes for the next Five-Year Plan and a greater responsibility in executing the Plan in co-operation with the local people.

A city or a town is an important factor in the associated lives of its citizens. It indicates a country's development. The layout of its roads, its residential quarters and industrial areas, its various institutions and places of recreation reflect fairly accurately the ideas and ideals of its inhabitants, their culture, social status and economic condition and the kind of local Government they have—in short, the achievement of their civilization. Though men may make cities, it is equally true that cities make men. Cities and towns play a great part in the national life of a country. They are the centres of education, trade and industry and most of the leadership is drawn from the ranks of men of education and wealth who make their abode in big towns.

Town Planning

All over the world towns are growing in size and population. People come to towns in search of education, employment and the amenities of civilized life. India is predominantly rural. Yet we too are taking to town life to a steadily increasing extent. The conditions created by the world war have accelerated the drift to towns. Housing shortage has become a great problem. Overcrowding, congestion and squalor have become prominent evils even in places where the middle class people live. The growth of towns in the past has been unplanned and uncontrolled. They have become ugly, insanitary and almost unfit for human habitation in most places. The task of town improvement by replanning of insanitary and congested areas, construction of hygienic dwellings in healthy surroundings, provision of parks, playgrounds and open spaces and in such other ways are problems of major importance which municipal authorities have to tackle. A town should be built with as much care as a house is built, because it is the dwelling place of a community as the house is that of a family. The art and science of Town Planning has greatly developed in recent years.

Town Planning has been made a statutory function of our municipalities. Out of 62 municipalities in this State, 51 have taken up Town Planning schemes for certain local areas and effected considerable improvement in sanitation, health and beauty in those places. But such schemes have so far covered only about 8 per cent of the total area under municipal control. The second Five-Year Plan will provide for housing and improvement of slums on a much larger scale than at present. Improvement of slums is a great problem in most municipal towns. The Government of India have formulated a scheme for dealing with slums and all municipal councils should take such assistance as will be available for this purpose in the Plan. In relieving congestion in urban areas the co-operative house-building societies can be of service to municipalities. Under the Industrial Housing Scheme

Sri K. KAMARAJ, Chief Minister, inaugurating the Fifth Annual Conference of the Chamber of Municipal Chairman at Rajaji Hall on June 2 1955.

interest-free loans are issued by the Central Government. The municipal councils can avail themselves of the help which will be given by the Centre under their schemes of housing including also schemes for the lower income group housing. It is quite necessary to prepare a general Town Planning Scheme for the entire area of the municipality and its vicinity. This "Master Plan" must provide a broad-based frame work on which the future improvement and extension of the town can be based.

Water Supply and Drainage

In Western Europe and North America spectacular results have been achieved in bringing down mortality rates and raising health standards during the last few decades. This is to a great extent due to the purification of water supplies and the sanitary disposal of human wastes. Cholera, typhoid, dysentery and other water-borne diseases as well as certain insect-borne diseases are commonly occurring as epidemics in our country. There is increasing awakening among our people regarding the need for safe water supplies, proper drainage and sanitary disposal of sewage and human wastes. The Planning Commission have said that the provision of a safe and adequate water-supply is a basic requirement and it should receive the highest priority. Drainage is necessarily complementary to water-supply schemes. 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 services in that area.

We have now eight water-supply schemes under execution and six under investigation or design. Twelve of the existing water-supply schemes are having improvements in progress. Seven drainage schemes are under execution and six under design or investigation. The approximate cost of the work ahead on all municipal schemes is :—

Rupees 12 crores for water-supply works.

Rupees 24 crores for drainage schemes.

The Government of India have offered to our State financial assistance by way of loans to the extent of Rs. 2·396 crores for the execution of water-supply and drainage schemes during 1954–55 and 1955–56. This Government have therefore undertaken an accelerated programme for the execution of the scheme included in the first Five-Year Plan. That sanitary Engineering staff has been strengthened to cope with the additional work involved in the accelerated programme. A few new water-supply schemes have been sanctioned. The Madras Corporation also is availing itself of this assistance from the Centre for accelerating some schemes. It is expected that by the end of the second Five-Year Plan period about 75 to 80 per cent of the municipalities will be able to have water-supply schemes and 20 per cent of them will be provided with drainage schemes. The sanitary engineering department will have to be further expanded and the financing of each scheme as between the local body concerned and the Government will have to be examined to see how the existing difficulties can be overcome.

Other Health Problems

There are many other public health problems to be attended to in municipal areas. The efficient disposal of human excreta by the provision of modern sanitary conveniences is a matter of considerable importance for health. Only 57 per cent of the houses in municipalities are said to be provided with latrine accommodation. The number of public latrines is inadequate and most of them are not of approved sanitary type. The Government sanction one-third or one-fourth grant to municipalities which conduct anti-mosquito or anti-filaria schemes. Thirty-six municipalities have undertaken such schemes. It is very necessary that the other 26 municipalities should avail themselves of the grant and carry out anti-mosquito measures. Under the National Malaria Control Scheme, intensive anti-malaria work is being taken up in the municipal areas of Madras, Erode, Salem, Tiruppur and Namakkal. Filaria control units will start work in and around Kozhikode and Mangalore municipalities as soon as necessary vehicles, equipment and drugs are received from the Centre.

Maternity and Child Welfare

This service must be kept in the forefront in planning a health programme. The municipal councils are maintaining 122 maternity and child welfare centres and 48 maternity homes. More centres will have to be opened so as to provide maternity services for all mothers and better health care for children. Malnutrition occupies a prominent position in the causation of high maternal and infantile mortality and morbidity rates in our country. The low amount of protein in the diets of most people is the most serious nutritional problem we have. In Britain the National Milk Scheme started in 1940 has been extended and put on a permanent basis as the Welfare Foods Service in 1946 to satisfy the special nutritional needs of expectant and nursing mothers and young children by providing milk and vitamin supplements at a low cost or free of charge. Administration of skimmed milk is said to be particularly useful in cases of protein deficiency.

The gifts from the UNICEF and other foreign agencies are enabling us to make free distribution of skimmed milk and other food supplements at maternity and child welfare centres. A large percentage of children are in a poor state of nutrition which impairs their physical and mental growth. In the United Kingdom they have expanded their School Meals Service with a view to improve the nutrition of their school children. Two schemes have been suggested by our Public Health Department for implementation in the second Five-Year Plan period—one for the provision of mid-day meals to elementary school children and another for a balanced meal to expectant and nursing mothers and pre-school children who are in need of it through maternity and child welfare centres. If our food catering establishments can be persuaded to prepare and supply balanced food at a reasonable price, it will be a great step in raising nutrition levels in a large section of the population who resort to hotels.

The Family Planning Committee of the Central Ministry of Health have recommended that the work of family planning clinics should be integrated with that of maternity and child welfare centres and that short courses of training should be given to doctors, nurses, health visitors and midwives who are to be employed at these centres. It is considered necessary that a large scale programme of education for family planning should be undertaken so that it may produce an adequate effect on the problem of population. Local bodies should co-operate with Government in the work that is being undertaken in regard to family planning.

Medical Relief

The municipalities are having ten hospitals and 49 dispensaries of modern medicine and 44 institutions of indigenous medicine. It is proposed to provincialize all medical institutions run by local bodies with a view to improving their accommodation, equipment and staff. Communicable diseases are a great problem in our country. The control of such diseases requires isolation of infected persons. Very few municipalities have provided infectious diseases hospitals. There are proposals for subsidising the construction of such hospitals by local bodies.

B.C.G. Vaccination

The incidence of tuberculosis is fairly high in industrial and urban areas. The conditions are favourable in our country for the spread of infection and high mortality on account of the low standard of living, poor housing conditions and malnutrition. The measures needed to combat tuberculosis are improvement of the general standard of living, isolation and treatment of sufferers and preventive measures. Isolation of infected cases in hospitals and sanatoria is not possible except to a very limited extent. Improvement of living standards is a long term objective.

It is generally conceded in medical circles that B.C.G. vaccine is harmless, it confers some degree of the protection against the first infection with virulent tuberculosis and that it is, therefore, an important preventive measure. The WHO Expert Committee on Tuberculosis has adopted this view and sponsored the International B.C.G. vaccination campaign as a joint enterprise with the UNICEF. Millions of persons have been given this prophylactic vaccine in Europe and elsewhere. B.C.G. vaccination is now going on in some countries of South-East Asia and South America. After 1948, the Ministry of Health in Britain has introduced B.C.G. vaccination for medical students, nurses and tuberculous negative persons who are contacts of active cases. The use of B.C.G. has recently been extended to school children in Britain. The WHO Committee have recommended mass vaccination with B.C.G. especially for communities with high tuberculosis infection rates and mortalities. Our Planning Commission have urged that the States in this country should make B.C.G. vaccination programme a part of their public health services. The Government of India have entered into an agreement with the WHO and the UNICEF and launched a country-wide B.C.G. vaccination campaign. The progress of this campaign has been very encouraging. This State was the first to introduce B.C.G. vaccination in Madras City. A mass vaccination campaign was inaugurated in Coimbatore only in last November. It has since then moved to district headquarter towns and belt areas in Malabar, South Kanara, Salem, Nilgiris, and Tiruchirappalli. About 12¼ lakhs of persons have been tuberculin tested and nearly 4½ lakhs have been given B.C.G. vaccination up to the end of April. The vaccination is purely voluntary. Government expect the municipal councils to co-operate with the teams entrusted with B.C.G. work in municipal areas.

The Coming Elections

You will, no doubt, be thinking of the coming elections and the record of achievement which you can put before the electorate. Municipal administration in our country is said to suffer from lack of proper publicity. Large sections of the people evince little interest in its working and fail to give proper support to its activities. Proper dissemination of correct information on municipal services will help to create an enlightened public opinion and civic sense among the citizens. I trust your deliberations will prove fruitful in advancing the cause of local administration.

[*Speech delivered by Sri A. B. Shettyh Minister for Health, at the Fourt, Annual Conference of the Chamber of Municipal Chairmen at Rajaji Hall on 3rd June* 1955.]

A conference of Collectors of Districts and Heads of Departments was held in the Secretariat on June 8, 1955. The picture shows the Chief Minister addressing the conference.

Mahabalipuram Guest House

The foundation stone for a Guest House at Mahabalipuram was laid by Sri K. Kamaraj, Chief Minister, on 5th June 1955.

The Mahabalipuram of today was a much celebrated sea-port town, known by the name of *Mamallapuram*, about one thousand three hundred years ago. King Narasimha Varma (A.D. 630–668), the son of King Mahendra Varma the first (A.D. 600–630) belonging to the Pallava dynasty, established his kingdom at this place and he came to be known eventually as the "Great Malla Varma". This place *Mamallapuram* came to be called '*Mahabalipuram*' in later centuries. This town was once as busy and as famous as the celebrated sea-port town of '*Kaveripoompattinam*' —a sea-coast city in '*Chola Kingdom*' that was carrying on trade with all Western countries. From the inscriptions on stones, architectural beauty and archaelogical interest obtained from writings on the old mud pots, it is a fact beyond doubt that this place had commanded the heights of civilisation as several cities of yore.

Foreign Interest

Reverend Bishop '*Manuchi*', who came to India from Europe in the early days, was struck with the architectural beauty displayed on the stones, rock-cut caves, Rathas, temples, etc., and was obsessed with the feelings of high talents of the progenitors of this architecture and the greatness of the Pallava shrines and temples. Later, "Dr. Hoolt Chay", who had inspected the place, has written a good treatise on the inscriptions, images, rock-cut caves, etc. This attracted a good number of foreign tourists and persons from all over the continents began to visit this place. The influx of the foreign tourists has systematically increased and it can be seen that for the last four years, the number of foreign tourists is not less than 50 to 60 on a monthly average. Besides, pilgrims from all parts of India visit the place individually and collectively. With the increase in the number of foreign and inland tourists, it has become the concern of the State Goverment to provide amenities to the tourists. There was already an Inspection Bungalow at Mahabalipuram, maintained by Public Works Department under the control of the District Collector of Chingleput. This Inspection Bungalow was improved to make room for two suites and this too did not meet with the needs of the growing number of the tourists. It was, therefore, necessary to construct a suitable Guest House to accommodate tourists.

Suitability of the Site

The question of constructing a suitable Guest House had been engaging the attention of the Governments both at the Centre and at Madras for sometime. The Hon'ble Union Minister, Shri Diwakar, visited the place in September 1950 and suggested the construction of a Rest House for tourists. Proposals were made in 1951 to provide a Rest House very near the shore temple, but dropped later. The Hon'ble Prime Minister of India, Shri Jawaharlal Nehru, who visited the place on the 3rd October 1953 also suggested the provision of a suitable Rest House. The place was finally selected on 18th January 1954, after an inspection of the place in company with the Hon'ble Ministers, Sri M. Bhakthavatsalam, Sri C. Subramaniam Sri Shanmugha Rajeswara Sethupathi and the Chief Engineer, Public Works Department. There is more than one reason for selecting this place for erecting the Guest House—

1. The place is free from noise and bustle of the village and enjoys the charms of solitude.

2. The place is 20 feet above the surrounding places and the building commands a good view of the sea and surroundings.

A good step in the right direction—the foundation stone for the Mahabalipuram Guest House laid by Sri K. Kamaraj, Chief Minister

3. There are no ponds, pits, springs and water pools and there is no fear of the pest of mosquitoes.

Cost Shared

The Government of India have paid one-half of the cost of construction, which has come to one lakh of rupees and the other half is to be met by the Madras Government. The proposed building will have six suites of room all with double accommodation, each provided with kitchen, bath room, bed room, verandah, etc. The roofing will be of reinforced concrete. The construction would be such as would match with the background of the archaeological structures and also have an architectural appeal about it. The finishing features and equipment will be of top-class variety, at the same time effecting all possible economies. Provision has been made for electric installation, including fans, sanitary fittings and protected water-supply. Provision has also been made for the construction of stewards quarters and watchman's quarters. Catering will be both in the European and Indian style at moderate cost.

The place, situated on the sea coast and famous for Pallava architecture, with rock-cut caves, monolythic rathas, sculptured mantapams, temples at the beach, etc., will attract thousands of tourists and the construction of this Guest House is a good step in the right direction.

Administration of Agriculture Department Review for 1953–54

Reviewing the administration of the Agriculture Department during 1953–54 in respect of the Madras State, the Government have observed that the working of the Department was on the whole satisfactory and that it is gratifying to note that the extension work done by the Department during the year yielded good result assisted by a kindly monsoon during both theseasons. The Government have impressed on the Agriculture Department that no effort should be spared to make the fulfilment of the Five-Year Plan real and effective.

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

Seasonal Conditions

During the year the north-east monsoon was above normal and favourable for crop production. Rains received during the hot weather period were favourable for dry crops. The south-west monsoon rains were above normal in the West Coast. On the whole, the year under review broke the long chain of six years of drought. Conditions improved considerably throughout the State. Scarcity for water was not so keenly felt as in the past six years and there were no severe weather extremities like cyclones or storms. Agriculturally, the season was good and in certain areas the crops gave bumper yields. There was an increase in the production of rice from 2·16 million tons to 2·98 million tons.

Food Production

The third-year programme in the Five-Year Plan of the State was executed during the year under review. The plan aimed at a target of 256,693 tons of additional foodgrains through agricultural schemes during the year. Most of the schemes under the plan are continuations of those under the old three-year Grow More Food Plan, but intensified for attaining self-sufficiency by the end of 1956.

Community Projects and National Extension Service Schemes

The Community Development Programme was in operation in eight Community Development Blocks in the Lower Bhavani Project, the Malampuzha Project and the Periyar Project areas and in South Kanara, South Arcot, Chingleput, Tirunelveli and Madurai districts. The National Extension Service Scheme was in operation in 28 blocks scattered throughout the State. Progress in agriculture has been intensified in each Community Project and National Extension Service Block by appointing special staff, spreading improved seeds, increasing the extent manured with fertilization and green manures, popularisation of improved methods of cultivation like the modified Japanese method of cultivation, grant of agricultural loans, etc. A special National Extension Service Scheme with particular emphasis on increasing rice production was introduced in the Mayuram and Kumbakonam divisions of the Tanjore district. The scheme will be gradually extended to the rest of the district and its object is to ultimately increase the annual exportable surplus of rice of the Tanjore district by 75,000 tons.

Agricultural research

The achievements under Agricultural research were, on the whole, satisfactory and it is hoped that the tempo and standard will be improved under crop-breeding work.

Crop Improvement and Seed Multiplication

The Department has evolved so far about 100 improved strains of paddy suited for local conditions and seasons.

Do You Know?

That,

1. In 1954, Indian Aircraft on scheduled and non-scheduled services flew nearly 24 million miles carrying over half a million passengers and 181 million lb. of cargo and mail.

2. The cost of a hydro-electric project varies from Rs. 1,000 to Rs. 3,000 per K.W. of installed capacity, depending on local conditions.

3. With a view to providing expeditious mail service in rural areas, as many as 1,754 runner's lines, totalling 14,519 miles, were replaced by motor services during the last five years.

4. The production of steel in India in 1954 amounted to 1,226,000 tons, and all-time record. During the same year, 387,401 tons of steel were imported.

5. During the ten months ending January 1955, nine hundred and eighty-eight companies limited by shares, with a total authorized capital of Rs. 192·12 crores were registered as against 984 companies with a total authorized capital of Rs. 39·74 crores in the corresponding period of 1953–54.

6. During 1954, 310,604 tons of Ammonium Sulphate was despatched from Sindri to different parts of the country.

Development of Highways

During the last few years Madras State has made great strides in construction and improvement of roads and bridges. The first Five-Year Plan which provides for a well-balanced programme of road and bridge construction is well on its way and the last year of the Plan would see the achievement of the physical targets of the Plan to a satisfactory extent. The Balance of the programme will be followed up in the Second Five-Year Plan.

Of the following four Schemes, two have been completed; the work on the other two had just started.

Vallipuram Causeway at Nelvoy

The Palar river at Vallipuram Causeway has a width of about 2,430 feet at the crossing. Owing to frequent floods in the river, the traffic on this road used to be interrupted several times in the year. The construction of a high-level bridge at the place would have cost not less than 25 lakhs of rupees. As the amount available from the C.R.F. is limited and the construction of such a costly structure might not have materialised so soon, this causeway costing 4·25 lakhs has been provided here. As the road level on the causeway has been kept at 90·25 a few feet above the ordinary flood level, practically there will not be any interruption to traffic except in the case of heavy floods. The causeway has a level portion of 1,980 feet and sloping portions of about 300 feet on Tirukalikundram side and 160 feet on Nelvoy side. The road width over the causeway is 22 feet. On the southern side of the river where the river has its deep bed, 56 vents are provided. Out of these nine box culverts with four cells of 10 feet by 8 feet each form 36 vents. The remaining vents are of 10 feet by 9 feet each for which open foundations with cement concrete piers and simply supported slabs are adopted. The work was started on 6th June 1953 and completed by March 1955.

About 108 tons of steel and 1,320 tons of cement have gone into the work.

The Vallipuram Causeway at 13/1–6 of Nelvoy-Tirukalikundram road was opened by Sri K. Kamaraj, Chief Minister of Madras, on 5th June 1955.

Bridge across Palar at Ranipet

The Palar bridge at Ranipet consists of 30 spans of 60 feet clear and the roadway will be 24 feet wide between kerbs. The decking will comprise of 3 flanged Tee beams with ribs 12 inches by 45 inches spaced at 9 feet centres, having a bottom flange 24 inches by 12 inches. The thickness of deck-slab will be 92 inches. The foundations under piers and abutments will consist of two circular wells of 12 feet external diameter, the thickness of steining being 2 feet with cement concrete (1 : 3 : 6). The length of the bridge proper will be 1,974 feet. The cost of the estimate is 19·75 lakhs excluding approaches. The approach work is proposed to be executed under a separate estimate. About 2,520 tons of cement and 735 tons of steel are estimated to be used in the work.

Now, North Arcot district is well provided with a net work of good roads covering 1,642 miles. This comprises of 104 miles of National Highways, 552 miles of Government Roads and 986 miles of District Roads. Of this, 22 miles have cement concrete surface, 136 miles are black-topped, 993 miles water-bound macadam and the rest are unmetalled fair-weather roads. The cost of maintenance and improvements to the National Highways is being met entirely from the funds of the Government of India. There is a separate Five-Year Programme of Road Development on National Highways, under which the cement concreting of this road from miles 87/2 to 100/0 has been executed at a total cost of about 10·45 lakhs. This bridge work is also one such work undertaken with the assistance of the Government of India. It is also proposed to take up under the current Five-Year Programme, the widening of this road to 22 feet width to provide for two-lane traffic, in miles 70/0 to 78/0 and 87/2 to 100/0.

The foundation stone for the bridge across Palar at Ranipet was laid by Sri O. V. Alagesan, Deputy Minister, Transport and Railways, Government of India, on June 10, 1955. The photo shows Sri M. A. Manickavelu, Minister for Revenue, addressing on the occassion.

Apart from the National Highway works and the National Five-Year Plan for the State and other roads, the Government of India have recently sanctioned 21 works costing Rs. 145 lakhs in all, for the development of inter-State roads. Under this scheme, are included the following four works in North Arcot District, costing Rs. 9·25 lakhs:

Formation of a road to Yelagiri Hills—Rs. 4,00,000; improvements to Katpadi-Venkatagirikotta road—Rs. 2,00,000; constructing bridge near Kannamangalam at mile 104/4–5 of Cuddalore-Chittoor road—Rs. 1,25,000; and improvements to Arkonam-Tiruvallur road—Rs. 2,00,000.

In addition to these, the two works of constructing a bridge across Cheyyar at mile 31/4–5 of Wandiwash-Polur road costing Rs. 3 lakhs and a bridge across Kallar at mile 14/2 of Polur-Chengam road, costing Rs. 75,000 have been recently sanctioned. Besides these, another bridge work across Goundinya river at mile 18/6–8 of Katpadi-Venkatagirikotta road in Gudiyattam Municipal limits costing Rs. 2,75,000 has also been sanctioned under Post-War Road Development Five-Year Plan. All these works when completed will greatly add to the communication facilities of this district and considerably help its economic development.

Sri O. V. Alagesan, Deputy Minister, Transport and Railways, Government of India, laid the foundation for the bridge across Palar at Ranipet at mile 71/1–5 of Ranipet-Krishnagiri road on 10th June 1955.

Ponneri-Pulicat road work

The Ponneri-Pulicat road connects Ponneri with Pulicat and is 12½ miles long. Pulicat town lies at the southern extremity of an island which divides the sea from the large lagoon called the Pulicat lake, which is about 37 miles in length by 3 to 11 miles in breadth. This salt water lake is under the influence of the tide and must have been produced by an inroad of the sea during a storm, when it topped the low ridge of the coast line. Pulicat town is the site of the first settlement of the Dutch in India. In 1609 they built a fort here and called it Geldria. It was taken by the British in 1781 and finally occupied by them in 1795. There used to be considerable trade between this port and the Straits Settlements. This important place of Pulicat was once a flourishing town as evidenced by the array of magnificent buildings now in disrepair and in the process of being pulled down and sold for salvage of timber and other valuable building materials. This village is completely isolated from other parts of the district for want of proper communications. There are said to be 5,000 families in Pulicat alone and about 12,000 of the surrounding hamlets are included. There are about 2,000 fishermen operating in this area who find it difficult to send their catches to the market in time for want of suitable communications. The need for a road from points of view of public health, education, etc., is also urgent.

There are some traces of an old road in the swamps near Pulicat. It is presumed that a road has once been formed by the Dutch and the same would have got merged in the swamps for want of proper attention. It is now proposed to form a new road at a higher level to connect Pulicat with the existing road. With this improvement, Pulicat, which is now cut off from civilisation by a large stretch of marshy land, will be easily accessible by motor cars and buses from Madras City.

Sri M. Bhaktavatsalam, Minister for Agriculture, inaugurated the work on Pulicat-Ponneri road on 11th June 1955

Besides malaria, filariasis and kala-azar are two of the chief insect-borne diseases. Parts of the City having poor drainage system, are subject to the filariasis scourge transmitted by culex fatigans. Kala-azar has been prevalent in the City for more than three decades. The northern portion of the City, namely the Gorgetown area, constituted the original focus of infection from where the disease has spread to other areas by slow stages. It is understood that an intensive survey has been undertaken recently and that the Corporation will, in due course, take up control measures in regard of kala-azar and filariasis. The citizens of Madras will, I hope and particularly those in the affected areas extend their full co-operation to the Corporation health staff in making the investigation and control work a success.

[*Speech by Sri A. B. Shetty, Minister for Health, at the Corporation Stadium on 8th June 1955 inaugurating the Investigation and Control Programme of the Corporation.*]

Administration report of the Fire Service Branch for 1954

During the year 1954, Fire Service continued to function in 42 Municipal towns and in Madras City. Fire calls were attended to by Fire Stations within a radius of 30 miles and even beyond in exceptional cases. The Fire Service attended to 1,902 calls during the year as against 1,815 in 1953 and saved property estimated at Rs. 116·6 lakhs as against Rs. 194 lakhs during the previous year.

There were 10,202 ambulance calls during the year as against 9,446 in 1953. The officers of the Branch carried out 6,235 inspections as required by various Acts with a view to prevent possible fire accidents and also carried out 778 half yearly inspections of Government buildings to ensure adequacy of fire protection measures.

The Village Fire Fighting Squads organised in 1951 continued to function. There were 10,195 Fire Squads functioning during the year. They rendered assistance to Fire Service on 315 occasions.

The Fire Service has been rendering valuable help to the general public who are realising in a greater measure its importance and usefulness.

Contagious Diseases Among Animals

There was a general fall in the incidence of and the mortality from contagious diseases among animals in the State during April 1955. In all, 273 outbreaks with 1,302 deaths were recorded in the month as against 348 outbreaks with 1,600 deaths in the previous month.

Rinderpest: The State continued to be free from the disease as in the previous month.

Haemorrhagic Septicaemia: There was a fall in the incidence of and mortality from the disease as compared to the previous month. Thirty-seven outbreaks with 185 deaths were recorded during the month as against 55 outbreaks with 301 deaths in the previous month. The disease was prevalent in a severe form in the district of Tanjore when compared to the other districts.

Black Quarter: There was a fall in the incidence of and mortality from the disease during the month, as compared to the previous month. Two hundred and twenty-one outbreaks with 1,047 deaths were recorded during the month as against 276 outbreaks with 1,205 deaths in the previous month. The disease was prevalent in a severe form in the districts of Chingleput, North Arcot, Tiruchirappalli, South Arcot and Salem.

Anthrax: There was a fall in the incidence of and mortality from the disease during the month as compared to the previous month. Seven outbreaks with 70 deaths were recorded during the month as against 11 outbreaks with 94 deaths in the previous month.

Foot and Mouth: There was a slight rise in the incidence of and no mortality from the disease during the month as compared to the previous month. Eight outbreaks with no deaths were recorded during the month as against six outbreaks with no deaths in the previous month.

Prompt preventive measures were taken to control the epidemics in time and the diseases were brought under control.

Sri A. B. SHETTY, Minister for Health, inaugurating the National Malaria Control Programme at the Corporation Stadium on 8th June 1955.

Refrigeration to Preserve Fish

BY SRI M. JAYARAJ, B.E., Refrigeration Engineer, Mangalore

Yet another bold step, in the drive for development of Fisheries in the State is being taken by the Government of Madras, when the two Ice Factory, Cold Storage and Quick Freezing plants at Mangalore and Kozhikode are commissioned. Constructed at a total cost of about 7·5 lakhs each, either plant is capable of producing four tons of Ice per day, quick freezing about five tons of fish per day and has storage capacity for about thirty tons of fresh fish and about forty tons of frozen fish.

Next only to the Central Government Quick Freezing plant at Sasson Docks, Bombay, these plants are India's most modern fish refrigeration plants equipped with "Chill Blast" quick freezing process.

Benefits to Fishermen

Refrigeration is but at its infant stage, as a medium of preservation of fish in our State. Hitherto there have been facilities only for icing fish for preservation. Icing of fresh fish limits the effective period of preservation to only about 24 hours. The starting of these two plants will mark the dawn of a new era in fish preservation, namely—quick freezing and storage thereafter under refrigeration. Fresh fish, quick frozen and stored in cold storage can be preserved for four to six months.

This enables the fishermen to bring in their catches in the glut season, quick-freeze them and store them in cold storage and draw them from the cold storage, as and when required for local and distant markets, at times when there are no catches and the demand is strong. This will not only enable the fishermen to get good prize for their catches, but also will eliminate the colossal national waste that is prevailing to-day in the West Coast fisheries due to the inevitable conversion of a considerable portion of the catches during glut season to mere manure, for want of facility for preservation.

Functions of the Plant

Production of Ice:—Four tons of opaque ice will be produced per day and there is an Ice storage room maintained at 30° F. for storing twelve tons of Ice produced intact. This will enable the Factory to cope up to sudden peak demands and adjust production according to demand. Ice will be sold to the local fishermen at the barest minimum rate possible to popularise the use of ice in preservation of fish. Each plant is provided with an insulated fish transport van (gifted under the T.C.A.) which the individual fishermen can hire and transport iced fish to interior markets.

Fresh Fish Storage.—For short preservation of fish lasting for not more than eight to ten days, mainly to balance the procurement and demand in local markets, the fresh fish storage provided in the cold storage plants is extremely convenient. Each cold storage at Mangalore and Kozhikode is provided with a fresh fish storage room of capacity about 5,700 cubit feet in space for about thirty tons of fresh fish. This storage room is maintained at 30° F. continuously (2° F. below the melting point of ice).

Fresh catches of fish are just mixed with chipped ice and kept in baskets inside this fresh fish storage room. Fish thus preserved can last for 8–10 days depending on variety. In case even at the end of 8–10 days should the market be still unattractive, they can be quick frozen and stored.

Theory of Quick Freezing

The ordinary method of icing fish for preservation does not permit an average temperature of lower than 30° F. to be reached, with result, the innermost tissue of fish will be at a higher temperature and is liable to bacterial action. It is this short coming that reduces the effective period of preservation with icing. For prolonged preservation, it is hence necessary that fish has to be subjected to sub-zero temperature treatment which is called "Freezing" in which fish is subjected to a temperature of about 20° F. so that even the innermost tissue of fish is much lower than melting point of ice (32° F.).

It is essential that this process of freezing must not prolong but it must be quick. If freezing is attained slowly, the water molecules contained in the body of the fish freezes slowly and there is a tendency for the neighbouring molecules of water to unite together and form bigger crystals of ice during which process, the issues of fish rupture thus promoting bacterial action. This crystallisation is avoided by subjecting fish to what is called as "Quick Freezing" process in which the medium of cooling is at a much lower temperature and the freezing is attained as quickly as possible.

The Madras Government plants at Mangalore and Kozhikode are equipped with "Chill Blast Quick Freezing Process".

Chill Blast Process

Fresh fish is brought first to the "preparation room" where it is graded according to size and variety. If fish is of big size the gills and guts, etc. (where bacterial action starts first) are removed and cleaned and if necessary they are filletted. However, when they are of small size, it is neither economical nor advisable to remove the guts, etc., for it may take a considerably long time in preparation, effecting deterioration in quality. Sardines, mackerel, prawns, etc., which form the bulk of fishery of the West Coast, can be frozen as they are, without preparation. The bigger fishes like seer, cat fish pomfets, sharks, etc., can be prepared, filletted and then frozen.

Prepared or whole fish are washed well and spread in trays provided in the fish trucks and these fish trucks

The cost of the project is Rs. 7·02 lakhs. There is already a District Board road up to 12/0 Polathiamman Koil, since taken over by Government. This road needs extensive repairs and strengthening with revetments to protect the sides from erosion widening in places, metalling, etc. The remaining 2 miles and 7 furlongs to Pulicat have to be newly formed in swampy areas as already stated. This new formation alone costs Rs. 4 lakhs.

The portion of the road from 3/0 to 9/5 is already a metalled road. There are several weak and narrow culverts and the road is also narrow in several places. As the existing metal crust is not sufficient, it is now proposed to renew the entire surface with boulder stone metal 12 feet by 3 inches and also to widen and repair the culverts wherever necessary. For the reach 9/6 to 12/0 it is proposed to metal the entire length to a thickness of 5 inches and for a width of 12 feet. The entire reach will be widened to the standard width of 24 feet and the slopes will be protected by revetment wherever necessary.

The reach from 12/0 to 14/7 a distance of 2 miles and 7 furlongs is to be newly formed. The entire area is a big sheet of water during rainy season. The MFL is 92·50. So it is proposed to have the formation level of road after metalling at 95·00. The route now proposed to be adopted is the one which is the least affected during rainy season. The road will be formed up to 94·00 by earthwork. Over this, a gravel soling of 9 inches is proposed to the full width of 24 feet. Metalling over the gravel soling will be done to 6 inches thickness for 12 feet width. The slopes of the embankment will be protected with laterite revetment.

Sri M. Bhaktavatsalam, Minister for Agriculture, Government of Madras, inaugurated the Ponneri-Pulicat road work on 11th June 1955.

Prestressed concrete bridge over Palar

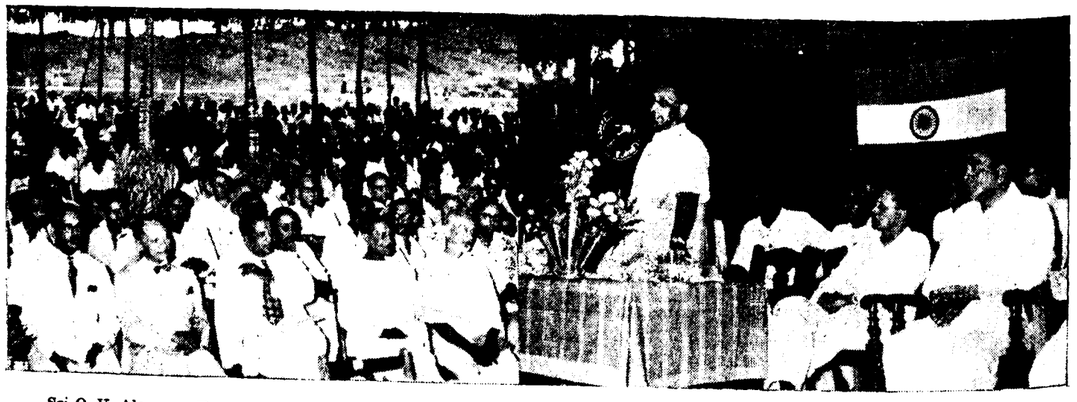
The Palar bridge is 2,202 feet long between the faces of abutments and consists of 23 spans of 90 feet clear. The piers are of plum concrete 6 feet wide at top and 7 feet at bottom. Well foundations are adopted with two circular wells of 12 feet diameter for each pier. Wells have been sunk to an average depth of 32 feet. Wells of pier No. 5 have gone down 52·5 feet below the river bed.

The deck consists of 4 precast prestressed girders 96 feet in length with a 6-inch thick reinforced concrete slab cast *in situ* on top of these. The girders are of cellular construction of U shape 41 inches by 61 inches with 5 inches webs and 6 inches soffit slab. These U girders are prestressed with 256 wires of 0·2 in diameter on Magnel Blaton system. There are 8 cables in each beam. The girder rests on mortar pad at one end and rocker bearing at the other. All the girders were precast and prestressed on the banks and launched into position. The girders weighed 59 tons each and launching of the 92 girders from bank to the piers was a job in itself. Local talent, materials and labour were made use of. The bridge is designed for Indian Road Congress Standards and has a carriage-way of 22 feet between kerbs.

The total cost of this work is 25·75 lakhs. Quantity of mild steel used was 506 tons, tensile wire 120 tons and cement 3,993 tons.

Many difficulties had to be overcome in the construction of this first prestressed concrete road bridge in India. While sinking wells big boulders were found embedded in clay. Sinking through this strata required considerable time and effort. The contract time had to be extended. Prestressed concrete work being new, every item of work had to be experimented and then perfected.

Sri O. V. Alagesan, Deputy Minister, Transport and Railways, Government of India, opened the prestressed concrete bridge over Palar near Chingleput at mile 38/3–5 of Madras-Dindigul road on 12th June 1955.



Sri O. V. Alagesan, Deputy Minister for Transport and Railways, Government of India, opened the Palar bridge near Chingleput on 12th June 1955. Sri Shanmugha Rajeswara Sethupathi, Minister for Works, presided.

National Malaria Control Programme—Madras Corporation

By Sri A. B. SHETTY, Minister for Health

India is one of the countries where malaria has been recognized to be the most important hazard to the health of the people, causing high annual mortality and a large amount of sickness and physical incapacity interfering with agricultural and industrial activities. The Planning Commission have assigned top most priority to malaria control work in our health plan. International malaria control by the use of new insecticides, developed since 1940, has practically eradicated malaria from one area after another. Larvacidal measures to control breeding of malaria mosquitoes may also be necessary in certain areas. But the use of D.D.T. as a residual insecticide to destroy the adult vector has become a major method of malaria control. D.D.T. as commonly applied for residual spraying on the inside walls of habitations, has produced no injurious effects. Enlarged spleens among young children are a reliable index to the presence of malaria. In D.D.T. sprayed areas the spleen rate has dropped to a very low percentage indicating the practical elimination of malaria. Residual spraying has been found useful in destroying such house-hold insects as flies, lice, cockroches and fleas. But house flies soon develop resistance to D.D.T. Insect strains of other species also have become resistant to insecticides like DDT and BHC. It is said that no species of anopheles has yet been found to have developed resistance to insecticides in this country. Yet there is a possibility of malaria vectors also developing some degree of resistance in future. Residual spraying quickly reduces the incidence of clinical malaria but it is not wise to terminate a residual spraying project in view of the danger of malaria reappearing in a previoulsy treated area, if there is any focus of malaria in that area or endemic malaria on its borders. Until malaria eradiction is accomplished, treatment has to be provided for malaria cases of quinine and other synthetic compounds. It will be useful to publish a booklet giving reliable information upon modern anti-malarial drugs and suitable for treating different types of cases.

You will see this vehicle running about the City contributing its share in eradicating Malaria.

It has been estimated that 3·5 million presons are exposed to the risk of malaria in Madras State, 2·5 millions in the rural areas and about one million in urban towns like the Madras City, Salem, Erode, Tiruppur and Tuticorin municipal areas and in Namakkal Panchayat Board area. Madras State is implementing the National Malaria Control Programme of the Government of India. During 3½ years of the operational period of the programme, the Goverment of India provide, out of the Indo-American Fund, assistance through grants of DDT, Anti-malaria drugs, vehicles, sprayers essential equipments amounting to Rs. 15·66 lakhs in cost. The State Governments have to provide operational costs including the cost of the personnel, contingent expenditure on labour, transport charges, etc. The Government of India have agreed to give similar assistance in the shape of equipment and materials costing approximately Rs. 5·86 lakhs for the 2½ years of the operational period of the National Malaria Control Programme, in the urban towns already mentioned.

Madras is considered to be one of the best cities in India in many respects. Though the extension areas of the city have houses with compounds, the old built up areas like Georgetown, Tondiarpet, Washermanpet, Royapuram and Chintadripet are over-crowded with side to side houses, Many diseases of an epidemic and endemic nature prevail in the City.

are pushed into the " Freezing tunnel ". In the freezing tunnel, chill air at 20° to 30° F. is blown over these fish trucks at high velocity and this blast is continued till the fish is completely frozen. The usual duration of this process is about 3 hours depending on the variety of fish ; at the end of this, the fish trucks are pushed out of the freezing tunnel.

Glazing and Storage

The trays containing frozen fish are then taken out and dipped in cold water kept about 40° F. to 50° F. and as soon as they are dipped in cold water due to extreme low temperature attained by the frozen fish, a coating of ice is formed all over its body thus encasing the fish in a protective armour which considerably retards the process of desiccation and enzymic contamination. This process is called 'glazing'. In order that the fish can be preserved for a prolonged period it is necessary that this protective glaze has to be maintained without thawing by storing the frozen fish under sub-zero temperature conditions.

However, if fish or fillets are warpped in moisture and vapour proof transparent paper and then frozen, this 'glazing' can be eliminated.

Fish thus frozen and kept under storage in the frozen fish store, where the temperature is maintained at about 0° F., thus protecting the glaze intact, can be stored for a period of about four months even extending up to six months depending upon the quality of fish and conditions of storage.

Scope for Brighter Trade

Mangalore plant is situated in a convenient locality just opposite the bar with a river on one side and a high way on the other. The fish can most conveniently be transported from the nearby fish-landing places by boats and the boats can transfer the fish to cold storage direct with the least difficulty due to the fine boat-landing facilities. The out going product can easily be booked from the Railway goods station, which is quite close to the cold storage. During the peak fishing season the heavy catches of the rich fish landing areas like Malpe, Gangolli, Moolki, Ullal, Kasaragod, etc., can be transported by power boats which, the department proposes to make available. These can either be frozen or kept under chilled fish room.

Mangalore itself has a very good local market for fresh fish. If local market is not attractive, the fish can be iced and sent to interior markets like Coorg, Mysore border and Malnad areas, by the insulated vans which have already been provided under the T.C.A. Frozen products can be sent by rail in Refrigerated van provided by the railways to places like Madras, Bangalore, etc., where the cold storage facilities already exist and stored there, for consumption as and when demanded by the market.

Thus there is scope for continuous refrigerated transport and storage to make frozen fish trade a success. From Mangalore frozen fish can also be transported to Bombay by Refrigerated-storage-equipped ships and can be stored again in the cold storages of Bombay. Then there is the still untapped scope for export of frozen fish to foreign countries by cold storage equipped liners and already the Indian prawns (which are available in the West Coast) are in heavy demand abroad specially in the United States of America.

West Hill Plant

The West Hill Plant situated on the seashore near fish landing areas and very close to the West Hill railway station, which started production on 15th October 1954 has already gained wide popularity among fishermen. Government Ice has become popular in all the coastal fishing towns of Malabar and South Kanara districts and ice has been distributed to places like Parapanangadi, Kadulundi, Badagara, Tellicherry, Etakot, Kanhangad, Kasaragod and even up to Mangalore. The demand for ice continues to be strong and the people are realising the benefits of Refrigeration in Fisheries Trade.

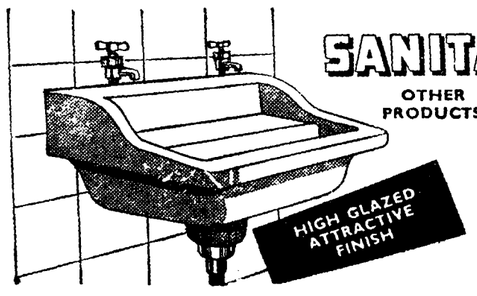
The fresh fish storage is being utilised to adjust procurement to demand. Again opportunities for freezing and transporting frozen fish, specially prawns by rail to various interior places or by steamer, abroad, remain untapped.

Thus these refrigeration plants mark the dawn of a new era of brighter fisheries. It opens new avenues for a hitherto untapped scope for Scientific preservation and marketing of our fisheries products—Our national asset.

(*Continued from page* 16)

patients maintain their morale and return home to continue cheerfully until they succumb to some other ailment or injury. Those who do not co-operate often lose interest in living and pass away.

Renewed interest in the aged in the problems of old age and its management (Geriatrics) is being taken in Britain. The benevolence of philanthropists like Viscount Nuffield and the keen interest which the State takes, makes research into these problems possible. For us the subject is an individual or domestic problem. With advances in Medicine and Public Health, we too may live longer and face the same problem. Shall we then be prepared, or get caught unawares ?



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Misc. 143

Rural Broadcasts for July 1955

Friday, 1st July 1955—
Lavani ;
Market rates and water-level readings ;
Topical Discussion : Weather Report.

Saturday, 2nd July 1955—
Activities of the Harijan Welfare Department—Talk in Tamil arranged by the Department of Harijan Welfare, Government of Madras ;
Podumenra Maname : Song ;
The Adult Literacy Class : Tirukural : Seinanri Arithal (Kural Nos. 103 and 104) ;
Weekly Review of Market rates ; Water-level readings ;
Topical Discussion ; Weather Report.

Sunday, 3rd July 1955—
Green Manure : Glyricidia, sesbania and ipomoea : Discussion ;
Inikkum Karumbu : Song ;
Thummal Vendam : Play ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Monday, 4th July 1955—
Bee-keeping as a hobby : Discussion ;
Sathya Jothiyai : Song ;
Irulil Oli : Feature ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Tuesday, 5th July 1955—
Farm Forum : Discussion ;
Grama Pattum Katchiyum ;
Market rates and water-lelvel readings ;
Topical Discussion ; Weather Report.

Wednesday, 6th July 1955—
Care of Teeth : Discussion ;
On National Anthem : Discussion ;
Listeners' Letters ;
Market rates and water-level readings ;
Topical Discussion : Weather Report.

Thursday, 7th July 1955—
Farm Forum : Discussion ;
Musical Bouquet ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Friday, 8th July 1955—
Karaha Attam :
Market rates and Water-level readings ;
Topical Discussion ; Weather Report.

Saturday, 9th July 1955—
Cottage Industries : Leather Tanning : Discussion ;
Pachai Kuzhandaiyadi : Song ;
The Adult Literacy Class : Tirukural : Sei Nanri Arithal (Kural Nos. 105 and 106).

Sunday, 10th July 1955—
Cultivation of Turnips : Discussion ;
Tennaimara Cholaiyile : Song ;
The Pial School of Political Science ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Monday, 11th July 1955—
Grasses and Fodder Crops : Discussion ;
Folk Songs lesson ;
The Village Women's Forum ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Tuesday, 12th July 1955—
Farm Forum : Discussion ;
Grama Patasalaiyil : Asu Kaviroyar;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Wednesday, 13th July 1955—
Infectious Diseases : Discussion ;
National Anthem : How to sing ?
Nakaiyum Pakaiyum : Play ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Thursday, 14th July 1955—
Farm Forum : Discussion ;
Vasanai Kalanjiyam : Koonthal Thailam : Musical Feature ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Friday, 15th July 1955—
Gandharva Kudirai ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

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Saturday, 16th July 1955—
Diseases communicable by milk and those that are communicable by milkmen—Talk in Tamil arranged by the Department of Animal Husbandry, Government of Madras.
Mazhaiyin Azhagu : Song ;
The Adult Literacy Class : Tirukural : Sei Nanri Arithal (Kural Nos. 107 and 108).
Weekly Review of Market rates ; Water-level readings ;
Topical Discussion ; Weather Report.

Sunday, 17th July 1955—
Dry Farming : Discussion ;
Kavi Padi Perumai Seyya : Song ;
Kona Ezhuttu Kunchitapadam : Serial Feature ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Monday, 18th July 1955—
Pearl Fisheries of South India : Discussion ;
Sathya Jothiyai : Song ;
Irulil Oli : Feature ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Tuesday, 19th July 1955—
Farm Forum : Discussion ;
Urumi Melam ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

(*Continued from page* 12)

The Question-hour is a period of sun-shine, cloud and storm. There are few more trying experience for the Ministers than that of this hour. It demands superb seamanship on the part of the Speaker/Chairman also. He has constantly to intervene to maintain order and control irrelevant and discursive supplementary questions and answers and at the same time keep the House in good humour. There is at times a whole series of scenes with the Speaker/Chairman constantly on his legs but the storms are seldom lasting. The House changes from grave to gay or *vice versa* and the incidents of this period are immediately forgotton when the Speaker Chairman says :

" *Questions over.*"

Wednesday, 20th July 1955—
Leprosy and Treatment Discussion ;
National Anthem : How to sing ?
Listeners Letters ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Thursday, 21st July 1955—
Farm Forum : Discussion ;
Musical Bouquet ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Friday, 22nd July 1955—
Kathakalakshepam : Sri Aandaal ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Saturday, 23rd July 1955—
Kashmir : Life in a house-boat ;
Vilakkinile ; Song ;
The Adult Literacy Class ; Tirukural : Seinanri Arithal (Kural Nos. 109 and 110) ;
Weekly Review of Market Rates ; Water-level readings ;
Topical Discussion ; Weather Report.

Sunday, 24th July 1955—
Major insect pests of rice and their control : Discussion ;
Gramangal : Song ;
The Village Welfare Association ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Monday, 25th July 1955—
Common ailment of calves : Discussion ;
Malaiyin Maiyalile : Song ;
Chattarathu Chowkidar (1) Serial Feathure ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Tuesday, 26th July 1955—
Farm Forum : Discussion ;
Grama Panchayattil : Peyotti Vazhakku ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Wednesday, 27th July 1955—
Greens in diet : Discussion ;
National Anthem : How to sing ?
Social Education for Women under Five-Year Plan Talk ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Thursday, 28th July 1955—
Farm Forum : Discussion ;
Have you heard this song ?
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Friday, 29th July 1955—
Pattu Vathiar Amma—Musical Play ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

Saturday, 30th July 1955—
Makkal Tiruppani : Play ;
Gomatha : Song ;
Tyagam : Play ;
The Adult Literacy Class : Tirukural : Naduvu Nilaimai (Kural Nos. 111 and 112) ;
Weekly Review of Market Rates ; Water-level readings ;
Topical Discussion ; Weather Report.

Sunday, 31st July 1955—
Gourd : Discussion ;
Tamizhnadu Ulagodu : Song ;
Venn Kudai : Play ;
Market rates and water-level readings ;
Topical Discussion ; Weather Report.

(*Continued from page* 13)

Temple Popular

The Temple is a popular one for the Lingayats and the Non-Lingayats as well. Pilgrims used to visit from throughout the District of Mysore, Mandya and Bangalore Districts in Mysore State and from Nilgris, Coimbatore and Salem Districts in Madras State. Deepavali, Sivarathri and Ugadhi are the three major annual festivals for this temple and thousands of pilgrims used to congregate to witness the Car festival. At present the Temple is under the management and control of the H.R. and C.E. (Admn.) Department with an Executive Officer and a Board of Trustees having been appointed for the proper management of the same. The authorities are doing their best to provide all facilities to the visiting pilgrims.

New Extension

In the Madras Electricity System a total number of 134 D.C. services with an approximate connected load of 219 K.W. were changed over to A.C. supply on a voluntary basis.

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The passing out parade of the Women's Auxiliary Cadet Corps Lady Teacher (Officers) Training Camp was held at Queen Mary's College on 15th June 1955, under the presidentship of Mrs. Nallamuthu Ramamurthy. The photo (*bottom right*) shows the President presenting the Best Cadet Cup.

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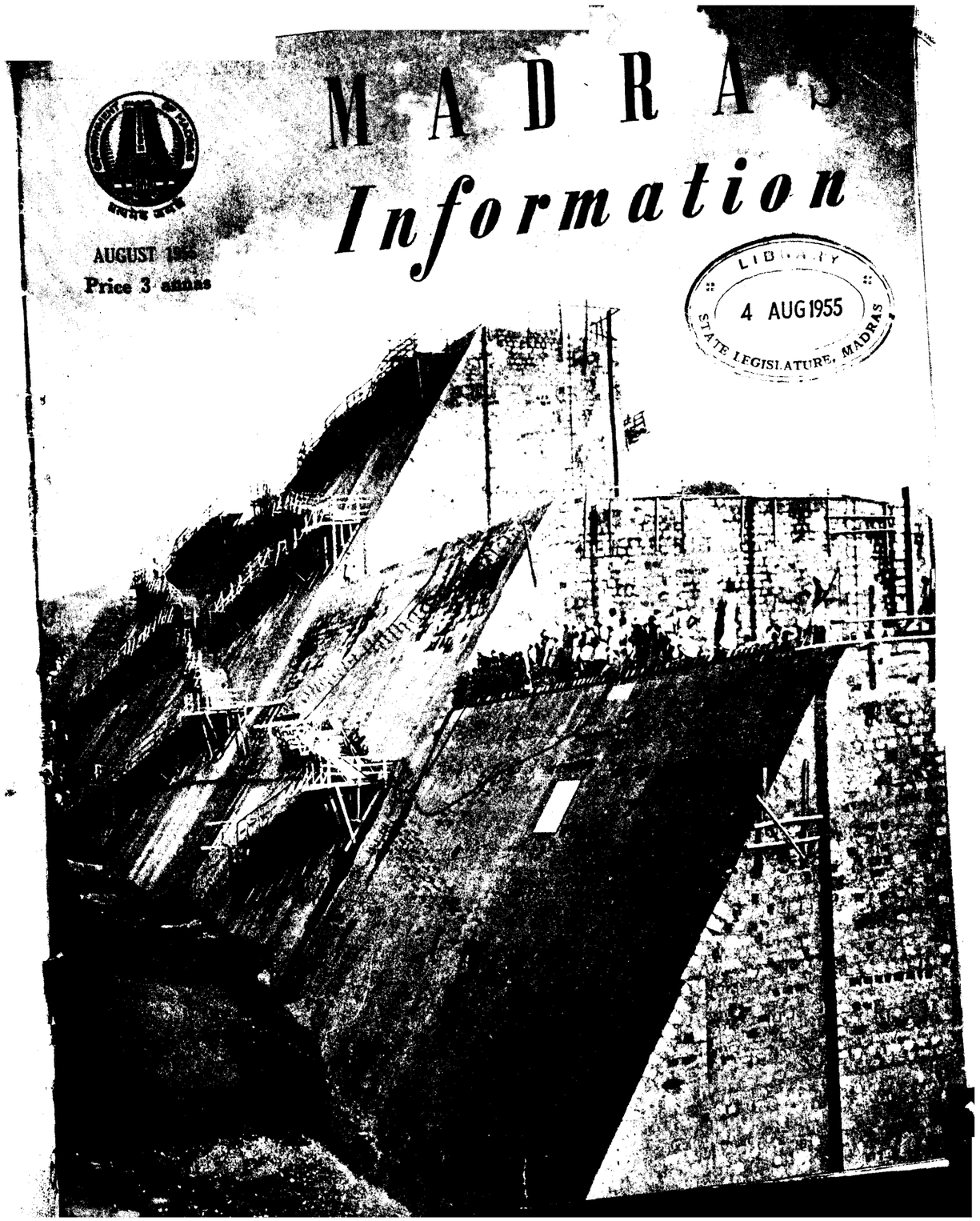

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Cover Page : CONSTRUCTION FOR TOMORROW—The Work on Manimuthar Project in Tirunelveli district is progressing satisfactorily. This is one of those major projects in the State for which people made a substantial contribution. A little sacrifice by the present generation, and the fruits will be enjoyed by the future generations—none else, but our own children and grand-children.

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Eighth year of Freedom

On the 15th of this month we celebrate the Independence Day. "Heart-searching" is an expression we usually associate on occasions like that. But a constant demand on that expression need not belittle its significance. Heart-searching can indeed be very genuine. A mental flash-back takes us back to those hectic days when the freedom fighters were telling the people from platforms in hamlets, in villages, towns, cities, Chowpatti sands: "Let power to shape our destinies fall in our hands and then we shall. . ." Today that power is in our hands and the people's representatives are in power everywhere. But have we any reason to be apologetic? Decidedly not! In the seven years that have rolled by, we have done something. We have also laid the foundations for a great social structure worthy of our martyrs. Here in these pages you read a modest account of what we have done in our State. Now read on . . .

The eighth year of freedom in Madras State witnessed a further period of intense activity in the consolidation of efforts towards progress and development of national economy. As the first Five Year Plan neared fulfilment, its achievements also became more and more visible and the large mass support it received during the year clearly indicated the people's appreciation and approval of the plans for their prosperity.

Compared to the preceding years' this was a year of greater developmental activity, encouraged by the improvement in the food situation and an all-round recovery after nearly seven years of adverse economical conditions, accentuated by a large spell of adverse seasonal conditions. Nature began to smile again on this side of the peninsula and during the last two years, the monsoons have been favourable and rainfall became normal, if not plentiful. This assuaged greatly the ravages of drought and famine in previous years; the fields began to smile again with the green crops, the dried up wells began to yield water for drinking and irrigation and the tanks began filling up. Thus eighth year of Freedom dawned with sunshine and smile and people began to look forward with better courage and faith. This enabled the acceleration of progress and with the willing co-operation and rousing enthusiasm of the people, the Government was able to push through its development plans and launch new schemes with vigour.

A series of welfare measures introduced by the Government marked their progress during the year; pension benefits to school teachers, free education to poor school children up to middle school classes, the progressive implementation of the Community Project and National Extension Service Schemes, etc., aroused the interest of a large number of people in all the welfare measures of the Government. The irrigation projects under construction registered further progress towards completion; new projects like the Sathanur (North Arcot District) and the Krishnagiri (Salem District) Reservoir Projects and the Periyar Hydro-electric Project were inaugurated, a number of bridges were opened up, connecting important communication lines, the highways in the State increased in length and their surface improved; a number of educational institutions were opened and strength in them also went up; hospitals, doctors and similar Health and Medical and aid Services also increased; agricultural and industrial production in the State registered greater stability. On the whole, it was a year of hope and optimism which permeated the whole countryside, where the preparation of the Second Five Year Plan was being carried on actively and on a solid basis.

It is perhaps this that would ultimately make the eighth year an important landmark in the economic progress of India. It will go down in history as a turning point, as the year that paved the way for the "socialistic pattern of Society."

A review of the progress made during the year and the work planned then is therefore of significant importance, for it gives a comprehensive picture of the first fruits of the early years of freedom and a better perspective of the India that is being evolved on the anvils of the eighth and subsequent years.

Education

The year under review showed all-round improvement in all spheres of education in this State, elementary, collegiate and technological.

There were 21,552 Elementary Schools with a total strength of 1,884,905 boys and 1,108,873 girls as against 21,423 schools with 1,829,117 boys and 1,081,263 girls in the previous year. The Government have appointed a Committee to examine the present system of elementary education in the State in all its aspects and to suggest reforms so as to re-orientate the system of education in the early stages.

Under the scheme for providing single-teacher schools in schoolless centres and to give relief to the educated unemployed, 2,708 new schools were opened this year and 100 additional teachers were appointed for the Higher Elementary standards to be opened in the existing Elementary schools.

There were about 938 basic schools during the year as against 905 in the previous year. The number of scholars reading in them during the year was 79,013 boys and 48,063 girls. There were 23 craft equipment stores at the beginning of the year 1954 and two more were opened during the year.

The introduction of free education up to middle school for children of parents whose income falls below Rs. 1,200 per annum is an outstanding measure introduced during the year. The secondary education followed in the State is in conformity with several recommendations made by the Secondary Education Commission. The Government have constituted a Committee with Dr. A. L. Mudaliar, Vice-Chancellor of the Madras University as Chairman, to improve and accelerate the progress and to implement other recommendations of the Secondary Education Commission. The number of Public Secondary Schools was 827 for boys and 205 for girls. The number of Indian Secondary Schools alone during the year being 802 for boys and 178 for girls, as against 782 for boys and 177 for girls in the previous year. The strength of the Indian Secondary Schools during the year was 379,002 boys and 119,159 girls as against 369,304 boys and 110,347 girls in the previous year. 127 schools imparted diversified courses of study, at the secondary stage.

There were 40 colleges for men and 16 for women for general education. Three second grade colleges were opened during the year and four second grade colleges were upgraded to first grade colleges. The strength in the various University classes during the year was 35,602 men and 5,997 women as against 33,837 men and 5,247 women in the previous year.

There were 7 training colleges for men and 3 for women, 44 non-basic training schools for men and 48 for women and 32 basic training schools for men and 15 for women. Certificate and Diploma courses for Technical teachers were conducted in 3 centres during the Summer vacation of 1954.

The number of Engineering Colleges in the State was 6 and the number of scholars in these institutions was 2,049.

The scheme of social education which was introduced in 1948 was modified this year and admission was restricted to illiterates between the ages of 8 and 18. The number of social (adult) education centres was 1,939 and the number under instruction was 49,044 men and 3,556 women.

The number of institutions for the handicapped was 15 as in previous years. The strength in these institutions was 808 boys and 363 girls.

District Central Libraries are now functioning in all districts in the State at the Headquarters towns and during the year 55 branch libraries were opened.

Free Education

Harijans were exempted from school fees and Backward Communities were eligible for half-fee concessions. The Government have now decided to exempt all poor children without any distinction of caste, creed or community, from the payment of school fees up to the middle school stage with effect from next school year. The managements of schools would be compensated for loss of income. Even though elementary education was generally free, the managements of some aided elementary schools were charging school fees. The management of these schools would be suitably compensated. These measures are expected to cost about Rs. 50 lakhs.

The Government have been considering for some time the various suggestions made from time to time to better the lot of teachers in aided elementary schools. Even now the teachers both in aided and local bodies services have the option to take insurance policies and pay the premia from the provident fund amount standing to their credit.

The Government have decided that the teachers in elementary schools should be given, in addition to the existing scheme of provident fund, pension equal to one-fourth of their pay as per the present rules applicable to pensionable service under the Government and made it operative from 1st April 1955.

Food and Agriculture

The two-pronged drive of the Government of Madras to improve the lot of the agriculturists and to increase agricultural production to meet the food deficit was continued successfully during the year under review. The system of informal rationing which was in force in Malabar and the Nilgiris districts was discontinued from July 1954, and due to the availability of foodgrains in the open market at reasonable prices, all fair price shops were gradually closed down by the end of 1954. In view of the easier food situation in the country, steps were being taken to increase the production of deficit commercial crops like cotton, sugarcane, oilseeds, etc., without detriment to the production of foodgrains.

A sum of Rs. 902·2 lakhs had been provided in the Five Year Plan for expenditure on agricultural schemes and the allotment for 1954–55 was Rs. 198 lakhs. The vagaries of monsoons which had been mainly responsible for successive crop failure in this State were offset by the execution of several irrigation works, both major and minor under the Five Year Plan benefiting nearly 4 lakhs of acres. Major Projects like Lower Bhavani and Malampuzha had already commenced supply of water while Manimuthar, Amaravathi, Sathanur, Krishnagiri, etc., were under various stages of construction. In addition to innumerable minor irrigation and tank improvement works a scheme for the construction of filter point tube-wells was launched to develop and utilise the underground water-supply. This scheme was becoming increasingly popular and with the loan assistance made available by the Government of India, 600 filter point tube-wells at an estimated expenditure of Rs. 20 lakhs were being installed in 1954–55.

Manure Supply

The Government's effort in recent years to increase rice production by providing the agriculturists with inorganic and green manures, improved seeds tractors, filter point tube-wells and pump sets had increased rice yield appreciably and the extra production last year due to intensive cultivation scheme was about 2½ lakhs of tons. A quantity of 65,692 tons of Ammonium Sulphate was distributed to ryots for application as straight fertiliser during the period April 1954 to March 1955. Pest control measures had been expanded and pesticide and fungicide were distributed to ryots in pest-affected areas at 50 per cent of the cost price. The quantity of foodgrains saved by these measures was estimated at 45,000 tons valued at Rs. 1·3 crores. A weekly forecast giving information on the outbreak and likely spread of pests and disease was issued to ryots suggesting the remedial measures which should be adopted.

There were 49 agricultural research stations and farms in this State functioning during the year. The paddy research stations at Coimbatore had collected nearly 1,500 strains of paddy. About 60 per cent of the

total area under paddy in this State were covered by improved strains and 8 lakhs of acres by improved seeds of millet.

Demonstration Plots

The scheme of the Government to organise one demonstration plot in each village to bring home to the cultivator the results achieved at the Farms and Reserach Stations was pursued during the year and there were 13,278 demonstration plots as against a total of 20,000 villages. There were also about 16,309 village associations and 97 taluk associations of agriculturists in this State. They helped in the propagation of Japanese method of cultivation, and organisation of village seed farms. In Tanjore seed farms were opened in all the 625 villages under the National Extension Service scheme.

Agricultural Credit was provided to the ryots indirectly through co-operative organisations and directly as takkavi loans. The total amount of finance provided by the co-operative for agriculture during the year 1954–55 was about Rs. 632 lakhs while the corresponding figure for the year 1953–54 was Rs. 422 lakhs. In addition Rs. 70 lakhs had been provided for manures, Rs. 4·67 lakhs for tractors, Rs. 14 lakhs for pump-sets, etc. Long term loans at the rate of Rs. 300 per acre subject to a maximum of Rs. 1,500 per person for carrying out soil conservation work were given in the Nilgiris district. So far, 6,752 acres had been contour-bunded under the above scheme. Afforestation work had been undertaken in 10,000 acres of barren forest lands in dry districts, as this would in addition to restoring fuel forests, effectively arrest the development of sheet and gulley erosion in these areas.

Development of livestock also received prompt attention during the year. The Madras State has been for sometime now free from Rinderpest. Twenty quarantine stations were opened along the important cattle routes at the borders adjoining other States to protect cattle entering this State with freeze dried Rinderpest Vaccine. During the year 1954–55 over 600,000 animals were protected this way. Nine new veterinary dispensaries and seven Touring Billets were opened during the year. Under the Male Stock Distribution Scheme, 140 breeding bulls and 30 rams were distributed during the year for stud purposes.

Eight key villages with two Artificial Insemination Centres were started during the year, bringing the total to 36 key villages and 9 Artificial Insemination Centres in the State. In addition to this, 8 Artificial Insemination Centres were sanctioned during the year under Community Project programme in different districts and also 6 Livestock Improvement Centres under National Extension Service in Tanjore district.

Toned Milk

The Government Milk Factory established in 1947 produced on an average about 120,000 lb. of reconstituted milk per month. A Committee appointed by the Government to go into the question of working of this factory and matters concerning the milk supply position in Madras City recommended the manufacture of "Toned Milk" instead of reconstituted milk by toning buffaloe's milk to the standard and quality of fresh cow's milk.

In order to improve the present stock of exotic breeds in the poultry Research Station at Madras, new Strains of White Leg horns, Rhode Island Reds, Light Sussex and Brown Leghorns were introduced during the year.

Co-operation

Madras, which has been almost the birth place of the Co-operative movement in India is maintaining its reputation for progress in this field and forging ahead with further development in co-operative organisation all round.

The rural credit societies constitute the major part of the Co-operative structure in the State. The number of rural credit societies increased from 10,151 to 10,295 and the membership from 9·28 lakhs to 9·81 lakhs in the course of one year. The paid-up share capital of members also increased from Rs. 123·38 lakhs to Rs. 130·20 lakhs. The societies cover nearly 49·37 percentage of the villages and 21·04 percentage of the rural population at present. The total loans issued to the agricultural credit societies amounted to Rs. 367·65 lakhs.

The Madras State Co-operative Bank provides funds to the Central Co-operative Banks for financing agricultural operations and marketing of crops from its own resources supplemented by funds obtained from the Reserve Bank of India and the Government. The State Co-operative Bank has on its rolls 16 Central Co-operative Banks as members. Its paid-up share capital on 31st March 1955 is Rs. 11·65 lakhs. The sixteen Central Co-operative Banks had a paid-up share capital of Rs. 97·05 lakhs at the end of March 1955. They held deposits of different kinds to the extent of Rs. 751·03 lakhs. Up to March 1955, they issued loans to the affiliated societies to the tune of Rs. 1,004·97 lakhs and the amount outstanding was Rs. 862·92 lakhs.

Long Term Credit

On the side of long term credit, the Central Land Mortgage Bank continued to povide long term finance to the agriculturists repayable in 20 years. The membership of the Central Land Mortgage Bank consists of 73 primary land mortgage banks, and 338 individuals. The 73 primary land mortgage banks affiliated to the Central Land Mortgage Bank had a membership of 42,326 and a paid-up share capital of Rs. 26·35 lakhs on 31st December 1954. During the period they issued loans to their members to the extent of Rs. 14·85 lakhs, and the loans outstanding at the end of December amounted to Rs. 340·37 lakhs.

Co-operative marketing constitutes another major activity of the movement. There are 120 Marketing Societies in the State which issue loans to members on the pledge of their produce, undertake marketing of their produce for favourable prices and distribute chemical manures and agricultural implements. The Government continue to render financial assistance to the Marketing Societies by way of subsidy to the extent of 50 per cent of the cost of godowns constructed by them subject to a maximum of Rs. 7,500. The number of godowns put up by the Marketing Societies up to 31st March 1955 was 43.

There are at present 28 land colonisation societies for civilians. These societies have taken up 14,337 acres of land of which 6,911 acres have been brought under cultivation. During the year, two land colonisation societies were registered and started at Pulian-kulam in Tirunelveli district and Koila in South Kanara district.

Co-operative Milk Supply Societies and Unions continued to function as

in the previous years, supplying milk of good quality to the consumers at reasonable prices and securing at the same time to the producers a fair return for their labour. There are at present 20 milk supply unions. The number of milk supply societies has increased from 527 to 539 and their membership from 57,077 to 57,953. The production of milk per day in the unions and societies has increased from 35,000 Madras measures a day in August 1954 to 37 000 Madras measures per day in March 1955.

Handloom Industry

The handloom industry received great encouragement, and the industry showed signs of improvement during the year. From August 1954 to March 1955, the number of primary weavers, societies increased from 671 to 776; their membership from 1·13 lakhs to 1·24 lakhs and the paid-up share capital from Rs. 62·29 lakhs to Rs. 64·30 lakhs. The number of looms brought into the co-operative fold increased from 1·03 lakhs to 1·32 lakhs out of nearly 5 lakhs looms in the State an increase of nearly 10 per cent in the course of 7 months.

Out of the Cess Fund the Government of India sanctioned a sum of Rs. 182·88 lakhs to the Madras State up to 31st March 1955 for the implementation of the several schemes for the benefit of the weavers. The measures for the improvement of the handloom industry chiefly relate to the provision of share capital to members of weavers' co-operative societies, working capital to the weavers' societies and the Madras State Handloom Weavers' Society, provision of technical and improved appliances for the industry, expansion of marketing activities by way of opening of emporia, sale depots, etc., grant of rebate to consumers with a view to encourage purchase of handloom cloth by the public. As a result of the working of these schemes, 35,452 weavers were brought as new members into the co-operative fold up to 31st March 1955 by advancing loans to them towards share capital of primary weavers' societies and Madras State Handloom Weavers' society Rs. 40·48 lakhs and Rs. 34·4 lakhs respectively were made available.

Cottage industries provide subsidy occupation to the agriculturists engaged in the industry. There are 150 cottage industrial societies with a membership of 15,216 and paid-up share capital of Rs. 4·39 lakhs. These societies embrace a variety of cottage industries, such as mat-weaving, coir making, leather goods making, basket making, toy and button manufacture, pottery, hand-pound rice, oil pressing, metal works, etc., besides garment making among women.

Housing Societies

The urban housing societies organized in municipalities and major panchayats of the State help to relieve congestion in urban areas. Housing societies have been organized in rural areas also to enable the villagers to construct houses of their own. There are 171 urban housing societies with a membership of 16,280 and paid-up share capital of Rs. 105·76 lakhs. There are 224 Fishermen's Co-operative Societies with a membership of 31,413 and paid-up share capital of Rs. 5·53 lakhs. They issued loans to their members to the extent of Rs. 5·94 lakhs during the year. Select societies are entrusted with quick transport vans by the Fisheries Department to enable the members to move the catches quickly to the markets. Government have sanctioned a loan of Rs. 18,000 to the Mahabalipuram Fishermen's Society, Chingleput district, for the purchase of catamarans.

In the four Community Project areas, twenty-four Community Development blocks and 29 National Extension Service blocks in the State, there are 3,218 co-operatives of different types covering 2,878 villagers; 611 villages are yet to be covered by co-operatives in these areas.

Industrial Development

Though Madras State suffers comparatively due to lack of any large-scale industries, efforts are being made for the rapid industrialisation of the State and to maintain a high level of employment; Government have been giving maximum encouragement and assistance to private enterprise. The Madras Industrial Investment Corporation, Limited, sponsored by the Government granted long-term loans to industrial concerns to the tune of Rs. 1·5 crores.

During 1954–55, licences were granted for the establishment of a number of new textile mills and for the expansion of existing ones involving a total addition of about 200,000 spindles to the State's existing spindleage. Licences were also granted for three sugar factories with a total crushing capacity of 2,600 tons of cane per day, one cement factory for the manufacture of white and coloured cements, one soda ash factory at Tirunelveli and one paper mill at Papanasam. There are also proposals to establish another paper mill in the Nilgiris district and a factory for motor cycles.

Lignite

Following the discovery of a very important key product, lignite, in South Arcot district, and the successful experiments carried out in the initial stages of the pilot project at Neiveli; the Government of India have now come forward to meet the entire expenditure of the lignite investigations at Neiveli in South Arcot from this year; however the work will be carried out through the agency of Government of Madras. A project co-ordinating committee consisting of five representatives of the Government of India and three representatives of the Government of Madras was set up. In May 1954, the Government of India engaged the services of a British firm for writing up a project report on South Arcot Lignite. They have since submitted the report. An integrated scheme for the production and utilisation of raw lignite will be drawn up after further investigations to check the thickness of the lignite seam and the study of the underground water conditions are completed.

Among other items of progress made in the industrial undertakings directly run by the Government, the following are some of the more important.

The production and sale at the Kerala Soap Institute during the year were higher and better than in the previous year. The total production of soap during the year was 408 tons.

Additional new machineries were installed for the manufacture of Shark Liver Oil and 'Adamin' at the Government Oil Factory at Kozhikode. This has considerably improved the odour and colour of the final product.

The total quantity of silk produced at the Government Silk Filatures at Kollegal was 50,190 lb. of raw silk, 3,019 lb. of duppion silk and 20,330 lb. of thrown silk. During the year improved varieties of duppion silk and sub-standard silk out of the inferior cocoons were produced. The area under mulberry cultivation was 24,885 acres and there was an increase of 1,900 acres during the year.

Cottage Industries

During the year 1954–55, the following schemes on cottage industries were implemented in the Madras State.

Steps were taken to establish 30 model village oil pressing units in the State and conversion during the first year of 750 old type of ghanies into wardha ghanies at Government cost. The object of the scheme is to give fillip to village oil industry which is unable to withstand competition from power operated oil mills.

The fine kora mats of Pattamadai in Tirunelveli district have earned a reputation both in India and abroad. During recent years the industry received a set back due to the decline in demand for the costly mats. With a view to revive the industry, a training-*cum*-production centre has been set up at Pattamadai at a cost of Rs. 18,200 for the conversion of the mats into various fancy articles such as ladies' hand bags, purses, etc.

The Glass Training Centres at Madura and Kasaragod provided training to students in glass bangles and beads manufacture. The glass centre at Madras is training students in the manufacture of all important items of scientific glassware required for educational and research Institutions. A scheme for the expansion of the Marketing centre and for undertaking additional lines of manufacture such as Thermosflasks, neon-signs, etc., has recently been sanctioned and will be implemented during the year 1955–56. The Cottage Industries Research Institute at Madras, continued to design improved implements and tools for the Cottage Industries.

During the year 1954, the Viswesvarayya Scheme of Rural Industrialization was extended to the entire Musiri taluk in the Tiruchirappalli district. The new industries started include manufacture of Cement products, manufacture of brass vessels, boilers, a coir making unit using the latest Japanese method and quality match splint making unit. Poultry farms, and apiaries have been started at a number of places and these have come up well.

The Government Coir School at Beypore in Malabar district continued to give training to students in coir handicrafts.

A loan of Rs. 21,150 was disbursed to the artisans and Cottage Industrialists during the year for the development of Cottage Industries.

Development Projects

Several of the Development Projects included in the First Five-Year Plan are completed or nearing completion and others are in progress.

The Lower Bhavani Project has practically been completed except for fitting up of spillway gates which is in progress. The canal has been excavated and banks formed over the entire length of 124 miles. Water has been allowed in the canal to irrigate about 114,600 acres from September 1954 to March 1955. The value of work done during the period from September 1954 to March 1955 is Rs. 21·25 lakhs. The total expenditure to the end of March 1955 is Rs. 10·29 crores.

The Malampuzha Project designed to irrigate about 40,000 acres. Malampuzha is also nearing completion. The major portion of the work on the construction of dam and appurtenant works was completed before the 15th August 1954. In September 1954, water was supplied from the canal for about 18,000 acres. The total expenditure up to the end of March 1955 is Rs. 370·00 lakhs.

The Mettur Canals Schemes which will irrigate 45,000 acres in Coimbatore and Salem districts constructed at a cost of Rs. 267 lakhs is in good progress. The excavation of the entire West Bank canal has been completed. Water was let out for irrigation up to 20th mile from August 1, 1954 to January 15, 1955 for short-term food crop on an area of about 770 acres in Salem district and 6,500 acres in Coimbatore district. Out of 120 miles length of distributaries in the West Bank canal earth work has been completed for a length of 100 miles. Investigation for distributaries in the East Bank canal is in progress.

The Manimuthar Project consists of a storage reservoir to supplement the supply of water to the existing ayacut of 83,000 acres under the Thambraparni system and to supplement supply to the existing ayacut under several rainfed tanks in Tirunelveli district with a total ayacut of about 20,000 acres. The total cost of the scheme is Rs. 505 lakhs. Out of the total of 54 million c.ft. of earth work to be done in the 28½ miles length of main canal, 32 million c.ft., i.e., 59 per cent of the earth work has been done up to the end of March 1955. The value of the work done up to March 1955 is about 265·49 lakhs.

The Arniar Project is expected to irrigate a new area of 2,530 acres and stabilise supplies to 2,970 acres by the reservoir channels and supplement supplies to 5,700 acres by the anicut channel all in Chingleput district. The cost of the Project is about Rs. 104 lakhs. The bund has been formed in the two flanks for a length of 750 feet in the left and 2,200 feet on the right. The anicut at Surratapalli has been completed. The total expenditure to the end of March 1955 is Rs. 25·34 lakhs.

The Walayar Reservoir Project affording irrigation facilities to an extent of 6,500 acres in Palghat taluk of Malabar district, is estimated to cost about Rs. 100 lakhs. The work is in progress, and the total expenditure up to the end of March 1955 is Rs. 60·86 lakhs.

The major portion of the Mangalam Reservoir Project will be completed during this year.

The Amaravathi Reservoir Project designed to irrigate about 15,000 acres in Udamalpet and Dharapuram taluks of Coimbatore district is estimated to cost about Rs. 297 lakhs. Except for certain preliminary works, major items of work relating to the project are taken up only during the period under review. Excavation of foundation for the full length of masonry dam is in good progress.

The Vaigai Reservoir Project affording irrigation facilities for a new area of 20,000 acres and costing Rs. 360 lakhs is also in good progress.

The Sathanur Reservoir Project inaugurated in October 1954, will irrigate 20,000 acres in North Arcot district. Preliminary works such as clearance of jungle and forming road and collection of materials are in progress. The cost of the project is about Rs. 289 lakhs.

The Krishnagiri Reservoir Project will consist of two canals, to irrigate 7,500 acres including 2,240 acres of existing wet lands in Salem district. The cost of the project is about Rs. 202 lakhs. The project was inaugurated in January 1955.

Community Development—A People's Programme

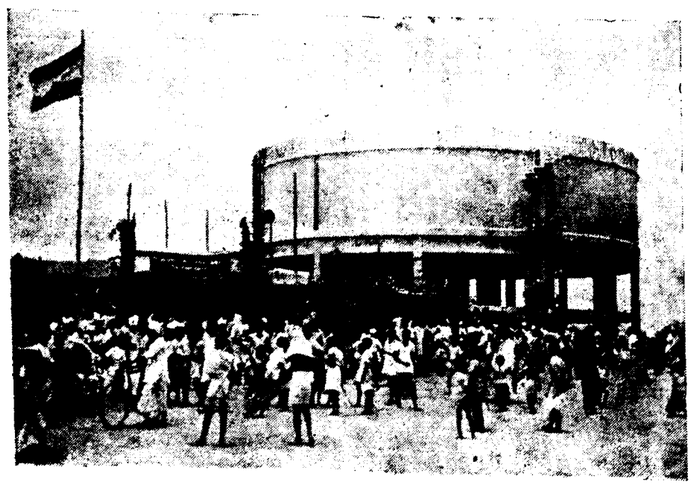
By Sri N. E. S. RAGHAVACHARI, I.C.S., Director of Community Development

A People's Programme

At the Development Commissioner's Conference held in Simla in May this year the delegates were asked what should be the correct slogan for the programme. Should it be "A Government programme with people's participation" or should it be "A people's programme with Government participation". The answer was unanimous. All the Development Commissioners stated that the latter was correct and even at present the programme is essentially a people's programme with Government participation. In this article I propose to examine the implications of this statement.

As is well known by now the Community Development programme is a multi-purpose programme aiming at an allround improvement of the conditions of living of the rural population. Obviously any amount of Government effort cannot effect this improvement unless the prople concerned exert themselves in the matter. It may be asked how the Government enters the picture. The Government has the necessary technical knowledge which it makes available to the people. For instance researches conducted at the various agricultural research stations show how the yield from the land can be increased. This knowledge is available with the officers of the agricultural department who are prepared to advise the agriculturist. But the next step is for the agriculturist to apply this knowledge and thus increase his production. This can obviously be done only by him and not by a Government officer.

Thus, unless this programme is conceived as a people's programme with the Government officials playing an advisory role, the programme cannot achieve its objective. The programme should be planned and executed by the people themselves through their representative organizations. The role of the development staff is essentially one of guiding them in planning and execution by providing the necessary technical help and by the organization of supplies and services.



A view of the overhead tank of the rural water-supply at Palamcottah in Tirunelveli district recently opened by Sri K. Kamaraj, Chief Minister.

Objectives of Village Planning

I have referred above to the planning of the programme by the villagers. One of the objectives of the village plan should be to increase production allround and to provide subsidiary occupations for the under-employed sections of the community. The success of the plan depends on the extent to which the villagers are willing to work and make sacrifices for the achievement of a better standard of living. The Planning Commission has laid down certain objectives for village planning. The Commission has pointed out that the aim should be that (1) every family has a plan of improvement for which it works, including agricultural production and subsidiary occupations, (2) every family is made eligible to become a member of at least one co-operative society, and (3) every family devotes a portion of its time and resources for the benefit of the community.

Specific items which have necessarily to be considered in any programme for increasing agricultural production and the volume of rural employment would be the use and production of improved seeds, use of manures and fertilizers, use of improved implements and better techniques, irrigation works, contour bunding and soil conservation, improvement of cattle, development of subsidiary occupations such as poultry, bee-keeping, etc., development of Khadi and other village industries, improvement of communications, etc.

People's Contribution

The programme involves the participation of the people in the execution of works of common utility to the village. This participation involves a contribution from the people towards the cost of the work by means of cash, labour or materials. Such a contribution has a two-fold objective. In the first instance it instils into the people a feeling that the works are their own. A work towards the cost of which the people have contributed and which is carried out by the people themselves becomes their own work. They are therefore interested in its proper maintenance. The dependence of the villager on the Government for works of a petty nature is thus reduced. Secondly if the Government were to meet the entire cost of the works, the Governmental part of the expenditure would be higher and the extra amount can only be found by further taxation.

The concept of the people's contribution is essentially a voluntary form of taxation. But it has the advantage over governmental taxation in that it is voluntary and the rate at which each individual contributes is left to the individual himself or to the community. Moreover it is a tax in kind in that it can be given in the form of labour or materials. Participation by way of labour is probably the best form of contribution as labour which would otherwise be idle is utilized for a productive purpose. A pair of hands is probably the most valuable possession an individual has, and by proper utilization of these hands wealth can be produced.

Village Organizations

As the programme is essentially a people's programme, it follows that there should be an effective people's organization for every village. Wherever panchayats have been formed and are fully representative of all the interests in a village, they are utilized for developmental activities. The panchayats have been advised to form development committees to which representative non-members could be co-opted. Wherever there are no statutory panchayats, informal development panchayats have been formed in all villages covered by the programme. It is these organizations which draw up the programme for the village and which mobilizes the people's contribution towards works. The works are also executed by these organizations.

Another inportant people's organization which is sought to be developed in areas covered by the programme is the co-operative organization. In keeping with the policy underlying the concept of the co-operative commonwealth, any activity which cannot be undertaken by an individual and is suitable for being handled by more than one person for technological reasons or otherwise must be undertaken through an association of people on a mutual service basis. Such an association has to be built up on a non-profit basis and it must ensure that it does not put up one class of people against another as is perhaps the case in business transactions. The most important of such associations is the co-operative society. The co-operative society has an important part to play in providing cheap credit which is so very essential in an agricultural economy. Credit however is only one of the aspects of co-operation and the objective is to form multipurpose societies for every village or group of villages which would handle credit, arrange for the distribution of seeds and fertilizers and market the agricultural produces.

The Success so far

How far have we succeeded in this State in making this a people's programme? I might say at once that there has been a good deal of awakening among the people and there is a continuous demand for the provision of more and more amenities in villages. People are prepared to meet their part of the cost for the provision of these amenities. For instance, villagers have formed earth-roads entirely at their own cost and then requested the Government to provide the culverts and bridges on these. Similarly, people are anxious that every village should be provided with adequate drinking water-supply and are prepared to meet part of the cost of such schemes. Community recreation centres have been put up in several villages. The entire cost of the building for these centres is usually met by the people of the locality, the Government making a small grant towards the cost of Radio and equipment. For school buildings, the people have spent much more than the Government's contribution. Wherever Government land is not available for formation of roads or for the construction of buildings, wells, etc., people have come forward with generous gifts of land. It is estimated that the total value of the people's contribution on all these items amounts to over rupees forty-five lakhs up to the end of March 1955.

Rural Housing

An important item of activity is the provision of rural housing. Government have devised a simple scheme under which loans could be granted to individuals at low rates of interest repayable in easy instalments. The maximum amount of the loan is Rs. 750 per house. In several villages, people have taken advantage of this loan provision and have put up houses especially for Harijans. This is usually done as a community effort. The more well-to-do villagers provide building materials, carts, etc., either free or at concessional rates. The labour is provided by the people for whom the houses are intended. In some cases, the more well-to-do villagers even arrange to provide a free mid-day meal to those engaged in such work. With such effective co-operation among the different people of the area, houses worth Rs. 500 have been put up with only a loan of Rs. 250 per house. Such a joint effort by the entire village community is one of the best means of promoting cordial relationship between the different sections of the community and at the same time has the advantage of helping the less fortunate sections of the community in meeting one of their long-felt wants, viz., proper housing.

An important field in which people have derived distinct advantage as a result of this programme is the field of agriculture. The villagers have fully learnt the advantages of improved methods of agriculture and have adopted these. For instance, the use of green manure has considerably increased and there is an ever-expanding demand for chemical fertilizers.

In the field of village and cottage industries, several schemes have recently been sanctioned which would provide subsidiary occupation for the people in the villages. Hand-spinning which provides for the maximum possible employment with the minimum capital outlay is being developed on a large scale the target being 1,000 charkas for each block. On a modest calculation, it is found that hand-spinning can provide an additional income of Rs. 100 per family per year. It is intended essentially to provide employment in those periods when the agriculturist is not fully employed.

A new era for the villager had dawned. By a full participation in the Community Development programmes, he can march forward towards prosperity.

Power

Following is the progress in the matter of power development in Madras State :—

An agreement was reached with the Travancore-Cochin Government regarding the royalty to be paid for utilizing the Periyar water for power generation and work on the Periyar Hydro-electric Scheme was commenced in November 1954. Under Pykara III stage Extensions Scheme two numbers 13,600 K.W. generating units were commissioned in May-June 1954. The second stage of Papanasam extension was completed in March 1954 with the commissioning of the 10,000 K.W. set.

The first stage of the Madras Plant Extensions Scheme involving one 15 M.W. set and 3 Nos. 80,000 lb. per hour boilers was completed in 1953. The second stage comprises a second 15 M.W. set and two more 80,000 lb. per hour boilers out of which the generating set with one boiler was commissioned in January 1955. The second boiler is expected to be commissioned in 1956. The third stage envisages an additional generating capacity of 30 M.W. and boiler capacity of 300,000 lb. per hour.

In view of the improved financial position and the loan assistance from the Centre the tempo of the rural electrification work will be further speeded up and the departmental targets doubled.

Government Transport and Communications

Transport

Government Transport has completed seven years of public service in the City of Madras after its nationalization. The fleet strength of the Government Transport is 407, operating on 65 routes. In addition to the City and suburban routes the Government Transport is operating on eight district routes also. As a part of the replacement programme, 50 Leyland Royal Tiger chassis were acquired during the year, out of which bodies for 25 buses were constructed at the Government Transport Workshop at Chromepet so far and put on the road. Orders have been placed for 50 more Leyland underfloor engine chassis to replace old buses.

A Refresher course on correct driving is being conducted for drivers. The scheme of efficiency bonus for drivers and conductors has been working satisfactorily and efforts are being made to improve the schemes further.

Communications

The maintenance and improvements of the roads and the planning for a well co-ordinated road system in the State are being attended to by the Highways Department. The First Five-Year Plan provides a sum of Rs. 3·5 crores for development of roads other than National Highways in the State. A major portion of the programme costing about Rs. 2·61 crores has been completed in the 4 years ending 1954–55. Under this Plan about 1,400 miles of new roads have been formed to serve the isolated villages ; 250 miles of roads have been provided with water bound macadam surfacing ; about 60 miles have been black topped and 26 miles have been provided with cement concrete pavement in order to meet the needs of the heavy traffic. A good number of bridges also have been constructed over the unbridged river crossings at a total cost of Rs. 105 lakhs.

In order to relieve the distress conditions of the people in the scarcity areas of Madurai, Ramanathapuram, Tirunelveli and Tiruchirapallii districts, 47 road works costing Rs. 20·10 lakhs were taken up with 50 per cent and from Central Road Fund. All these works are nearing completion.

The programme for the development of West Coast Road connecting Bombay to Cape Comorin, as an all weather road is under execution. The programme pertaining to this State consists of providing asphaltic surfacing to the entire reach of 321 miles and construction of 23 major bridges costing in all Rs. 282 lakhs.

Apart from the schemes under the Five-Year Plan and the West Coast Road Scheme, the progress of road development in the State has been further aided during the year by the sanction of a sum of Rs. 145 lakhs by the Government of India for taking up 21 works intended for the development of roads of inter-State and economic importance.

Pre-stressed Concrete Bridges

An important achievement of the department during the period was the completion of the 2,202 feet bridge across Palar near Chingleput on the Great Southern Trunk Road constructed at a cost of Rs. 25 lakhs. This is the first pre-stressed concrete road bridge ever constructed in India and also one of the longest of its kind in the world. Another such pre-stressed type of bridge of equal magnitude that has been taken up in this State and is in good progress now is the Coleroon Bridge costing Rs. 34·5 lakhs. Among the other major bridges that are under construction, the Ponniar bridge costing Rs. 33 lakhs, the Palar bridge at Ranipet costing Rs. 19·75 lakhs, the bridge across Tambraparni river at Authoor on Tuticorin-Tiruchendur Road costing Rs. 7·7 lakhs and the bridge across Perampuzha at Payyanur in Malabar costing Rs. 5·23 lakhs may be mentioned.

The proposal to establish a Highways Research Station in Madras at an estimated cost of Rs. 13·05 lakhs has been approved. The proposed Research Station will undertake special testing research and equipmental works required from time to time by the Government of India and by other State Governments in addition to its normal work. This will be the first Highway Reasearch Station to be ever started in any State.

At present the total length of roads in charge of Government is 8,626 miles and 17,301 miles of roads are with the District Boards. The State Government are taking over the important roads gradually from the local bodies and during the current year 338 miles of such roads have been taken over. The Second Five-Year Plan is worked out for a total cost of Rs. 18 crores which will definitely make much leeway in the development of roads.

Public Health

The WHO team of medical scientists who spent about a month in Madras during 1953 have expressed their appreciation of the progress made here in Medical education and practice. With the opening of a new Medical College at Madurai last year, the number of seats available in the three Government Medical Colleges has increased to 295. In addition to this, 42 students of this State have been given admission this year to the Kasturba Medical College at Manipal, in South Kanara.

In addition to the 16 Primary Health Centres established in previous years, 10 Health Centres have so far been started in Community Project areas and 5 more are proposed to be started in the National Extension Service Blocks.

Among the preventive measures undertaken by this State, the anti-malarial work done by the Public Health Department may be said to be its most outstanding achievement. Madras State is implementing the National Malaria Control Programme sponsored by the Government of India. The end of the first Five-Year Plan will find this State in the happy position of having brought all the malarial areas under control.

B.C.G.

The introduction of the B.C.G. vaccination on a mass scale in this State is another preventive measure of great importance. The work which began in November last year has been finished in the cities of Coimbatore, Kozhikode and Bangalore and their belt areas. It has now been taken up in Salem. All the district headquarters stations will be covered this year and afterwards each district will be taken in turn to cover the other urban and rural areas in two more stages.

Second Five-Year Plan and the State

The Government of Madras have decided that in preparing the Second Five-Year Plan a suitable machinery should be provided for ascertaining the needs and wishes of people and the extent to which they are willing to co-operate with money and voluntary labour. The plan for the State will be prepared for each district after consulting opinion in the villages and will provide for meeting, to the extent practicable, the elementary requirements of the people in all districts in the matter of primary education, drinking water-supply, rural sanitation, agricultural facilities, communications, medical assistance and village co-operatives. Large developmental works planned at the State level will be broken up into parts and the part relating to each district will be added on to the plan evolved at the district level to make up the total plan for the district.

Village Committees

The first step in the formulation of village plans is the setting up of a suitable organization of villagers called the Village Development Committee to function as the planning agency for the areas for which it is constituted and undertake the implementation of the plans, in co-operation with the villagers. The Committee will have to raise local contributions for implementing the village works programme and it should therefore command the confidence of the villagers that the money collected will be properly accounted for and spent to the best advantage.

In villages for which statutory Panchayats have been constituted the panchayats themselves should be utilized to the maximum extent possible for planning purposes and should form the nucleus of the planning agency.

The district will be divided into convenient planning areas and a Development Committee will be constituted for each 'Planning Area.'

The functions of the Committee will be to scrutinize the village plans with reference to their suitability, the availability of funds and the commitments involved by way of supplies of improved seeds, manure and so on and to prepare a consolidated plan for the area. The Committee will also embody in the Plan any special lines of development that may be possible in the area with reference to any raw materials or other facilities that may be available there.

On the recommendations of the Planning Commission, the Government propose, as a beginning to have detailed district plans prepared for the districts of Coimbatore, Ramanathapuram and Chingleput. The Government have sanctioned the appointment for a period of three months in the first instance of a special staff consisting of a Deputy Collector and a number of Deputy Tahsildars and Revenue Inspectors in the districts of Coimbatore, Ramanathapuram and Chingleput for work connected with the preparation of district plans.

Municipalities and major panchayats will take steps to prepare a comprehensive plan of their own which would in due course be fitted into the District and State Plans. For the purpose of preparing the Plan, each Municipal Council and Major Panchayat will be the Planning Committee for its area. The plan may roughly be divided into the following heads : (i) Water-supply, (ii) Drainage, (iii) Medical facilities, (iv) Education, (v) Roads, (vi) Town-planning and improvement of slums, (vii) Improvement of financial resources of the municipality or panchayat.

In the districts of Coimbatore, Ramanathapuram and Chingleput, the special staff sanctioned will start immediately with the organization of informal village development committee in consultation with the local staff of the Revenue and Agricultural departments. It is expected that the work relating to the formulation of Village plans would be completed in a period of three months. After getting the Village plans, the Collector has been instructed to finalize the work of the district plan within a period of one month.

In the other districts, the Collectors have been instructed to take on hand immediately the work relating to the constitution of Village Development Committees and the Committees for the planning areas in their districts through the ordinary Revenue staff and complete the work within a period of three months.

The district plans will be wide in scope to make a real impact on the life of all sections of village communities and will lay down specific targets to ensure sufficient production to sustain an ever-widening scale of welfare activities.

The Government have issued instructions that the staff engaged in the preparation of the Plan should bring the objectives, prominently to the notice of the villagers.

Electricity Output for March

During March 1955, 686 public utility power stations in India generated 696·1 million kWh (kilowatt hours) of electricity of which 568·3 million kWh were sold to ultimate consumers. The new addition during the month was one undertaking at Khargaon in Madhya Bharat. As compared to February, the electricity output increased by 69·9 million kWh.

The corresponding figures of output and sale for March 1954 are 585·7 million kWh and 483·5 million kWh and for March 1939 200·4 million kWh and 165·7 million kWh respectively.

Periyar Hydro-Electric Scheme

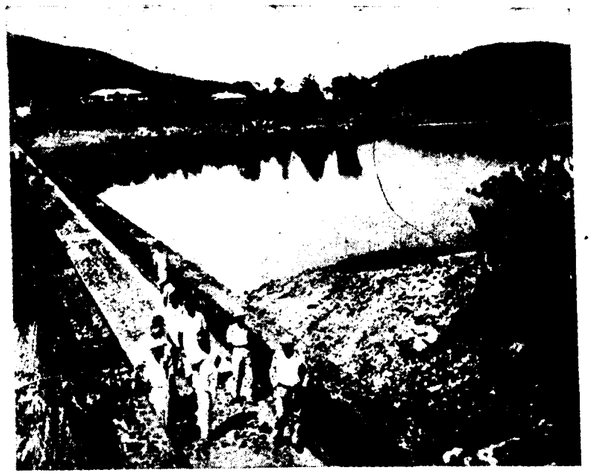
By SRI V. P. APPADURAI, B.A., M.I.E., Chief Engineer (Electricity)

The Periyar hydro-electric scheme is the fifth hydro-electric scheme to be taken up in the Madras State and when completed will be a major contribution to the Madras Grid adding about 140,000 KW of installed capacity. The work in the scheme was formally inaugurated on 11th February 1955 by the Chief Minister.

The Periyar river rises from Kallimalai, a peak on the ridge between Travancore State and Sankaranainar Koil taluk on the Madras side. In its upper reaches the river flows in a northerly direction for about 16 miles through thickly wooded forests and takes a turn to the west and flows for about 8 miles where a dam was constructed as early as 1893 by the Irrigation Department of the Madras Government. The course of the river below the dam is in a north-westerly direction till it joins the Arabian Sea near a place called Cranganur. The total length of the river is about 130 miles.

The Periyar lake is on the Travancore side of the border of Madras and Travancore-Cochin States and has a catchment area of nearly 240 square miles with an average annual rainfall of 100 inches. The height of the dam is 158 feet from the bed of the lake and the full reservoir level is 152 feet with a water spread of 10·21 square miles. The capacity of the lake at the full reservoir level is 15,662 million cubic feet.

The Madras Government, in pursuance of an agreement executed in 1886 acquired the lease rights of the water of the Periyar catchment for irrigation purposes in the Madurai and Ramanathapuram districts for a period of 999 years on payment of an agreed sum to the Travancore State. For this purpose the water of the lake is diverted into the Vaigai basin in the Madras State through a tunnel 96 square feet in cross section and 5,887 feet long capable of discharging maximum of 1,300 cusecs.



Periyar Lake.

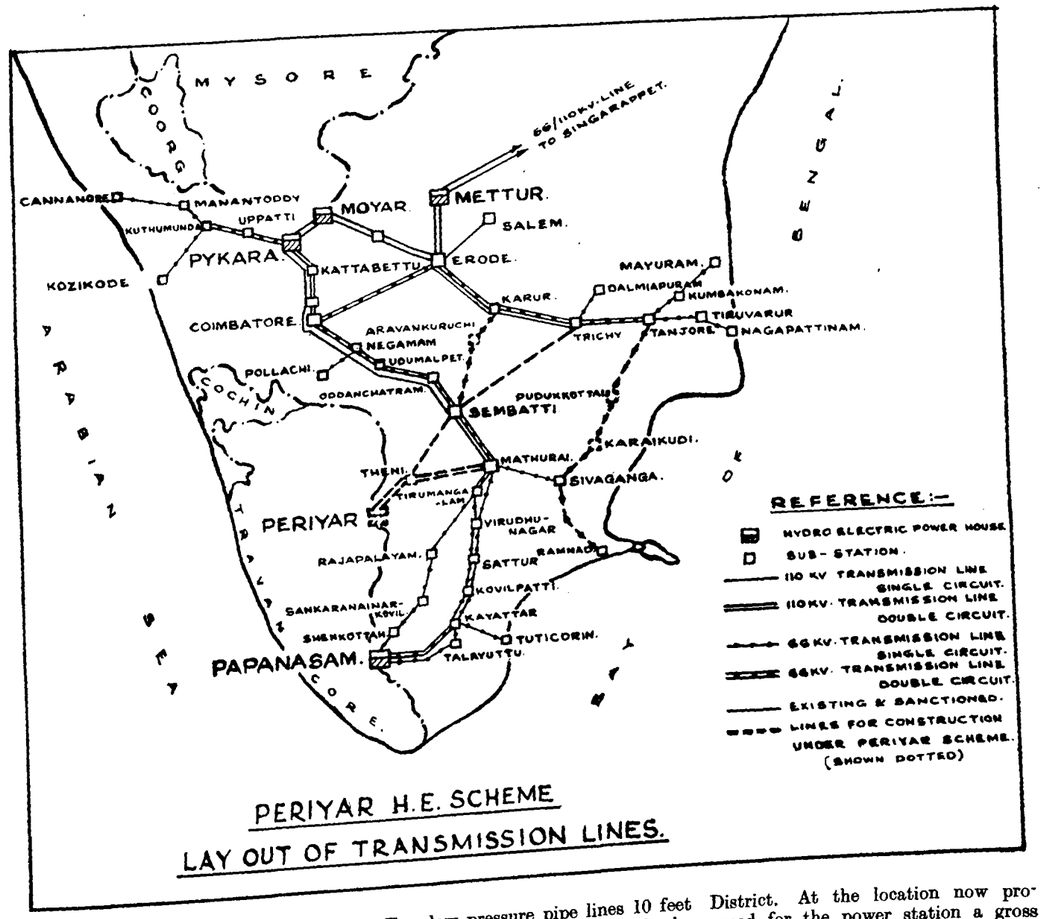
Brief description of the scheme—Civil-works and Power Stations

There is a drop of more than 1,000 feet between the exit of the tunnel and the Vaigai basin into which water is let in for irrigation purposes. The question of utilising this fall for the development of power was engaging the attention of the engineers from the very beginning of the Periyar Irrigation Project notwithstanding the fact that being dependent on South West monsoon, the full power could not be developed for a period of nearly three months in a year, i.e., from March to June.

With the proper regulation of the Periyar Waters, however, it will be rendered possible to develop power during the non-irrigation period also, the water after generating power being stored in a new reservoir that has been proposed to be built at the lower reaches across the Vaigai for irrigation purposes. A certain quantity of water could therefore, be discharged even during non-irrigation period also and stored in the Vaigai Reservoir to be used eventually for irrigation purposes.

The present scheme provides for utilising a continuous discharge of 1,000 cusecs during irrigation seasons, i.e., from June to March and 300 cusecs from March to May during the period of irrigation closure. The cost of Vaigai reservoir is being suitably apportioned between Public Works Department and Electricity Department as the Public Works Department have been considering its need separately for making use of the Vaigai river flows for increased irrigation in Madurai and Ramanathapuram districts.

The capacity of the existing irrigation tunnel is only 1,300 cusecs and this will be increased to 1,600 cusecs by increasing the area of cross-section of the tunnel from 96 square feet to 154 square feet and lining it with concrete. The cost of the improvement to the tunnel is also being shared by the



PERIYAR H.E. SCHEME

LAY OUT OF TRANSMISSION LINES.

Electricity and Public Works Departments.

Water from the above tunnel will discharge into a tunnel pond to be formed by a forebay dam which will be 93 feet high and have a capacity of 3 million cubic feet. Necessary surplussing arrangements and head works for irrigation outlet and pressure-tunnel for power-draft will be provided at the forebay dam.

Water from the forebay reservoir will take off through a power tunnel 4,188 feet long and 154 square feet in cross section. This tunnel will be capable of discharging a maximum of 1,600 cusecs. The power tunnel will terminate into a surge tank of differential type which will be 180 feet high and 40 feet in diameter, sunk entirely in rock excavation and concrete-lined.

Two low pressure pipe lines 10 feet in diameter and 194 feet long will take off from the surge tank and each low pressure pipe line will then branch off into two penstocks of 6 feet 6 inches diameter. Of these four high pressure pipes, one will be blank flanged for use at a later date and other three pipes will be connected to individual turbines at the Power Station. Each pipe will be 3,100 feet long and in three sections of diameter 78 inches, 72 inches and 66 inches respectively and is capable of discharging a maximum of 400 cusecs. The penstock will roughly follow the line of shoulder which runs from the surge shaft to the power house.

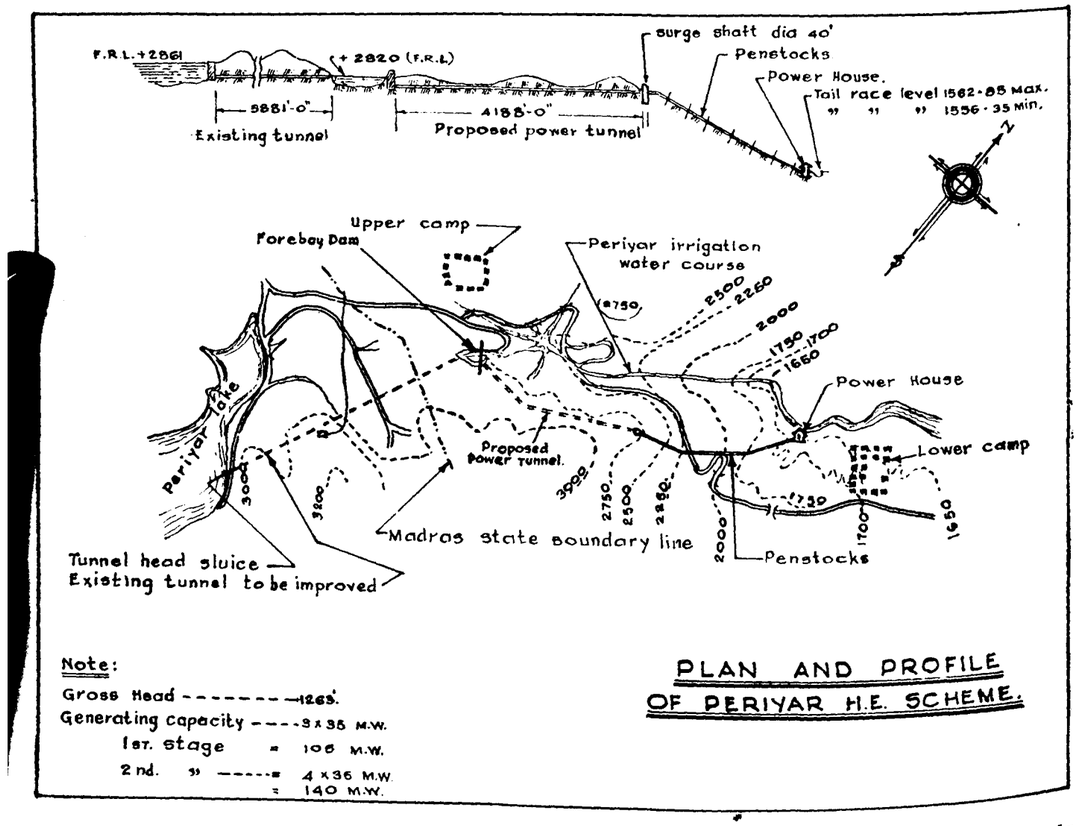
The Power House will be located in the ghat section of the main road from Cumbum to Thekkadi and will be about 35 miles from Theni in Madurai District. At the location now proposed for the power station a gross head of about 1,260 feet from the surge tank is available.

There will be initially 3 numbers 50,000 HP turbines each directly coupled to 35,000 KW 0·85 P.F. 3 phase 50 cycles 11 KV generator. A fourth set will be installed at a later date.

Three numbers step up transformers 11KV/110KV/42,000 KVA capacity will be installed now and the fourth one later. The transformer yard will be located by the side of the Power House. The main structures will be of the double deck type for carrying duplicate 110 KV busbars with necessary disconnecting switches.

Transmission lines and sub-stations

The power generated at Periyar Power House will be fed into the



existing power grid through 110 KV transmission lines as under :—

1. Periyar-Theni-Madurai 110 KV double circuit line—80 miles.
2. Theni-Sembatti-Tiruchirappalli single circuit 110 KV line—108 miles.
3. Sembatti-Karur single circuit 66 KV line—53 miles.

In addition the following lines will be constructed within a period of ten years from the time Periyar Power House commences operation :

1. Tanjore-Sivaganga 66 KV single circuit line (via) Karaikudi, Pudukottai, Gandarvakottai—80 miles.
2. Sivaganga-Ramanathapuram 66 KV single circuit line—50 miles.

Apart from the above trunk lines, the scheme provides for nearly 150 miles of 33 KV lines for taking power to suitable load centres. There will be about 80 miles of double circuit telephone line and about 350 miles of single circuit telephone lines to facilitate communication between the other stations. Power line carrier current communication will also be provided between generating station and important sub-stations.

The existing sub-stations at Madurai, Tiruchirappalli, Karur, Sembatti and Sivaganga will be provided with adequate additional equipments. A new 110 KV sub-station will be constructed at Theni and new 66 KV sub-stations at Oddanchattram, Aravakurichi, Pudukottai, Gandarvakottai, Karaikudi and Ramanathapuram. There will also be a few new 33/11 KV sub-stations for distribution purposes.

Estimated cost

The estimated cost of the scheme as submitted to the Planning Commission is Rs. 10·47 crores.

Progress of works

The scheme was inaugurated by the Chief Minister on 11th February 1955 and work was started immediately in right earnest. A small camp has been built for the labour as well as for the supervisory staff and power supply was effected to the project site. A number of quarters are under construction.

Roads to Surge shaft, penstock head and power house are in vairous stages of construction. Work on improvement to the irrigation tunnel was carried out in the irrigation closure period from 10th March to 10th June 1955 and a beginning has been made in the drilling of the power tunnel. Excavation for the forebay dam is in progress. Penstock garding and levelling of power house site and transformer yard are in good progress.

Orders have been placed for the outdoor transformers, transmission lines and sub-station equipments. Tenders have been invited for supply of the generating plant and orders are likely to be placed in a month's time.

It is expected that the power house can be put into commissioning by the middle of 1958–59.

The Background of Agricultural Extension in Madras

By SRI M. S. SIVARAMAN, I.C.S., Director of Agriculture

The goal of agricultural extension is the maximum economic exploitation of our agricultural resources in land and labour ; but actually we find that these are not put to their maximum use. As a result the level of production is low and agricultural labour is out of employ during the off-season. Another disquieting feature is the gradual decline in the yield of crops, while the cropped area has been more or less stationary and the population is amounting up. For instance in the Madras State while the population has gone up from 27·36 millions in 1931 to 35·75 millions in 1951 the ten-year average of cereal production has gone down from 5·94 million tons in 1931 to 4·99 millions in 1951 and the cropped area has been throughout about 18 million acres.

Arrest the Decline.

The immediate problem of the gramasevak and extension worker is therefore to arrest the decline and improve the yield of crops. Crop production in India depends upon the level of application of Nitrogenous manure to the field as the nitrogen in the soil gets depleted under tropical conditions. The total requirements of the major crops in the State at the existing level of production is 2·78 lakhs of tons of nitrogen of which the available nitrogen in the shape of farm yard manure, oil cakes, green manure, green leaf compost, ammonium sulphate, etc., is 0·93 lakhs of tons, i.e., about a third of our requirements. The balance is met by plant residues in the field and various recuperative processes that take place in the soil and outside.

More Manure

If production is to go up for the present, the supply of nitrogenous manures has to be increased. The only practical way in which this can be done is to produce extra green leaf and green manure so that the required quantity can be applied as such to the wet field and to the dry fields as composted manure. If this can be done without affecting the normal agricultural operations then we should have won the first round in the battle of production. In very recent years systematic steps have been taken to improve the production of organic manures in the Agricultural Research Stations in the State and it can now be said that all the Research Stations are in a position to produce their requirements of organic manure for wet and dry fields as green manure or compost as the case may be without in any way affecting the normal cultivation of crops. This has been achieved by systematic planting of manure yielding shrubs.

The foremost duty of the Gramasevak and Extension worker is therefore to bring home to the cultivators that what has been done in the Agricultural Research Stations can be repeated in the cultivators' field and make them adopt similar measures without further delay. In the case of wet fields where paddy is grown, the solution to the problem of green manure is simple. By growing Sesbania Speciosa as a border crop 2 to 3 inches apart in July it is possible to produce up to 6,000 lb. of green manure sufficient for the next crop of paddy in October. By leaving some of the plants for production of seeds it is possible to produce 60 lb. of seeds before December. By sowing 60 lb. of Sesbania seeds in the paddy field before the harvest of paddy in January it is possible to produce over 60,000 lb. of green manure in five months. A pure crop of Sesbania gives about 10,000 lb. in two months, 20,000 lb. in three months and up to 60,000 lb. in five months.

The advantage of growing Sesbania is it can be grown in the wet field along with paddy. It has not affected paddy production in any of the Agricultural Research Stations. Each plant can produce 4 oz. or over 9,000 seeds and therefore every cultivator can with a handful of seeds produce his future requirements of manure and seeds.

Sri K. Kamaraj, Chief Minister, planting a sapling at Tenkasi in connection with the Vanamahotsava.

Sesbania

Sesbania is particularly useful in places where the field bunds are narrow: in areas where the bunds are big the growing of perennial shrubs like Glyricidia Maculata, Indigofera Teysmanii, Ipomea Cornea, etc., should be encouraged on field and channel bunds so that the cultivator can get his green manure on the spot. A visit to any of the Agricultural Research Stations will show that in recent years all available space has been utilised for growing shrubs for producing manure. While Glyricidia and Teysmanii have been suggested because of the rapid scope for development, every effort should be made to encourage local practices like growing Vadanarayana, Povarasu, Mala poovarasu, etc., and it should be our endeavour to see that every acre has at least 200 perennial manure yielding shrubs so that at least 4,000 lb. of green manure per acre will be available to the cultivator on the spot as and when he needs it.

The progress of planting perennial shrubs will be rapid in fields which are protected against cattle. The same progress can however be achieved in all areas by planting stumps 6 to 8 feet long just at the commencement of the cropping season. If these stumps are not readily available they can be produced by planting small stumps in protected nursery beds and allowing them to grow for a year to the extent required. Where there is mutual co-operation among the cultivators it may be even possible to enclose large blocks from 10 to 50 acres belonging to a few cultivators by growing a permanent fence of Prosopis with the necessary openings for movement of bullock carts. While the solution to the problem is known, the actual method of implementing it has to be left to the initiative, enterprise and imagination of the Gramasevak and Extension Worker and their ability to plan ahead to produce the planting materials and convince the cultivator that with a little systematic effort he will be able to produce the required manure and reduce the cost of cultivation and at the same time improve the yield.

Experience in Tanjore has shown that the increase in yield of paddy by green manure alone ranges from 15 to 100 per cent in one year depending on the level of attention to cultivation. Green manure has been observed to have cumulative effect until the yield reaches about 3,000 lb., i.e., there is a steady increase from year to year as a result of green manuring till an average of about 3,000 lb. is reached and further increase in yield isposs ible thereafter by the systematic adoption of proper agronomic practices when every individual factor that affects production like preparatory cultivation, manuring, selection of seeds, spacing, irrigation, plant protection, etc., will have to be attended to at the proper time and in the proper manner.

Improved Strains

The next step is to use improved strains of crops which have greater genetic potentialities or qualities of resistance to pests and diseases. Though improved strains have been evolved in respect of most crops, the benefits from these have not reached all cultivators. But with systematic work it should not be difficult for any Gramasevak or Extension Worker to extend the improved seeds to every acre and every crop in his jurisdiction in the course of even two seasons, the first season being used to produce the nucleus of seeds for development and the second season to produce the entire requirements of the village. As even now, the nucleus material is available in most districts it may be possible to produce the requirements of all areas even in one season. For instance if a village has 1,000 acres of paddy, the seed requirements will be 40,000 lb.

Assuming that a Gramasevak or an Extension Worker starts only with 40 lb. of seeds, which will be sufficient for one acre, at the end of the first season it is not difficult to develop this to 2,000 lb. Assuming that 1,000 lb. of this is distributed to responsible cultivators, at the end of the second season we can produce 50,000 lb. of seeds, more than the requirements of the entire village. The skill of the Gramasevak and Extension Worker lies in planning ahead, entrusting the work of development to responsible ryots and arranging with the seed farm growers to have the seeds exchanged with the seeds raised by the other cultivators. It should be a reflection on the work of the Gramasevak and Extension Worker if every acre is not covered with improved seeds in the course of two seasons and inasmuch as the nucleus material is available, this work can be done in one season.

By producing improved seeds in every village, the cultivators who have not hitherto used such seeds will be in a position to appreciate the performance of the improved strains in their local environment. By limiting the seed supply, the Agricultural Department is able to pay greater attention to the purity of the seeds. Large scale procurement and transport of seed is avoided and the cultivators depend on the ryots in their own village for seed supply. Village seed farms help to foster self-help and extend supply of improved seeds cheaply and quickly all over the State and every village should run its own seed farms for all crops.

Produce Fuel

The problem of fuel is acute in most villages in the State. Because of short supply of firewood, cattle dung is used as fuel in many places. To produce enough fuel should be one of the chief activities of the Gramasevak and Extension Worker. In Prosopis Juliflora we have a valuable rapid growing tree which can supply the entire requirements of fuel and wood for making implements necessary for the average cultivator. One great advantage of Prosopis is, it is not eaten by goats or cattle, it is highly drought resistant and it does not shed thorns like the Babul or Odai. Though some varieties of Juliflora have a spreading habit in the beginning, in two years Prosopsis grows into a fine tree which will not interfere with the passage of men and cattle. It should be possible to raise Prosopis as a plantation over any waste land with the help of the collective labour of villagers.

All that is required will be a programme as follows:—

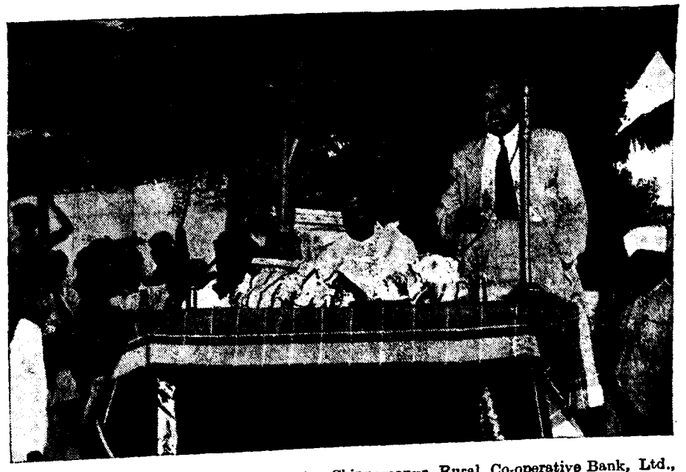
Some of the leading cultivators should be induced to spare a few ploughs and animals for about two hours after their main agricultural operations are over. With these it should be possible to form furrows every 10 feet apart on waste lands and sow prosopis seeds every foot apart in the furrow. If this operation is done from July to August, it should be possible to establish Prosopis in very large areas and this should not take more than half an hour per acre. If the seeds have not germinated after the rains, resowing may be done. Once the plant grows to a height of 4 inches with the help of the rains, there is no need to pay any attention to these plants. Prosopis can be grown as a hedge plant or inside the existing hedges to provide the thorns for repairing hedges. As a cover over barren and slopy lands Prosopis will help to conserve soil moisture and help to augment the sub-soil water. The spread of Prosopis has a decisive part to play in the development of our agriculture.

Tap Sub-soil Water

With improved supply of underground water we should be in a position to tap sub-soil water for greater exploitation of land surface. Even with our existing state of underground supplies it should be possible to exploit it to its maximum in areas where success has been proved already as in most delta areas. In places where we meet with sandy aquefer, it should be possible to install filter point tube wells. By installing a filter point or tube well it is possible to grow about ten acres of P. 216F cotton in Tanjore delta after raising two crops of paddy and thus keep agricultural labour fully employed throughout the year. Similar possibilities of raising cotton, groundnut or millets or other crops with the help of the filter points exist in many places outside Malabar, South Kanara and Nilgiris Districts. If the Gramasevak or Extension Worker is enterprising and active, he should be able to bring about an all-the-year-round cultivation of some crop or other instead of seasonal Agriculture. The Agricultural Department has devised a plunger pump which helps to pump water with the help of two bullocks. It should be possible to manage two or three acres with a plunger pump and a pair of bullocks. The method of installation of the filter point or tube well is very simple and the potentialities are great.

Duties of Extension Worker

Every Gramasevak or Extension Worker should make it a point to take all possible measures to solve in less than two seasons the fundamental drawbacks of our agriculture, viz., deficiency of organic manures and inadequate spread of improved seeds. Every area has to be tackled whether it is wet or dry. If it is a wet area he should programme for border planting of Sesbania which will require 4 oz. of seeds per acre and growing of pure crop of Sesbania on about a third of wet area to produce manure for the entire area. For this purpose he should be in a position to get 60 lb. of seeds per acre sufficient for one-third of the wet area. Shrub planting should be done at the rate of 200 plants per acre and if the area is subject to cattle trespass Glyricidia, Teysmanii, Vadanarayana, Poovarasu and Mala Poovarasu, etc., can be raised in an enclosed nursery so that bigger stumps are available for planting. Ipomea Cornea is generally not eaten by cattle and it can be developed by cuttings on a mass scale. Every endeavour should be made to produce enough green leaves so that the required manure for dry fields can be produced and composted. Simultaneously Prosopis planting should be taken up to enclose big blocks leaving gaps necessary for movement of traffic in the off-season. Every filed should produce its own requirements of green manure and improved seeds and it can be done in one season itself if the Gramasevak or Extension Worker is energetic and in any case before two seasons are over.



Sri P. T. Rajan, M.L.A., inaugurated the Chinnamanur Rural Co-operative Bank, Ltd., in Madurai District on 23rd June 1955. Sri A. Palaniappa Mudaliar, Registrar of Co-operative Societies, presided.

Rural Price Index

The index numbers of rural prices for the month of March 1955 (with the year ending 30th June 1936, as base or 100) for the several centres were as follows:—

Serial number and Rural Centers.	*District.*	*Index number (Base: July 1935 to June 1936 : 100).*
1 Puliyur	South Arcot	353
2 Agaram	Do.	342
3 Thulayanatham	Thiruchirapalli	444
4 Eriodu	Madurai	364
5 Gokilapuram	Do.	381
6 Kinathukadavu	Coimbatore	389
7 Koduvalli	Malabar	472
8 Guduvanchsri	Chingleput	378
9 Kunnathur	Do.	391

The Vaigai Reservoir Project

The work on the masonry dam of the Vaigai Reservoir in Periakulam taluk of Madurai district was inaugurated by Sri K. Kamaraj, Chief Minister, in the last week of June 1955. The bridge below the Vaigai dam was also opened on the same day by Sri Shanmugha Rajeswara Sethupathi, Minister for Works.

Sri K. M. Frederick, Chief Engineer (General), welcoming the Chief Minister and the Minister for Works, gave some of the salient features of the scheme.

Chief Engineer on the Scheme

The Vaigai river including the Periyar delta irrigates at present a total extent of about 2·94 lakhs of acres in the Madurai and Ramanathapuram districts of which 1·80 acres has been made possible by the diversion of Periyar waters from the Periyar lake which was formed about 60 years ago, into the Vaigai river. The utilisation of the available water for irrigation has now reached the limit possible but with all this we have not yet touched the fringe of the problem of development of irrigation necessary for making the area self-sufficient. The chronic shortage of food in the area has been accentuated in the past half a dozen years by the successive failure of the monsoon. So to give relief to the area we have to look to tapping of other resources. It is with this view that the Vaigai Reservoir now under construction has been taken up, combined with Hydro-Electric Scheme of the Periyar Lake higher up. The purpose of this reservoir is to store the surplus waters of the Periyar and the normal tail race discharges of the turbines during non-irrigation periods and release them for developing new irrigation to an extent of about 20,000 acres apart from stabilising the supply to existing irrigation.

The works connected with the Vaigai reservoir were started in April 1954 and those with the Hydro-Electric Scheme, recently.

One of the main items of the component works for the Vaigai Reservoir Project is the bridge work which has been completed now.

Salient Features

1	*Catchment area of the river at the dam site.*	870 *sq. miles.*
2	*Waterspread area of the reservoir at the F.R.L.*	9 *sq. miles.*
3	*Capacity of the reservoir at the F.R.L. of* +916·00.	6,878 *m.c. ft.*
4	*F.R.L. of the reservoir.*	+916·00.
5	*T.B.L. of the reservoir.*	+926·00.
6	*Number and size of river sluices.*	7 *Nos. of* 5 *feet by* 9 *feet each.*
7	*Sill level of the river sluices.*	+840·00.
8	*Crest level of spillway masonry.*	+901·00.
9	*Number and size of crest gates.*	7 *Nos. of* 40 *feet by* 15·42 *feet each.*
10	(*a*) *Total length of masonry dam.*	1,035 *feet.*
	(*b*) *Length of spillway.*	334 *feet.*
11	*Total length of earth dam.*	10,640 *feet.*
12	*Total length of dam.*	11,675 *feet.*

The bridge forms a permanent link between the two villages in Periyakulam area in the left side and Andipatti area on the right side of the river. Though the bridge is necessary immediately for the transport of men, machinery and materials from one flank to the other, required in connection with the construction works of the reservoir, its use is lasting and permanent, as it secures a permanent link between the villages on either side of the river, so long kept apart. Rivers have been barriers in the development of inter-regional communications and this bridge serves to remove the barrier at least in this part of the Madurai district.

Further important works in connection with the Project relate to the construction of the dam proper. The foundations are exposed and it is hoped that the structure will rise quickly and safely to satisfy the cherished ambitions of the people of the locality.

Schemes for the future

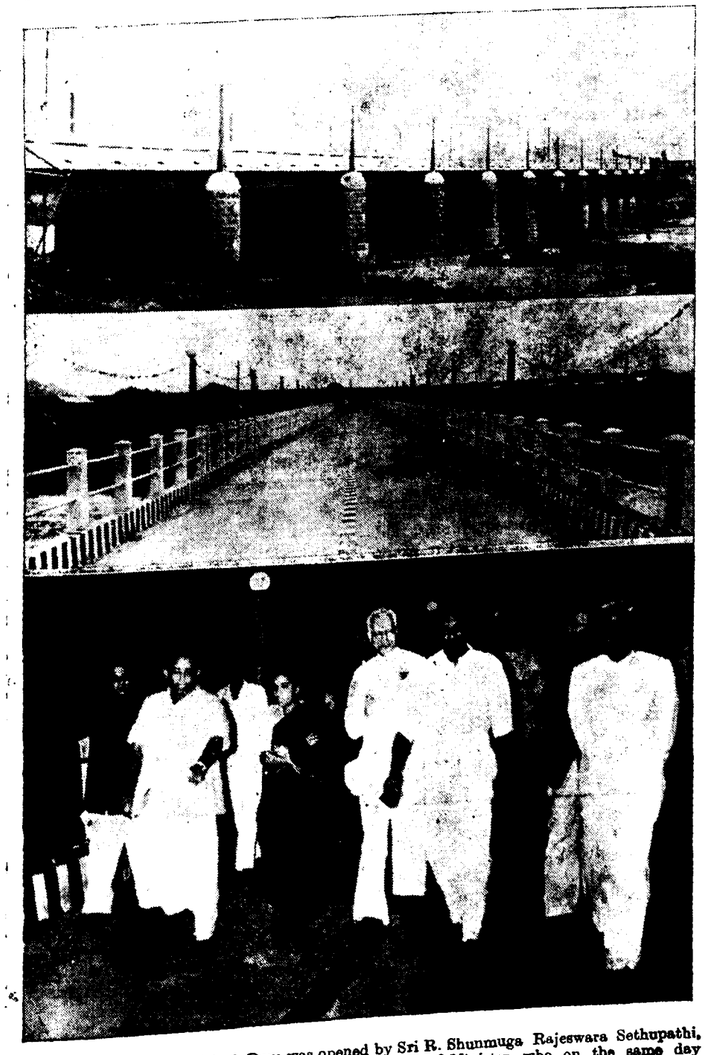
With this Project, we would be almost exhausting schemes on rivers flowing east into the Bay of Bengal and what are left to be explored and gone into in future are schemes to supplement the supply to these rivers, from rivers flowing into the Arabian Sea towards west, like Aladi, Pambiar, etc. Though these schemes require the consent of the Travancore-Cochin State, these are being examined with a view to be included in the Second Five-Year Plan. It is hoped that our sister State will co-operate with us to the best advantage and prosperity of both the States in making use of the waters which would otherwise go waste.

The details of the Scheme

At the close of the last century, a dam was built across the Periyar river which is flowing towards the Arabian Sea and the waters of that river diverted through a tunnel in the dividing range of hills into the Suruliyar which is a major tributary of Vaigai. The waters so diverted are picked up at Perani, where a regulator has been constructed across the Vaigai and used for irrigating 1,80,000 acres of first and second crops in the Periyar delta.

Storing the Surplus Waste

From the working of this Periyar Project for over five decades, it had been found that a large surplus of Periyar runs to waste into the Arabian Sea. The surplus varied from 237 m.c. ft. to 37253 m.c. ft. Several possibilities have been considered to use this surplus. It was considered very desirable to utilise the drop of water from the Periyar lake for generation of power. Surpluses occur only during the south-west monsoon period and the most feasible arrangement to impound them is to have a subsidiary reservoir on the Vaigai river. By draining the supplies in the Periyar lake through the tunnel throughout the year, mostly to work the Periyar Hydel Scheme the surplusing of the lake on the western side will be avoided to the maximum extent. The present reservoir will not only store such surpluses that go to waste but also the tail race water from the Periyar Hydel during the summer months when there is no irrigation. It will also store such portion of the Vaigai floods as will be wasted into the sea.



The bridge below the Vaigai Dam was opened by Sri R. Shunmuga Rajeswara Sethupathi, Minister for Works, on 25th June 1955. The Chief Minister who on the same day inaugurated the work on the masonry dam, along with the members of the party are seen walking over the bridge. (*Top*) Two views of the bridge.

The waters stored in the reservoir will be utilised for new irrigation of 20,000 acres consisting of (*a*) 3,000 acres of 'hard cases' interspersed in the ayacut of the existing Periyar delta, (*b*) 7,000 acres in Sivaganga taluk and (*c*) 10,000 acres in Thirumangalam taluk. The existing channels in the Periyar System lengthened and improved to the extent required will irrigate the hard cases and the new area in Sivaganga taluk. A new canal, 22 miles long, will be excavated on the right side of the Vaigai river above the Peranai Regulator to carry the water needed for the proposed ayacut in Thirumangalam taluk.

No part of the natural flows in the Vaigai river will be impounded in the reservoir. They will merely be passed down the river sluices whose capacity will be large enough to pass all the Vaigai flows which will normally suffice to meet the demands of the several channels taking off from the Vaigai. If, however, any floods exceeding such capacity occur and consequently have to be held back in the reservoir, they will be passed down immediately after the peak floods.

There are at times floods in the Vaigai resulting from rainfall in its own catchment and a good portion of these floods at present get wasted. It is proposed to impound in the new reservoir, such portion of those floods as would get wasted, and issue them to stabilise existing irrigation under the Vaigai. No part of the Vaigai floods impounded in the reservoir will be issued for extension of irrigation elsewhere.

The dam

The dam will be 11,675 feet (or 2 miles and 1½ furlongs) long and consists of two parts (1) a masonry overflow dam at the river crossing with non-overflow sections on both sides and (ii) earthdams in continuation of the non-overflow masonry sections at the two ends. The length of masonry dam will be 1,035 feet of which 334 feet will be the spillway dam and non-overflow sections of 466 feet on the left side and 235 feet on the right side. The length of earthdam at

the left flank will be 1,780 feet and that at the right flank 8,860 feet.

The masonry dam will have a maximum height of 106 feet above the bed level of the river. The ogee spillway of 334 feet at the river crossing will have its crest at +901·00 with seven crest gates of size 40 feet by 15·42 feet each installed over it. There will be seven river sluices of 5 feet by 9 feet each with sill at +840·00 to allow the irrigation requirements for the existing Periyar and Vaigai ayacuts. Four of the river sluices will probably be converted into penstock pipes so that seasonal power can be generated.

Submersion

The waterspread area of the reservoir at F.R.L. will be 9 square miles of which only 90 acres are wet lands. Although the submersion area is large, the area is very sparcely populated and only 12 hamlets get affected. Compared with the benefits of the project, the population displaced by submersion is small. The number affected is also small as compared with other projects. However, for the entire affected population, measures to properly rehabilitate them as in the case of other projects are being undertaken by the Revenue Department.

OUR CENTRAL INSET

Seven years have rolled by since we attained freedom. What is our record in these years? We might not have worked wonders; but we have done something. Here you see a pictorial record. It is by no means comprehensive. You find projects almost completed, midway and just inaugurated. They relate to power, irrigation and industries. You also find groups of people working. They symbolise a new and significant movement in the resurgent rural India. The lethargy and fatalism of the olden days are vanishing—slowly but surely. They are taking the initiative in their own hands for a new order, a new life. You also find a researcher in a paddy field. He too represents something new—the wedding of science to the old, old occupation of our people, agriculture. Well, let the talk of past records cease; let the determination or pledge be for showing a better record when the day dawns next year!

The Vaigai Bridge

The Vaigai river which carries the Periyar waters and its own catchment discharge rises in the Western Ghats on its eastern slope at an altitude of about 5,000 feet above M.S.L. and after running through the thick forests of the Gandamanaickanur Zamindari the river enters the plain country near Gandamanaickanur village. After traversing for a distance of about 40 miles the river is joined by the tributary called Suruliyar. The Suruliyar brings the Periyar water drawn through the tunnel from the lake. The present dam is situated about 8 miles down-stream of the confluence of the two rivers. The combined catchment area at this site is 870 square miles and the maximum flood discharge is computed to be 62,860 cusecs.

As at least 4 feet depth of water flows in the river during 9 months of the year, a bridge at the site to facilitate transport of men, machinery and materials from one flank to the other was found a necessity. This bridge is located about 3 furlongs below the dam alignment. It has 12 vents of 30 feet each. The water way is capable of discharging a maximum flood of 62,860 cusecs. The decking is R.C. 7 inches thick with 3 inches wearing coat supported on rolled steel beams of 24 inches by 7½ inches by 100 lb. The clear roadway is 18 feet. The bridge has costed Rs. 1,60,000.

The bridge not only serves the needs of the project works but also caters to a great and long felt need of the people on both the sides of river for easy communication. This bridge would also facilitate opening of bus traffic from Periyakulam to Andipatti direct instead of the present circuitous route through Theni.

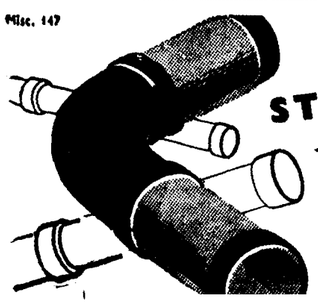
Smiling Faces

A news report on the event says: "Villagers with smiling faces from the nearby hamlets had thronged to witness the fulfilment of their long-cherished desire to get the water of the Periyar diverted into their area for irrigation." No wonder! And slowly, but surely there will be smiles on the faces of all villagers in our country as the great schemes get executed one by one bringing prosperity and happiness in their wake.

INSPECTING PROJECTS, SEEING PEOPLE

Sri K. Kamaraj, Chief Minister recently toured the district of Tirunelveli. Here in these pictures you see him inspecting the Manimuthar Project, laying foundation stones and inaugurating a Rural Water Supply Scheme. He is also seen in the midst of people, the ultimate source of all strength.

Misc. 147



STONEWARE PIPES SALT-GLAZED

FOR UNDERGROUND DRAINAGE

(A Dalmia Product)

DALMIA CEMENT (BHARAT) LIMITED

DALMIAPURAM — DIST. TIRUCHIRAPALLI.

Inaugurating Schemes, Meeting Children

In this page, you see the children of Tirunelveli District having a pleasant chat with the Chief Minister. One wonders whether they have any grievances; even if they have, it is being conveyed in the pleasantest of moods.

Vanamahotsava

By Sri N. MURUGESA MUDALIAR, Deputy Secretary to Government, Agriculture Department

Thoughtlessness Realised

The first week of July calls us to a task of national importance. Six years ago, we realized that the thoughtless and rapid deforestation that was going on for some time was bringing us to the verge of a catastrophe. Climatic changes became erratic, rainfall became scarce, water supply in the rivers dwindled and the fertility and the texture of the soil were seriously damaged. The treeless plains, the bleak hillsides and the denuded forests were proof of the folly committed in the years past. It reminded us of the ruin that overtook other countries in the past by the stripping of good earth of its raiment of trees, shrubs and plants. The civilization of the Indus did not survive the destruction of its soil; the once fertile regions of Israel were reduced to sterility; of the great forests of Central Sahara only a few Cyprus trees remain as relics. It was the price paid for imprudence and the inroads of civilization which had in itself the seeds of destruction.

It is an old story which needs no repetition. When the movement for growing more trees was started in our country six years ago, cynics scoffed and sceptics smiled; but the movement caught on. Today, it is no longer necessary to go into the raison detre of the movement. Although it is called Vanamahotsava, festival of trees, it should not be regarded as just another festival in our long calendar of festivals. Its implications are grim and its ultimate purpose, a matter of life and death. It is not a mere formal ritual of planting trees here and there during one festive week but is a never ending task of transforming the land with green verdure indeed, of transforming men's minds to better environment, better crops and better living.

The Poetry of the Tree

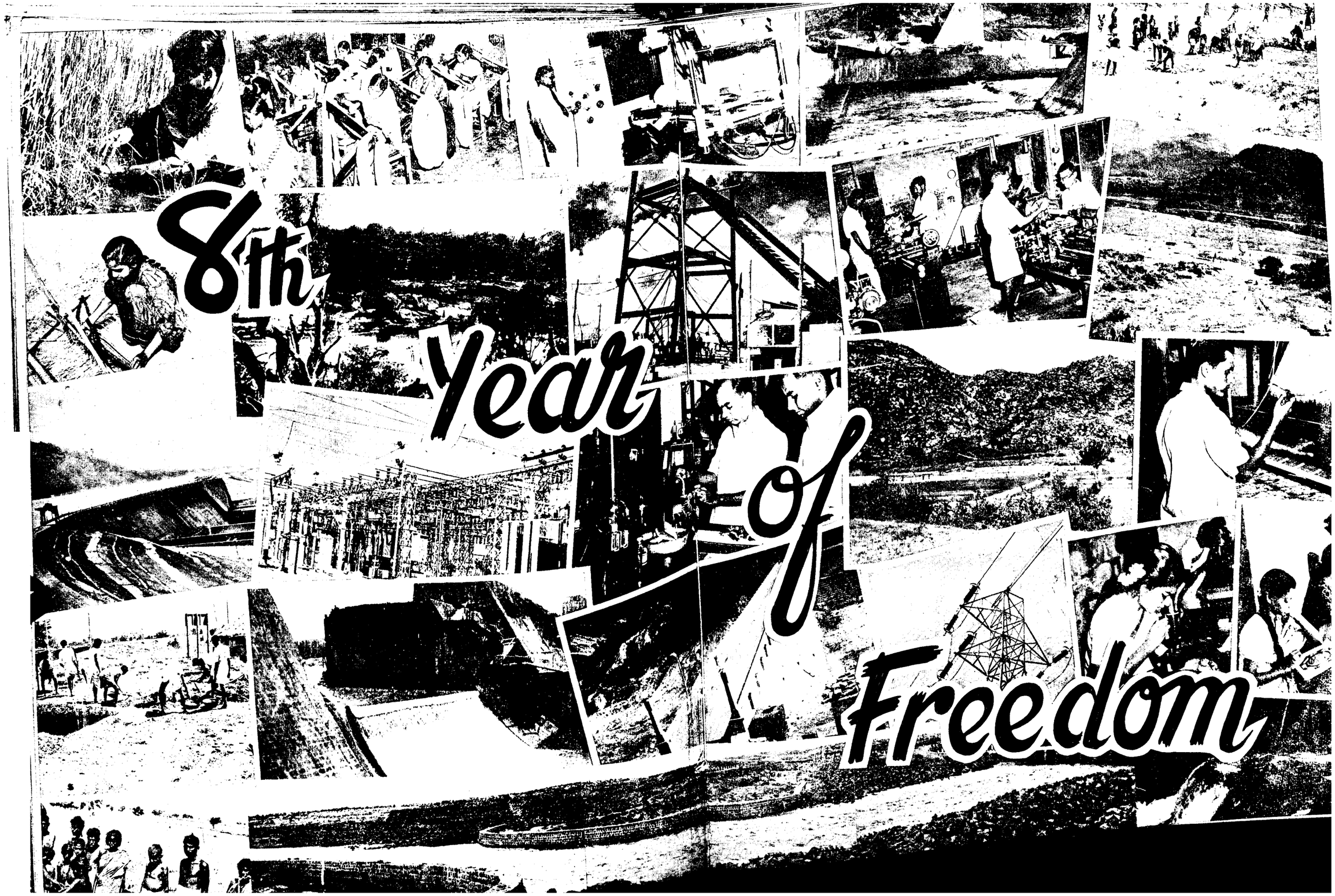
The tree planting campaign is not to supplant a sensible Government policy of forest preservation but to supplement it by popular effort. The appeal of the Vanamahotsava is therefore to the common man, the villager, the city dweller, the private forest owner and to all those who have some waste land which could be made richer and more beautiful by planting trees; not only more beautiful but more fruitful also, because trees could be planted not only for shade and ornament but also for food, fruits, fodder and manure. The bare piece of land which produces nothing of any value is a piece of ugliness and an affront to nature. If lovely spots of woodland are allowed to be wasted or damaged by vandalism or fiery mouthed goats, their beauty is robbed and destroyed. Farm lands without such hardy trees like babul or neem or pungam standing as sentries are a picture of vacancy. Highways without shady avenue trees will be like desert marches. Cottages and dwellings without a gold Mohar or rain tree or neem casting a cool shade and harbouring birds which chirp at the breezy call of the incense breathing moon are unaesthetic and without delight. Lake bunds and canals without tree linings make for the limpid waters more rapidly to evaporate.

Shri Sri Prakasa, Governor of Madras, watering a mango tree which he planted in connection with Vanamahotsava at Raj Bhavan, Guindy.

Housing colonies and townships without green belts are dull and colourless. Schools and colleges without tree growth around their precincts are a dreadful monotony, not very conducive to a happy evolution of young minds. Ruthless cutting of trees on private forests or topes or on private lands in hill towns for money or for raising less necessary crops is folly of the first magnitude to invite the demon of soil erosion. A careless Government policy which will not foster tree cover on catchment areas, for the purpose of augmenting irrigation for a growing economy and a growing population will spell ruin. It is needless to hold forth on the protective influence of trees and their productive uses. All life is at the mercy of soil, water and tree cover.

Continuous Efforts Needed

It is a common place criticism that the trees planted during Vanamahotsava under a momentary wave of enthusiasm or official influence do not survive long and are neglected and allowed to perish. This is not absolutely correct but it will be so long as men's minds are not transformed and they simply respond to the call in a half-hearted way. This very feature is an argument, not against, but in favour of a continuous effort. Hence the need for an increasing movement for awakening public consciousness. It is however foolish to expect that all trees planted would survive just as all children born do not grow to old age. Some wastage and loss


8th
Year
of
Freedom

in all creative process is inevitable and inescapable. But apart from the loss the cumulative results of a continuous effort to plant trees will be substantial as it is demonstrably so to day after five years.

If a villager plants a few trees on his land, a school boy plants a gold mohar in the school compound, the road engineer plants avenue trees, each of them takes a pledge to see that the trees they plant survive. In the absence of such a consciousness, their acts will be without feeling and without purpose. If even the person who planted neglects this obligation, the vandal who cuts cannot be expected to have better qualms although the ancient law says that people who cut green trees will be issuless. The Government can only remind all concerned of the duty to protect and preserve trees and focus attention during this week. The rest should be left to the individual's and community's own good sense.

The Record of the State

The citizens of this State have not been lacking in his good sense and year after year they have been fulfiling and indeed more than fulfilling the targets set for planting and survivals hoped for. The percentages of of survivals have been more than 50 per cent which should be gratifying. This State has also been a winner of the All-India prizes so far awarded. Villages, districts and institutions have also been winners in the respective competitions. The target for this year is fixed at 57½ lakhs. Although the plantings may commence from now, they can go on till the end of October when the count will be taken. Realising the disparity in natural advantages for tree planting, regional prizes have been instituted by the Government so that districts more or less similarly situated from the point of view of natural advantages can compete on the same level. Realising also that in the countryside the effort has to be put forth mainly by villagers, village officers and village panchayats, it is proposed this year to institute separate rewards to stimulate their endeavours. A rolling cup will be awarded to the best village, in each Revenue Division and certificates of merit to village officers for the best village in each firka subject to the minimum survivals that would be fixed. A rolling cup will also be awarded to the best class I Panchayats and a similar award to the best class II Panchayat in each district. Remission of land revenue assessment leviable on assessed and unassessed waste lands and Government porambokes adjoining ryots' patta lands where ryots have grown fodder and green manure plants and shrubs will be continued for the fasli years 1364 and 1365.

To prevent vandalism and havoc by cattle, sheep and goats, officers conducting prosecutions against such offences will press for deterrent punishment subject to the provisions of the law. The ways and means of preventing illicit cuttings of avenue trees is under the active consideration of a committee recently set up by Government. So far as the planting and maintenance of avenue trees on National Highways are concerned over Rupees 4 lakhs is provided for in the Civil works budget.

Seedlings for Sale

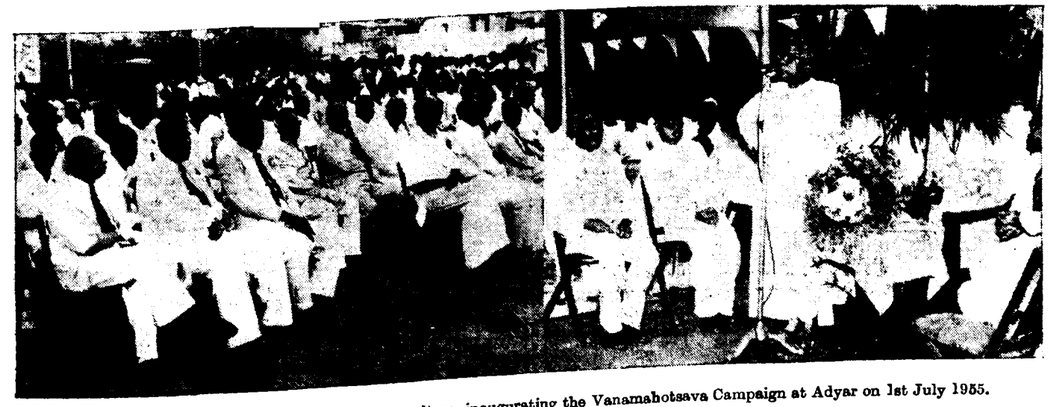
The Government are helpless to make arrangements for after care of trees planted but they make arrangements for supply of seeds and seedlings to the public at nominal cost. The Agriculture and Forest Departments have raised a large number of seedlings for sale to the public. The Agriculture department will give technical advice as to what trees should be planted and how to grow them. It would be excellent if the requirements of a whole village are pooled and the necessary planting material obtained from the nearest Agriculture or Forest Officer. The Agri-Horticulture Society in Madras City has also been given a small financial assistance for starting a nursery and supply seedlings to Madras citizens. Leaflets have been published giving hints about the growing of selected trees which will be useful in a variety of ways. People who require information should not hesitate to seek it. To be able to grow a tree is in itself a great education and delight and something to be proud of. We in this State have a variety of trees to grow according to our needs and circumstances—Caruvelam, Vepam, Vagai, Mayilkonnai—for fuel; Mango Jack, Katupala, Vengai, Vagai—for timber; Arasu, Karunkondrai, Vedanarayan, Poovarasam, Pumgam—for avenue; Thungumunji, Kalyanamurungai for fodder are some of the trees that can be grown. "Plant trees for prosperity" is not a mere slogen. Vanamahotsava has to be taken up in great love, faith and seriousness.

The first week of July is also an important week in another respect. Side by side with the greening movement, a cleaning movement which will turn waste into wealth has to be undertaken. A large increase of trees, village forests and woodlands will give ample materials for fuel and small wood for the nearby villages and towns. This would release cattle dung, which is now burnt to waste, for fertilising of soil and raising better crops. The collection of waste and the manufacture of compost, not only improves the sanitation of villages and towns but also gives many crores of Rupees worth of manure which would otherwise go to waste.

The manurial value of town compost manufactured out of night soil and town waste and of rural compost made out of village garbage, farmyard refuse, cattle dung and urine are too well-known. Town compost is now manufactured in most of the Municipalities and many of the Panchayats of this State. Rural compositing must be the first item of work in rural sanitation and rural reconstruction which our village level workers should take up. Villages in the National Extension Service and Community Project areas should set an example to the rest in this matter. Properly arranged compost pits not in the heart of the village but outside should be the first sign that should meet the eye in a village that is on the path of community endeavour and development. Composting costs little money, but produces valuable manure. Hence the Compost Week is united with the Tree Planting Week and the significance of the two should be easily understood.

Preservation of Wild Life

Let us hark back to the trees that we were considering at the beginning. Because man has invaded on the forests and laid waste to the flora and fauna, the wild beasts were driven out to do havoc on cultivated lands. The economy in Nature has been disturbed. India's wild life is becoming a rapidly diminishing asset mainly by excessive and indiscriminate killing and felling by poachers and profit seekers. A new awakening has dawned to arrest this danger and a Wild Life Board has been set up recently. It has already started its work and is tackling problems like close seasons, protection of animals and birds, prevention of illicit shooting, and trapping, development of game sancturies and national parks and



Sri M. Bhaktavatsalam, Minister for Agriculture, inaugurating the Vanamahotsava Campaign at Adyar on 1st July 1955.

public education on behalf of wild life. Under the inspiration of the Union Minister for Agriculture, the last day of the Vanamahotsava week will be celebrated as the Wild Life Day to focus attention on this another much neglected national problem. The object of the Day is to draw public attention to the need for preserving wild life and to create a love for the beauty and grandeur of wild life in children and in students. Lectures will be arranged on various aspects of wild life and visits of school children and college boys to the zoo and spots of wild beauty. An appeal has been issued to the members of the Wild Game Associations and various licensees to abstain from shooting for one week. Facilities will be arranged by the Forest Department for visiting wild game sancturies. In Cities like Madras, wild birds in captivity will be purchased and liberated as symbolic of the preservation of wild life. Wherever possible, films showing wild life will be arranged to be exhibited.

This year's Vanamanotsava is therefore imbued with a new significance to protect the trees and to preserve the fauna and flora of our beautiful land. This is a duty we owe to ourselves and to prosterity.

(*Courtesy, A.I.R.*).

Over the Air

In 1954, Indian aircraft on scheduled and non-scheduled services flew nearly 24 million miles carrying over half a million passengers and 181 million lb. of cargo and mail.

Crop forecast—Gingelly

The area sown with gingelly(sesamum) in Madras State in 1954–55 is estimated at 458,500 acres. Compared with the final area of 452,700 acres for 1953–54, the present estimate shows an increase of 1·3 per cent. The present estimate reveals an increase of 20·4 per cent over the average area of 380,800 acres calculated for the five years ending 1953–54.

An increase in area is estimated in the districts of Chingleput, North Arcot, Coimbatore, Tanjore, Tirunelveli and Malabar and a decrease in other districts of the State.

The crop has been or is being harvested in most of the districts of the State. The yield per acre is expected to be normal in the districts of Tanjore and Tirunelveli and slightly below normal in the remaining districts. The seasonal factor for the State as a whole works out to 97 per cent of the normal as against 93 per cent for the previous year. On this basis, the total yield works out to 57,700 tons as against 55,100 tons estimated for the previous year; representing an increase of 4·7 per cent. Compared with the average yield of 41,800 tons calculated for the five years ended 1953–54 the present estimate is an increase of 38·0 per cent.

The wholesale prices of gingelly seed per standard maund of 82·2/7 lb. or 3,200 tolas, as reported from important market centres on 9th April 1955, was Rs. 21–12–0 at Tuticorin, Rs. 20–6–0 at Tiruchirappalli, Rs. 20–1–0 at Salem and Cuddalore and Rs. 20 at Tirunelveli. Compared with the prices which prevailed on 10th April 1954, these prices show a decrease of 35·4 per cent at Salem 33·4 per cent at Tirunelveli, 31·0 per cent at Tuticorin, 25·9 per cent at Tiruchirappalli and 25 per cent at Cuddalore.

Facts and Figures

The cost of a hydro-electric project varies from Rs. 1,000 to Rs. 3,000 per KW of installed capacity, depending on local conditions.

With a view to providing expeditious mail service in rural areas, as many as 1,754 runner's lines, totalling 14,519 miles, were replaced by motor services during the last five years.

The production of steel in India in 1954 amounted to 1,226,000 tons, an all-time record. During the same year 387,401 tons of steel were imported.

During the ten months ending January 1955, 988 companies, limited by shares, with a total authorised capital of Rs. 192·12 crores were registered as against 984 companies with a total authorised capital of Rs. 39·74 crores in the corresponding period of 1953–54.

During 1954, 310,604 tons of Ammonium Sulphate was despatched from Sindri to different parts of the country.

The total amount disbursed by the Rehabilitation Finance Administration as loans to displaced persons till the end of March 1955 was about Rs. 943·21 lakhs.

mangoes, bananas, jack, pineapple, cashew, pummeloes, etc., are largely met. The major area under fruits is concentrated in the rest of this State with mango, banana, oranges, grapes, cashew, etc. We have sufficient potentialities to increase production and in the Second Five-Year Plan it is proposed to establish model orchards-*cum*-nurseries in all districts where no such units exist now. Unfortunately this must initially be a rather slow process as the selection of sites itself will take some time. But it should be seen that preliminary work is undertaken even in the current year. These nurseries will propagate, multiply and distribute plants from reliable stock in kind and varieties suited to the different areas. It is expected that about 5 lakhs of plants will be distributed in the course of the five years from these units. In order to expand the area under fruit and vegetable cultivation under private orchards in at least 10,000 acres, a scheme for grant of loans to ryots to cultivate fruits and vegetable in new areas is also proposed to be included. As at present proposed, the loan will be Rs. 300 per acre for new orchards recoverable in ten instalments. About Rs. 30 lakhs are proposed to be given as loans in this way.

Apart from these two schemes, schemes for increasing the area under pepper and cashew in favourable tracts will also be included in the plan. Whatever may be the nature of the schemes included in the Five-Year Plan, the Nilgiris district has to be dealt with from a special angle. Just as arid zones require a special kind of agronomy so also this district has to be dealt with, from a composite angle which will tackle the problems of soil erosion, afforestation and a sensible agronomy. Well-laid out orchards interspersed by judicious planting of bluegum or other plantation crops like tea will solve the problem of soil erosion for which your fair district which was one like "a little heaven dropped from out of the sky" has unfortunately become a by-word. I am not a pessimist and by the keen interest that growers here have taken all these years on their own initiative, but with the guidance of research work done here, I have no doubt that Nilgiris will become the paradise of fruits and flowers as never it was before. There is not only scope for increasing fruit cultivation but also for new crops like cocoa, cinnamon, clove, pepper and medicinal plants. At our suggestion, the Government of India have agreed to revive the Botanical Survey of India and I should think that the survey should start first from the Nilgiris for classification and systematization of the wild fruits and flowers and plants that still remain unexploited.

It only remains for me to congratulate the Organisers of this Fruit Show and all those who have praticipated in it for making this show an annual institution. By your efforts, I am sure that Nilgiris which has derived its name from the violet blossoms of Strovilanthes, will be covered with rich and luscious fruits which even the Gods should envy.

[*From the Speech of Sri M. Bhaktavasalam, Minister for Agriculture, opening the Fruit Show at Coonoor on 4th June* 1955.]

Quiz

1. The Rs. 71·69-crore Chambal Valley Project, when completed through all its three stages, will generate :

(*a*) 158,000 KW of electricity.
(*b*) 204,000 KW of electricity.
(*c*) 236,000 KW of electricity.

2. And the area of land irrigated by it in Rajasthan and Madhya Bharat will be :

(*a*) 8 lakh acres.
(*b*) 11 lakh acres.
(*c*) 14 lakh acres.

3. Over four lakh persons have subscribed in the National Plan Certificates, which were issued from May 10, 1954, the total collections being :

(*a*) Rs. 6 crores.
(*b*) Rs. 7·5 crores.
(*c*) Rs. 9 crores.

4. The total amount collected through the various T.B. Seal Sale campaigns, since they were started in 1950, is about :

(*a*) Rs. 40 lakhs.
(*b*) Rs. 50 lakhs.
(*c*) Rs. 60 lakhs.

5. The number of Welfare Extension Projects to-day, since they were started on August 15, 1954 by the Central Social Welfare Board is :

(*a*) 100.
(*b*) 150.
(*c*) 200.

Answers : 1—(*b*), 2—(*c*), 3—(*b*), 4—(*a*) and 5—(*c*).

The Board High School at Vedasandur in Madurai District opened by Sri K. Kamaraj, Chief Minister, during his recent tour of the district.

Our Legislature

The Programme of the Day

By SRI A. J. SABESAN, M.A., Secretary to the Council

'The main problems of Parliamentary procedure under existing conditions are two : on the one hand, how to find time within limited Parliamentary hours for disposing of the growing mass of business which devolves on the Government, and on the other hand, how to reconcile the legitimate demands of the Government with the legitimate rights of the minority—the dispatch of business with the duties of Parliament as the great inquest of the nation at which all public questions of real importance find opportunity for adequate discussion' Sri C. P. Ilbert, Clerk of the House of Commons.

The business of the Legislature resolves itself into three parts: (1) Legislative, (2) Financial and (3) Critical. It makes laws for the Government, votes supplies and influences the administration of the Government by means of questions, resolutions and other motions. The hours at each sitting are allotted for definite kinds of business and the Legislature sets about its task according to a pre-arranged programme. Let us skip a day and see what it does and how it works.

The Houses normally begin their sittings at 11 a.m. and conclude at 5 p.m. with an adjournment for lunch between 1-30 and 2-30 p.m. unless otherwise directed by the Speaker/Chairman. On Fridays, however, to enable the Muslim members to go for prayers, the Houses adjourn at 1 p.m. and begin again at 3 p.m. Members of the Government occupy the "Treasury Bench" to the Speaker's/Chairman's right with their party supporters behind them and the parties in the Opposition take their seats on the Speaker's/Chairman's left. At the appointed hour the arrival of the Speaker/Chairman is announced by one of the Clerks-at the Table and he takes his seat in an elevated chair at one end of the Chamber, all the Members standing till then.

The Business of the Day

The business of the day then begins. Items of formal or ceremonial nature as those mentioned below, if any, are first taken up. Any member duly elected and not sworn-in already takes the oath prescribed by the Constitution, reference is made to the death of Members or distinguished personages, if any, and a condolence resolution is passed *nem con* all the members standing in silence for a few minutes. The House sometimes adjourns for a few minutes, or for the day, as a mark of respect to the deceased. This is the occasion also for congratulatory messages (Greetings to Mahatma Gandhi on the occasion of the attainment of Independence by India, the successful termination of Police action against Hyderabad State, the escape of the Prime Minister of India in the incident at Nagpur).

"Question time" then begins. The questions and the replies on matters covering a wide field are "an unfailing source of interest and also of entertainment to the visitor" till the end of the first hour of the sitting or till the questions on the list for the day are disposed of, whichever is earlier. Often times there is an important question about an assignment of land, a house search or an arrest, etc., and the member not satisfied with answers to his question and the supplementaries thereon appeals to the Speaker/Chairman for an half-an-hour debate on that subject after the conclusion of the business of that day, which is accepted or not in the discretion of the Chair.

Formal announcements are then read out by the Speaker/Chairman, a message from the other House in regard to Bills, assent by the Governor to Acts passed by the Legislature or the result of an election to a Committee of the House, etc.

The House then comes to the further list of business for the day. But opportunity is given at this stage under the rules for adjournment motions, Ministerial Statements and private explanation or apologies and raising questions of privilege which do not find a place in the agenda. These do not always occur and there is no particular order in which they are to be taken up.

Adjournment Motions

A member from the Opposition Benches, with the consent of the Speaker/Chairman obtained beforehand, rises in his place and says :

"Mr. Speaker/Chairman, Sir, I beg to move that the business of the House be adjourned for the purpose of discussing a definite matter of urgent public importance, viz....."

Generally speaking these motions have relation directly or indirectly to the conduct or default of the Government, "some act of commission or omission on their part", and are in the nature of criticism of the action of the Government. In the House of Commons, an adjournment motion, if passed, amounted to a vote of confidence or a vote of censure on the Government. It was therefore held not advisable in this Legislature for a member of the party in power to bring forward an adjournment motion merely for the purpose of raising a debate on a subject while there were other ways of doing so. The right to move this motion is subject to various restrictions summarised below.

The motion must be clearly and precisely expressed and shall raise a definite issue. It will not be in order to move for adjournment regarding labour disputes in three different places. A motion on the possibility of atom bombs being used was disallowed by

Fruit Growing on the Nilgiris

By SRI M. BHAKTAVATSALAM, Minister for Agriculture

Original Efforts

Looking back on the history of fruit growing on the Nilgiris it is on record that it was W. G. McIvor of the Kew Gardens, the first Superintendent of Government Botanical Gardens, Ootacamund, who in 1848 imported from England a large number of fruit varieties which he propagated on a large scale. They included apples, pears, plums, peaches, figs, mulberries, raspberries, nectarines, apricots, vines, currants and strawberries. Considering the potentialities of the different elevations for different kinds of fruits from the tropical to the temperate a fruit station was established by Government in 1871 at Burliar at an elevation of 2,500 feet, where a great number of exotic tropical and sub-tropical varieties of fruits were introduced.

In 1900, a second fruit station was established at a still lower elevation of 1,400 feet for introducing fruits suitable for lower slopes in the hills and in 1920 a third station at the higher slopes of 5,600 to 5,900 feet was established for growing temperate fruits such as apples, plums and pears. For over 90 years the development of hill fruits including such varieties as mangosteen, litchi, rambutan, durian and avacoda has been part of the work of the Curator, Government Botanical Gardens, Ooty. In the early years fruit growing was taken up by enthusiasts like George Oakes, Charles Gray, John Davidson and others.

During the year 1942 the horticultural work in the hills was brought under the supervision of the Fruit Specialist and in recent years considerable attention has been paid to the development of hill fruits and a wide variety of exotics have been introduced since then. Although the climatic conditions of these hills may not be quite as favourable as in some of the Western countires, still the range of climate in the regions where fruit growing is being practiced is found suitable for a large number of tropical and sub-tropical fruits, and temperate fruits like apples, plums and pears, have also been successfully grown. The Fruit Show today is a demonstration and evidence of the development of fruit culture in this hill district.

A Fascinating Avocation

Fruit growing is among the most fascinating of cultured avocations. The benefit that it gives cannot be measured in terms of mere money becuase it gives aesthetic satisfaction and beautifies the landscape particularly on the hills. It provides the best of foods, viz. fruits which are so necessary for health radiant living and so *satwik* for intellectual refinement. Fruit growing is not only a science but also an art. It requires a great deal of intelligent and patient hard work. You might remember that some of the world's greatest horticulturists like Michurin, started as amateurs. Fruit growing is not merely an absorbing pastime but it is also capable of commercial exploitation. In the United States of America, Spain, Italy, Brazil, South Africa and Syria, it is one of the sources of national wealth and trade.

I am glad to observe that commercial orchards have increased considerably on these hills during recent years and almost all the best exotic hill fruits that are available for consumption are grown here, starting from Mangosteen at the lower elevation to apples, pears and plums at the higher elevation. I am also glad to note that the Government Model Orchard and Nursery here is being made full use of by the fruit growers.

It was a hectic tour as usual, but Sri K. Kamaraj, Chief Minister found time to pluck a bunch of grapes from a vine yard in Ganguvarpetti in Madurai district during his recent tour. He and the members of the party seem evidently enjoying the sweet fruit.

Research Work

At Coonoor, Burliar and Kallar important research work is being carried on by our officers. Two mixed American apple varieties have recently been introduced and two Cherimoyer selections have emerged out as promising Rootstock trials on plums and peaches are also being undertaken. New introductions are olive grafts from Italy, tree onions from America and some new vine and pomegranate varieties. Hybridisation work on citrus, pine-apple, jack and annonas are also being attempted at Kallar and Burliar. Progeny trials with clove, nut meg and cocoa are also being conducted. There is unlimited scope for horticultural research in this area and I hope that our Agricultural Department will carry out sustained work which will benefit the fruit growers.

There are many possibilities of expanding fruit cultivation not only in the hills but also on the plains in this State. I have observed that many fruits like the seedless grapes, which were once considered as not possible a few years ago, are now successfully grown by careful cultural and manurial practices. The area under fruit is about only one per cent but the income per acre is nearly six to seven times when compared to grain cultivation. Fruit growing on a large scale will also in due course give scope for other industries like canning, dehydration, etc. You all know that the Second Five-Year Plan will be formulated with reference to the resources and it is my conviction that the pomological resources of the State should be developed to the maximum extent possible during the next Five-Year Plan period.

Need for Workers

This requires not finance alone but also a large number of first-rate workers in horticulture and cultivators who will take up this work with faith, devotion and patience and will not look for early dividends. With the transfer of the Kodur Fruit Research Station to Andhra this State has been left without one for the plains. A scheme for a regional research station under an All-India Scheme for specified fruits is likely to be sanctioned shortly. A small pilot scheme for fruit preservation has already been sanctioned recently. Three orchard-*cum*-nurseries at Periyakulam, Thimmapuram and Mangalore have been working for the past two or three years as ocular demonstration to fruit growers and to supply planting materials. There is keen demand for more fruit stations from areas like Salem, Tiruchirappalli, Tirunelveli and North Arcot.

Place in the Plan

Horticulture development will be one of the important aspects of the Second Five-Year Plan in the agricultural sector. The schemes will include not only the establishment of fruit stations and advisory services but also measures to control pests and diseases, the training of personnel, etc. According to the present thinking of the Government of India six horticultural training centres will be started in the entire country. It may be mentioned in this connection that in Madras we have been running for the past four years a horticultural diploma course, which has been affiliated to the University of Madras since last year. The Government of India are also contemplating the granting of loans for areas brought under new orchards. It is likely that a sum of about Rs. 14 crores will be provided for all India in the Second-Five Year Plan for horticultural research and development.

In the Second Five-Year Plan of this State which is in process of formulation the Government will ensure that sufficient importance is given to horticultural development. We have here a diverse climate in the various regions which favours the production of innumerable kinds of fruits. For instance, the hardy varieties thrive on the Nilgiris and higher Palnis above an altitude of 5,000 feet and in between 2,000 and 5,000 feet typified by parts of Wynaad, slopes of the Nilgiris, Shevroys and Palnis, mandarins, mango mangosteen, papaya, bananas, jack, pineapple, litchi, breadfruit, carambola, rose apples, avocado, etc., are found to thrive.

Another zone is represented by Malabar and South Kanara between sea-level and 2,000 to 3,000 feet where

Executive Committee Members of the State Farmers' Forum

The Government of Madras have appointed the following farmers as members of the provisional executive committee of the State Farmers' Forum, which is affiliated to the Farmers' Forum, India, constituted at the All-India Farmers' Convention. Sri S. K. Swami, Tenkasi—Convenor. *Members*: (1) Sri V. Govindaswamy Naidu, M.L.A., Chingleput district, (2) Sri W. P. A. R. Chandrasekara Nadar, Nilakottai taluk, (3) Sri S. Sambamurthy, Villupuram, (4) Sri R. V. Swaminathan, M.L.A., Ramanathapuram district, (5) Sri P. G. Karuthiruman, M.L.A., Coimbatore district, (6) Sri A. K. D. Balarama Raja, Rajapalayam, (7) Sri R. Ramamoorthy, Tiruchirappalli, (8) Sri V. C. Subbiah Gownder, Coimbatore district, (9) Sri M. Achuthan Nair, South Malabar and (10) Sri S. C. Balakrishnan, M.P., Palni.

The Government of Madras have approved of the draft constitution for the State Farmers' Forum. According to this constitution, the objects of the Forum will be (1) to study the problems affecting the agricultural producers in Madras State, (2) to promote, advance and protect the social economic and cultural interests of the agricultural producers and village women in this State, (3) to assist in formulating and promoting State and national agricultural policies and to collaborate and co-operate with similar Organizations of Agricultural producers within and outside the State for furtherance of the said objective and (4) to take such steps for the fulfilment of the above objects as may be necessary from time to time; in particular —collection and expenditure of funds; undertaking publicity and publication of all kinds; holding meetings, conferences and seminars; sending representatives, delegations, deputations, etc.

Assembly had to be adjourned for want of a quorum.

Dramatic Spectacle

On 21st December 1954 the Leader of the Opposition and a few other members of the Opposition walked out of the Assembly saying that they will not be a party to the passing of the Madras Dramatic Performances Bill, 1954 into law.

But the Legislature has, in the words of Michael Mac Donaugh,

> "the interest of the highest dramatic intensity on the occasion of a big debate relating to the predominant political question of the day which deeply stirs party passions and prejudices and brings down into the arena of the floor the great chiefs to fight for principle with the keen and subtle weapon of the tongue."

One such historic occasion was the debate on the motion moved by Sri C. R. Reddy on 27th November 1923 :

> "That a humble and dutiful address be presented to His Excellency the Governor submitting that the Ministry as now constituted by him, is against the weight of the verdict given by the country in the general election and does not possess the confidence of this House."

Another such occasion was the debate on the motion by the Leader of the House on 30th June 1952 :

> "That this House expresses its confidence in the Council of Ministers of which Sri C. Rajagopalachari is the Chief Minister."

Mention may also be made of the adjournment motion moved on 9th October 1928 by Sri S. Satyamurti in regard to the conduct of the police in seizing copies of Subramania Bharathi's Songs :

> "These are songs" he said "with the like of which one is familiar in English Literature such as praising the country, praising her natural beauties, praising her great heroes and her heroines, praising her great achievements, expressing unmitigated love for the motherland, expressing joy in her present and hope in her future."

and quoted extensively from Bharathi's works. After a number of such "impassioned and poetic speeches" appealing to members to join "in effectively condemning this deliberate inroad by the Government on the expression of the national feeling" and a statement by the then Law Member of the "prosaic facts" connected with the incident, a closure motion was moved and carried before the automatic termination of the debate and the motion "that the business of the House be now adjourned" was pressed to a division and carried, followed by loud and prolonged cries of "Vande Mataram" from the Opposition benches.

The heated atmosphere of the debate at times, the interruptions the cheers and counter cheers, the way in which members "troop into the Chamber" when the division bell rings and the air of intense expectancy when the division is actually in progress are more to be lived than said. One cannot help feeling that the Legislature is not merely a mechanism but also a living organisation, a "pageant" a "dramatic spectacle."

At the conclusion of the day's proceedings, the Speaker/Chairman rises from his seat and adjourns the House to the time and day announced by him for the next meeting.

The house then adjourns for the day.

Coal Export

India exported 2,021,956 tons of coal in 1954. The export of mica in the same year was valued at over Rs. 6·52 crores.

Crop forecast—Cholam

The area sown with cholam (jowar) in Madras State in 1954–55 is estimated at 1,953,000 acres. Compared with the final estimate of 1,994,600 acres for the previous year, the present estimate is a decrease of 2·1 per cent. It shows an increase of 11·3 per cent over the average area for the five years ended 1953–54, viz, 1,754,400 acres.

Cholam is not grown in the district of South Kanara and it is an insignificant crop in Malabar, Tanjore and the Nilgiris districts. Compared with the final area of 1953–54, the present estimate reveals an increase in the districts of Chingleput, South Arcot, Tiruchirappalli, Tanjore, Ramanathapuram, Tirunelveli, Malabar and the Nilgiris and a decrease in the other districts of the State.

The Seasonal Factor for the State as a whole works out to 98 per cent for Karif crop and 95 per cent for rabi crop, as against 96 per cent and 94 per cent respectively for the previous year. The total yield for the State works out to 637,800 tons of unhusked grain or 542,100 tons of cleaned grain. This shows a decrease of 0·1 per cent when compared with the yield of 638,500 tons of unhusked grain or 542,700 tons in terms of cleaned grain estimated for the previous year and an increase of 38·9 per cent as compared with the average yield of 459,300 tons of unhusked grain or 390,500 tons of cleaned grain estimated for the five years ended 1953–54

Dr. A. Lakshmanaswamy Mudaliar, Vice Chancellor of the Madras University, speaking at the U. N. Day celebrations in the City on 26th June 1955.

Rural Electrification

The number of villages elctrified during May 1955 in the various systems is given below with particulars of taluks and districts :—

	Taluk.	*District.*
	I. *Pykara System.*	
1 Marudur	Avanashi	Coimbatore.
2 Velayapalayam	Do.	Do.
3 Nanjaipuliampatti	Gobichettipalayam.	Do.
4 Thookanaickenpalayam	Do.	Do.
5 Valliampalayam	Udamalpet	Madurai.
6 Narayankottai	Periyakulam	Do.
7 Muthuveerappatty	Do.	South Kanara.
8 Majur	Udipi	
	II. *Mettur System.*	
9 Perangiur	Tirukoilur	South Arcot.
10 Kilmurungai	Gudiyatham	North Arcot.
11 Pasandapalli	Tiruppatthur	Do.
12 Valiwanur	Walaja	Do.
	III. *Papanasam System.*	
13 Alanganallur	Nilakottai	Madurai.
14 Irumbadi	Do.	Do.
15 Thalaikulam	Srivilliputtur	Ramanathapuram.
16 Papakudi	Ambasamudram	Tirunelveli.
	IV. *Madras System.*	
17 Kolathancheri	Chingleput	Chingleput.
18 Konganacheri	Do.	Do.
19 Ozalur	Do.	Do.
20 Sholavaram	Ponneri	Do.
21 Keelakattalai	Saidapet	Do.
22 Moovarasanpatti	Do.	Do.
23 Nanmangalam	Do.	Do.
24 Rendamkattalai	Do.	Do.

More Training Colleges

The Government of Madras have sanctioned the opening from the academic year 1955–56 of three Government Training Colleges at Pudukkottai, Vellore and Komarapalayam (Salem district). One of the Colleges will be a Women's College.

Seventy-five students will be admitted in each College to begin with. The optional subjects in each college will be English, Tamil, Mathematics and Social Studies. The necessary expenditure for the construction of buildings for these colleges has also been sanctioned.

The Lengthening Roads

One thousand and fourteen miles of pucca and 11,665 miles of kucha roads were built under the Community Projects, Community Development and National Extension Service programmes up to September 1954.

During the same period 152 production-*cum*-training centres for the development of arts and crafts were started under these programmes.

Sri C. Subramaniam, Minister for Finance addressing one of the meetings of the Secretariat Association during the Service Week.

the Speaker of the House of Commons on the 6th December 1951 as no event had occurred which had created an emergent situation and the use of atomic weapons was still in the realm of hypothetical and could be discussed at any time.

The "urgency" is one depending not on the subject of the motion but on the urgency of the debate, namely, that in the special circumstances of the situation the House must discuss the matter in question immediately temporarily superseding other pending business and that a resolution with proper notice coming up for discussion in the ordinary course or a motion of censure would be too late, e.g., the direct action contemplated by N.G.Os. and the withdrawal of recognition to their Association; the economic crisis threatening the State by the policy of the Government. Motions which anticipate a matter previously appointed for consideration or which could be discussed within a reasonable time, as during the general discussion of the budget, are not in order.

Matters of day-to-day administration (unsatisfactory distribution of yarn to handloom weavers, harrassment by officials in the courts) or matters under adjudication by a Court of Law cannot be the subject-matter of an adjournment motion. It will not be in order to move an adjournment motion where there is no departure from the ordinary administration of the law (Police raid on a certain newspaper office), or where the evil complained of was continuing for a long time (malpractices and harrassments in the procurement of foodgrains in Chidambaram taluk), or where there was a remedy in a Court of Law (arrest of tappers at Kunnathoor).

The motion must relate to a matter "of public importance" and also involve the administrative responsibility of the Government. Leakage of question papers is a matter for the University, an autonomous body and not the Government. The motion must not also raise a question of privilege or policy or refer to grievances which can only be remedied by legislation nor should it be taken advantage of to force the Government to bring forward legislation.

The Speaker/Chairman reads the statement to the House and decides whether the matter proposed to be discussed is in order or not under the above restrictions with due regard to precedents as to what is "definite" "urgent" and "of public importance." It is ruled out if he holds that it is not in order and it is within the discretion of the Chair to state the reasons for his opinion or not. If, on the other hand, it passes his "eagle scrutiny", he ascertains whether the mover has the unanimous support of the House and in case any member objects, the support of at least 24 members in the Assembly/10 in the Council. If the member fails to obtain the requisite support, he is informed that he has not the leave of the House. In such an event in the House of Commons the Member who asks for adjournment may challenge a division if not less than 10 members have risen when called upon by the Speaker but such a right does not exist under our rules.

"It is almost easier" as *Quintin Hogg* says "for a camel to pass through the needle's eye than for a member to secure a debate by means of this procedure." Out of 134 motions given notice of in the Assembly from 1946–54 only 6 were discussed, and in the Council 23 motions were given notice of and 5 discussed for the same period. Should a member still succeed in pressing it to a debate, the motion is taken up in the Assembly on the same day or at the request of the Leader of the House on the next day at 4 p.m. or at the conclusion of the business of the day if earlier, and in the Legislative Council at such hour on the same day or at such hour on any other day as may be fixed by the Chairman in consultation with the Leader of the House.

The debate on such a motion, if not earlier concluded, automatically terminates at the end of two hours after the commencement of the debate and thereafter no question should be put. It is also not necessary that like any other motions it should terminate in a vote and is usually talked out or withdrawn with the leave of the House.

A statement is made at this stage by a Minister on a matter of urgent public importance (Promulgation of the Madras Maintenance of Public Order Ordinance, Food situation in Guntur district, etc.) or by the Leader of the House about the business of the House. At times a member calls the attention of the House to any unexpected situation that has arisen (Closure of the Thakkar Baba Vidyalaya Hostel, Madras, the tragic death of a boy by electrocution in a public street, etc.), and the Minister concerned makes a statement or asks for time to make a statement later. Only one such matter has to be raised on the same day under the rules. In these cases, members are allowed to ask questions in the nature of supplementary questions for elucidating the statement or eliciting further information on points "arising out of the statement" but only to a limited extent as otherwise "the give and take of questions may develop into a ragged and wrangling debate."

Personal Explanation

After question-time is the occasion also for personal explanation by a member to correct mis-statements or to clear his character. A harmless supplementary question in the Asembly as to why there was so much of "Kumbakonam" in the matter of admission to the Government Arts College, Kumbakonam and what steps the Government proposed to take to prevent such "Kumbakonam", was said to have provoked a lot of agitation and protests in that town and on a subsequent day, the member concerned made a personal explanation that it was not his intention to wound anybody's feelings and whatever he had said was in good faith. A rigid adherence to established usage is waived in cases of personal explanation especially when the public conduct of a member is involved. An ex-Minister was once allowed to make a personal explanation in regard to the statement made by him the day before on the ground that an attack was made on his conduct in connection with the no-confidence motion by the Congress Party. On the 25th March 1954 the then Chief Minister made a statement in regard to press reports about his resignation so that, as he said, "the facts may be made clear where they have been clouded."

Collective Responsibility

The principle of collective responsibility of the Ministry has now been gradually accepted and Article 164 (2) of the Constitution specifically provides that the Council of Ministers shall be collectively responsible to the Legislative Assembly of the State. The defeat of certain Ministers in the General Elections, 1952, was taken as a reflection of the confidence of the public and the Ministers resigned as a body though the Governor accepted only the resignations of some of them who were defeated at the polls and asked the remaining Ministers to carry on the Government till a New Ministry was formed. A non-official resolution was carried in the Assembly against the Government but the Ministry did not resign, and on the point being raised in the Assembly, the Speaker held that it was not for him to give a ruling or advise the Government as to the action to be taken by them. A change in leadership of the Ministerialist Party has been followed by a change in the personnel of the Ministry.

No Confidence Motion

A motion may also be made expressing want of confidence in the Ministry or disapproving the policy of the Ministry in a particular respect. Leave to make such a motion is asked for after question time with the consent of the Speaker/Chairman. The procedure in regard to adjournment motions is adopted in this case also except that the number of members required in support of the motion is 25 in the Assembly and 15 in the Council and it is taken up on a day to be appointed by the Speaker/Chairman within 10 days. A "No Confidence Motion" cannot be moved by way of an amendment to the Resolution of Thanks in reply to the Governor's Address as there is a specific procedure prescribed under the rules for this purpose. A "Vote of Confidence" may also be moved as was done in the Assembly in June 1952 but no amendments are allowed to such a motion.

The visitor can look for something dramatic at this stage in the event of a ministerial crisis. The member who has resigned the office of the Minister rises from his new seat (in the Opposition where there has been a change of the party in power) and amidst great excitement in the galleries (there was clapping of hands in the Galleries even when Sri T. Prakasam rose to make a statement) and tense expectancy among the members, makes a statement in explanation of his resignation which is usually interrupted with laughter and interjections like "Hear", "Hear", "You have now seen what it is" "Oh", "Oh", "No, No", and "Yes, Yes". The Speaker/Chairman calls him to order if without confining himself to the reasons for his resignation, the ex-Minister exhorts other members as to their future conduct or gives a resume of his work. The Minister then makes a statement pertinent thereto but no debate is allowed.

Privileges of Members

Article 194 (3) confers on the State Legislature and its members the powers, privileges and immunities of the House of Commons of the United Kingdom and its members. A member will now be on his feet with a complaint of breach of privilege arising out of any article in a newspaper or other matters, as for example, publication of budget proposals in the press before the presentation to the House, the imposition of restrictions on admission of visitors to the Legislator's Hostel. The Speaker/Chairman satisfies himself whether or not a *prima facie* case of breach has been made out and whether the matter is being raised at the earliest opportunity. As soon as holds that a *prima facie* case exists, a motion is made that the alleged breach of privilege be referred to the Committee of Privileges or in the alternative that it be dealt with by the House itself. When it is referred to a Committee, it investigates the matter and makes a report on it. The House considers that report when it is brought before it and decides whether the offender should be punished. Where no reference has been made to the Committee the case is, on a motion made in the House, dealt with by the House itself in such manner as it may think fit. The Speaker/Chairman may also *suo motu* refer any question of breach of privilege to the Committee of Privileges. On 10th February 1955 a question of privilege was raised in the Assembly about the arrest of a member and on a motion moved by the Leader of the House and carried, the House decided to sit in *camera* and the matter was discussed in a secret session.

"Questions and urgency motions are the cocktails before the oratorical feast" (W. I. Jennings—Parliament). These being disposed off, the House proceeds to the Orders of the Day as set out in the list of business. It may be a debate in regard to current affairs, a motion for the consideration of a Bill either introduced and proceeded with or continued from the stage at which it was left last time, a general discussion on the Budget or motions for Demands for Grants. The items are taken up in the order in which they are entered in the list of business unless the House agrees to a change in that order on a motion moved to that effect. Each motion as it comes up is moved by the member or the Minister in whose name it stands (and seconded in the case of non-official motions), a debate follows and after the reply by the mover, the Speaker/Chairman puts the motion to the vote of the House unless it is withdrawn, and the House divides if the opinion of the Chair as to the decision of the House is challenged.

One item after another is thus disposed of until the normal adjournment for the day. The House may also be adjourned earlier if on a count being taken at any time there is no quorum necessary to constitute a meeting of the Assembly/Council, or in exercise of the power of adjournment vested in the Chair as on the momentous occasion in the Central Legislative Assembly on the 8th March 1926 when the Swaraj Party, the largest party in the House, walked out of the Assembly and the then President Sri V. J. Patel, adjourned the House saying that in the circumstances the House ceased to be representative in the sense it was intended to be by the Act governing its constitution (Government of India Act, 1919).

Half-hour Discussions

The sitting is also at times extended for debate agreed to already. There may be a half-hour discussion on a matter which was the subject of a question on that day, such as assignment of lands to Harijans at Kalpattu village. Sometimes there is a debate for short duration not exceeding one hour on an urgent matter of administration (e.g., retrenchment of workers of Neyveli Project which led to a strike). In these cases there is no formal motion before the House nor voting, and the Chair usually fixes a time limit for the speeches by members and the Minister's reply to the debate. This procedure gives an opportunity to the House to express its views by way of criticism or advice and obtain a statement from the Minister on a matter which has aroused public feeling, and is at times availed of in the place of a motion for adjournment of the business of the House to discuss a matter of urgent public importance.

The presence of members and the interest in debate on these occasions will vary with the importance of the subject before the House. Personality also counts. The attendance will at times be bordering upon a quorum as for instance during the detailed consideration of certain Bills or a motion which does not meet with much opposition, and the few members present will be found "addressing themselves to the glossy unresponsiveness of empty benches." The half-hour debate on the then Premier's statement on the Andhra Province did not attract much attention and the

Preservation of Wild Life

By SRI A. B. SHETTY, Minister for Health

There is appropriateness in associating the celebration of "Wild Life Day" with Vanamahotsava. Vanamhotsava week is intended to promote extension of tree lands and arouse public attention to the need for the rehabilitation and development of forests which play a vital role in our country's economy. Woods, forests and wild animals go together. Wild life is a source of great fascination to us. Children hear and read stories of wild animals with eager interest and take delight in seeing their pictures.

Their Great Variety

A visit to the zoo gives pleasure and excitement to young and old. Every day about a thousand people visit the Madras Zoo. The sight of wild animals in their natural surroundings in the forest is thrilling. Many naturalists have written about the beauty and variety of wild animals in India. There are said to be more than 500 species of mammals. The furs, hides and horns obtained from them form a valuable asset to the country. The avi-fauna is also rich and varied. Several of the fine specimens of wild beasts and birds seem to have progressively diminished in many parts of the world.

The clearance of jungles for cultivation purposes and the denudation of natural forests by overfelling of trees during war time have diminished the area of shelter needed for wild animals. Professional poachers destroy wild life to a great extent. Shooting from motor cars or jeeps at night with the aid of electric light and the use of the more efficient arms and equipment of to-day have increased the pace of such destruction. The modern movement for the preservation of wild life has taken practical form on a vast scale in many countries of the world. Africa, the land of big game animals, has several game preserves. The U.S.A., Japan and other countries have National Parks and Wild Life Sanctuaries.

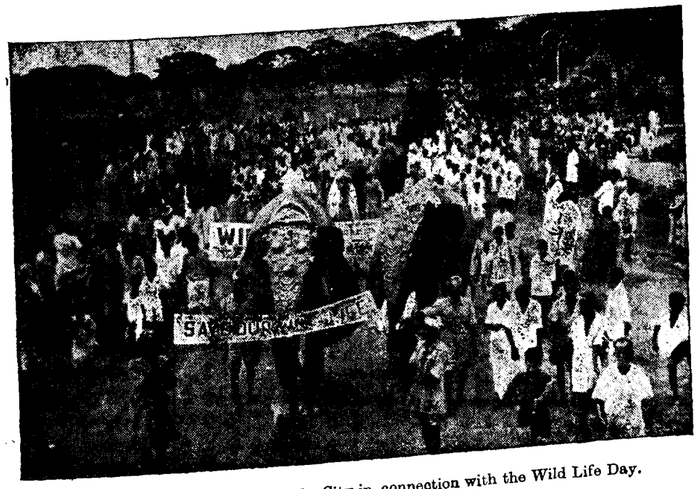
The Need for Preservation

The need for wild life preservation is now well recognized in this country also. The forest policy laid down by the Central Government in 1952 emphasises the need for affording protection to wild animals and particularly to the rare species which are on the verge of extinction. Among the big animals, the lion is confined today only to a small tract in Sourashtra, namely, the Gir Forest. The rhinoceros of Assam is fast disappearing. Similarly, there are other wild animals which are dwindling in numbers in all States. An Indian Board for Wild Life Conservation has been constituted by the Central Government in 1952. Several of the State Governments have set up their own State Wild Life Boards. Game Reserves and Wild Life Sanctuaries have been established.

Wild Life Sanctuaries

There are two National Parks in Bombay and U.P. A State Wild Life Board has been constituted here in September 1954. Special organizations have been functioning in the Palni and the Nilgiri hills for the purpose of regulating shikar and preservation of game in those localities. Madras has had a Wild Life Sanctuary at Mudumalai forests in the Nilgiris district since 1940. This Sanctuary is now being extended over an area of 120 square miles running up to parts of the forest range of Wynaad division. Visitors can go on elephants to the sanctuary and see wild life there in its native haunts. Proposals are under consideration for converting this sanctuary into a National Park, providing various amenities to attract visitors and tourists. The establishment of a sanctuary for birds in Chingleput district is also being contemplated. The All-India Conference of the Superintendents of Zoos which met in Madras City in May last, seems to have taken up the question of the improvement of Zoos. This is a welcome move since Zoos have a scientific and educative value.

The Wild Life Day was inaugurated by Sri A. B. Shetty, Minister for Health, at Rajaji Hall.



The procession taken out in the City in connection with the Wild Life Day.

The forest area which is set apart for the purpose of the sanctuary is well away from cultivation. The agricultural population need have no apprehension about the measures that are being taken for the protection of wild life. Crop protection gun licences are being given to ryots. What is prohibited is the shooting of animals and birds which are threatened with extinction and the destruction of females and immature males among certain species in reserved forests. The shooting of other animals and birds is regulated by rules. The preservation of the larger carnivores will keep in check the growth of the numbers of the crop-destroying animals like the wild pigs, deer, monkeys, etc. The maintenance of the balance of nature in this way serves a useful purpose.

Enlightened Public Opinion

Dr. Punjabrao Desmukh, the Union Minister for Agriculture, has rightly observed that we cannot rely only on legislation to stop the excessive and indiscriminate killing of our beautiful birds and animals by poachers and shikaries. He has stressed the need for developing a strong and enlightened public opinion in order to create the right atmosphere for the execution of plans for the preservation, systematic management and perpetuation of wild life. Government of India have, therefore, decided that a "Wild-Life Day" should be observed annually all over the country and that the first annual day should be celebrated this year on the last day of the Vanamahotsava Week.

It is hoped that this celebration will focus attention of the public, especially of students and children, to the need for cultivating a Love of Nature and the preservation of the fauna and flora in Wild Life.

Zoological science tells us about the extent of animal life which shares the world with Man. Human creatures are just one species of mammal among many hundreds of other species. Man represents the last link in the long chain of evolutionary process. The progress of science enables us to understand better to-day the wonderful living world about us and its inter-relationship. Out of this understanding must come greater sympathy for the host of animal companions with whom we human beings are going through the life adventure.

[*Speech delivered by Sri A. B. Shetty, Minister for Health, inaugurating the Wild Life Day at Rajaji Hall on 7th July* 1955.]

Number of Factories and their Inspection

There were 6,914 Factories at the beginning of the year. The number of factories at the end of the year was 6,748 of which 6,348 factories were in commission.

The total number of inspections and visits made by full-time Inspectors during the year was 18,774.

Plans: 2,103 plans were scrutinised by the Chief Inspector of Factories during the year as against 2,256 plans in 1953.

Complaints: 1,280 complaints were received during the year as against 1,184 in 1953.

Health: The health of the workers was generally normal. No epidemics were reported from any of the factories during the year.

Accidents: There were 6,014 accidents during the year as against 5,628 in 1953. Of the accidents reported during the year 17 were fatal.

Prosecutions: The occupiers and managers of 309 factories were prosecuted during the year as against 195 factories in 1953.

The Madras Maternity Benefit Act: The average daily number of women employed in 2,309 factories from which figures were received was 58,020. 4,901 claims were made during the year as against 3,843 in 1953. The total amount of benefit paid was Rs. 1,48,160 as against Rupees 1,45,750 in 1953. No woman was employed in any factory during the four weeks immediately following the date of confinement.

Employment of Children Act: The Employment of Children in establishments covered by this Act has been effectively checked.

. . . and the Desert Bloomed

This moving account of development work in a Community Project centre in West Bengal will bring tears of joy in the eyes of any sensitive reader. What tremendous potentialities lie within some of our simple people! When a spark of idealism kindles it, dynamic energy sufficient to change the face of the land is created. Look at Dibakar the village worker, and those simple Santal Women! We have reproduced it from "The Weekly West Bengal", *the official organ of the West Bengal Government.*

Who gave its name to the village I do not know. Stark, barren fields lay all around it, with a jungle in the distance. There was no sign of water within a mile and a half. Women, after their day's work, fetched water at night from a stream, two miles across the forest. They left their relatives waiting eagerly by the road, for none could be sure that they would all return safely with the water. Not infrequently had wild animals attacked the poor water-carriers. A quiet, charming girl had gone to fetch water some time ago. She never came back. Two days later a part of her body was found. Jungle animals, after appeasing their immediate hunger, had left the remnant for their future need.

I heard this story the first day I made my acquaintance with the people of Sukna. I immediately said, "We must have water in the village." In incredulous laughter, they dismissed my word. No one came forward to help. But frequent contact created personal ties. Nothing had yet been done to foster real confidence then. Still, unable to ignore my request, the entire village agreed to help in constructing a well. The work was completed in three weeks. Then women could draw as much water as they liked for their household needs. They took their bath, supplied water for the children's play. They did not even hesitate to be lavish with the water. The well looked to them like a tank, Two summers went by. Far from drying up, the water stayed undiminished.

Dibakar Chakravarti was the village worker for this area. But none of the Santal villagers called him Dibakar Babu. They addressed him as "Brother". The elder ones said just "Dibakar". How sweet and funny it sounded! Dibakar not only knew all the villagers; he had a tie of affection which bound him to every one. He had no end of concern for the villagers. He kept visiting our office all the time to settle little problems for them. A Santal "aunt" of his fell very sick. Arrangements had to be made for putting her into a hospital. A weaver brother of his, despite tramping Sainthia for four or five days, had failed to buy yarn for weaving. A little canvassing was necessary. On another occasion he came running in agitation—a Santali sister of his had been working over a month, her master became displeased with her and dismissed her without paying any wages. I looked behind Dibakar and found the girl in tears. As I turned my eyes towards Dibakar himself. I noticed tears glistening in his eyes too. In a choked voice he said, "Sir, you must come at once and find some solution."

He would never cease to come or hesitate to demand and intercede on behalf of his dear ones in Sukna. When there was poultry to be distributed, Dibakar would invariably be there just in time; when it came to hatching eggs, his demand would be the largest. When vegetable seeds were being supplied, Dibakar would come daily until he had collected enough for a kitchen garden for every house. A centre was opened in the block for distribution of milk powder. It was notified that it would not be possible to start a centre in Sukna immediately. Dibakar was not satisfied. He was aggrieved. For two months he kept on sending all the trainees of the Sukna Social Education Centre and the village mothers with infants in arms to the officers of the main centre. At last the authorities were compelled to open a centre in his village, too. On the opening day Dibakar was overjoyed. He gathered all the workers together. That day in his village he begged for the blessings of every person for the people of Sukna.

One evening I went to the village and found Dibakar busy in the adult literacy class with his elderly Santal brothers. They were exceedingly happy. With "Jai Hind" they greeted me. "Raghupati Raghava Raja Ram", they sang. Students wrote their names and addresses and held up the slates proudly for me to read. They read the "Anander Samsar". Through Bratachari songs and dances they expressed their joy. It filled me with happiness to see the enthusiasm of these simple folk. A ray of hope was kindled!

Dibakar and I walked back home together from that class. We were silent for a while. Suddenly, I asked him, "Are you satisfied as the way the Social Education Centre in Sukna is functioning?" He replied, "No, I am not satisfied at all. If the villagers cannot improve their living condition through the Social Education Centre, it is useless. Those who cannot afford a square meal a day,—what meaning would '*Jai Hind*' have for them? How long could they be content chanting '*Raghupati Raghava Raja Ram*'?" I asked, "Can't we do anything in the matter?" He said "I don't know; and even if I did, where are the means? What can we do?" We could not finish our talk. We returned to our respective homes.

Some time elapsed. Suddenly Dibakar started coming up to the headquarters very frequently. He never said anything. He talked of this and that and left. I realized that under the guise of asking for vain advice in trivial matters, he wanted to broach something which troubled him. One day I asked him straight. "Dibakar, do you want to tell me anyithng in

particular?" He replied, "I had been thinking of telling you something for a long time, but I don't know if I should." After my assurance that he might speak without reserve, he said, "If we really want to help the people of Sukna somehow, we must get some land for the landless Santal farmers. If we can get each of them some land of his own to till, there will be unprecedented enthusiasm. Then they will really begin to move forward." I enquired, "How is that possible?" He said, "Zamindaries are going to be abolished soon and all big landholders are keen on setting their lands. If you go and request them, they will give you land on promise of deferred payment. You can then distribute that land among the landless people." I assured him of my help. Dibakar set me thinking.

Getting hold of land was not all. Waste land needed to be reclaimed for cultivation and huge expenses were involved. Even that was not the end. Without irrigation, double-cropping would not be possible. That also needed a great deal of money. Where would all this money come from? Dibakar kept on coming. The vision that had flashed across his mind began to take a firm hold. There was no stopping him.

He collected all the facts. There were fourteen owners and two hundred bighas of waste land. He made five of the owners agree to make land gifts. They would not charge any price, if we made a gift of the land to the landless, reclaimed it for cultivation and arranged for its irrigation. He got one young landlord interested in the work. A thousand rupees in cash he agreed to lend to the poor Santals who wanted to take a lease of the land. But a lot more of cash was needed. Where was one to get it from? Dibakar would not give up his dream. Somehow he had to have the land for his Santals. We approached the owners and gave personal guarantees. We assured them of fair price in the near future. Partly in fear, partly in respect, partly also because they had no other choice, they agreed to give up the land. Deeds were drawn up. On an auspicious day, twenty-two Santal families who had never dreamt of owning land divided two hundred bighas amongst themselves. What a great wave of joy surged up in the village that day.

The question was whether to start work after forming a co-operative society of all the villagers. We had differences of opinion on that point. It was decided that we should take the advice of the villagers themselves and abide by their decision. A meeting was called in the village. The idea of the co-operative society was explained to them. Everybody—even the women of the village—participated in the discussion frankly. It was decided that a co-operative society at the very start was unnecessary. Each person should cultivate his own land, keeping the principles of co-operative working in mind. But for collection of seed and manure or use of better ploughs and other implements, the village society would procure these on behalf of all. Thus, gradually, the conditions would be ripe when all the villagers could farm the land jointly and divide the harvest amongst themselves. Without any hesitation the Santals advised, "Though the idea of co-operative work was good, it was wiser not to start it initially; the mind was not yet ready to grasp it fully and mutual recriminations might arise to spoil the glorious promise." We did well by accepting their argument. In my opinion no sounder decision could have been reached.

So, the land was acquired. But how were we to make it cultivable? We had provision for loans for reclaiming land in the block. The villagers submitted a petition for loan. But it was impossible to improve that stoney land within the permissible limits of the loan. What should be done? In the meantime, a couple of tractors had arrived in our Calcutta, Office of the Community Development Organization. We wrote to the authorities. The Engineer came, gave encouragement, examined the land. He expressed his opinion,—a bigha of land could be reclaimed for twenty rupees.

A week later, Dibakar put two thousand rupees on my table. He had taken the money from the Santals in advance. He said "Make haste, the rainy season is coming. We must grow paddy on these two hundred bighas. If we can reclaim a hundred bighas, I will get you two thousand rupees more,—you get going without any hesitation." Hearing him, I was surprised and felt extremely happy. Who knew what effort he had to spend to collect such a large sum of money?

After ten days the tractor unit arrived. Accompanied by a couple of his Santal brothers, Dibakar went cheerfully up to Sainthia and brought the tractors home on foot from there to Sukna. It was a distance of about twenty-five miles. The work started Men and women, young and old, every one in the village sat by the fields eagerly. In rapt attention they watched the bulldozer push and roar like a huge giant as the uneven useless land became arable in a short time. Then they shouted in self-forgetful joy. In two and a half weeks forty bighas of land were reclaimed. Arrangements started for sowing paddy.

But now trouble ensued. After calculation it was found that two thousand rupees had been spent after paying wages on an hourly basis. Only forty bighas were reclaimed. Good lord! A hundred was the target! What were we to do now? How could we get so much money? We were not prepared for this. Who was going to lend us money? The rate of Government loan was fixed by regulation. Where was one to find a party to provide more loan? Even if we did find one, why should he lend money to poor employees like us? What a pity we could not keep our promise. With tears in their eyes, Santal women flocked around us, saying, "Babu, you gave us hope, and that is why we quit our jobs. Tell us where we can get land." I could not look Dibakar in the face. The moment one met his eyes, they filled with tears. We had never been in such a predicament before. Bewildered, we went from door to door to all the big bosses of the Government. Far from helping, they reproved us. They ridiculed us, calling us "little Vinobajis". Finding no way out, we went back to our brothers and sisters in Sukna. We told them plainly about our helpless condition. They listened attentively and then it was they who consoled us. They said "Babu, don't worry. God is there, you are here, and so are we all. If the machine does not work, let it lie still. We will all work with our hands and put the land right. Don't be unhappy."

Manual labour took charge of the job. It seemed it had to be that way for a long time to come until the Bulldozer could be worked again. In the meantime we had some money from the Patel Fund. This money could be used to renovate such ponds as might still yield potable water and water for irrigation purposes, provided the owners agreed to bear a third of the expense. There was a small pool in the midst of the land. Once it was used as a tank. If that tank could be renovated, the village would cease to be dry. Not to speak of drinking water, it would be

possible to irrigate two hundred bighas and another hundred and fifty bighas in addition. I told Dibakar about it. He started again in right earnest. But where were we to get a third of the cost from? Dibakar called a meeting and invited me. For four hours I tried to make the villagers understand that if they worked for two-thirds of the prevailing rate of wages they could have the tank improved in the village. But how were they to make both ends meet if they worked for such poor wages? They could not make up their mind. At that time roads were being built in every village in Mahammad Bazar. There was no dearth of work. If they worked on any of these jobs, they could easily earn one rupee and a half per day. How could they accept a rupee for earth work on the tank? Would it be possible to satisfy their needs with only a rupee a day? No, it was not possible.

Some time elapsed. Dibakar had not given up. He was going from door to door and discussing about the tank with his brothers, sisters and sundry other friends and relatives in the village. Suddenly he came one day,—two Santali women followed him. One of them was middle aged, Moni Mejhen by name. The other was quite young, around eighteen or twenty years of age, who would not tell her name in spite of being asked. Both of them were leaders among the women in the village. It was not only the women that they led, but they held sway over everybody. They said, "Babu, come to our women's meeting. Explain everything to us, and we will make the men work." It was a strange situation indeed. I realised Dibakar had his invisible hand in this. I went and saw an unprecedented scene. All the village women had assembled in one place. They asked me to explain everything, but they never really gave me a change. The moment I reached there, they said in one voice, "We women will dig the pond. We will gladly accept whatever wages you have to offer. We will listen to none. You are our big brother." Great commotion arose. I looked around, Dibakar had vanished. There was no news of him. I became astounded. What should I answer? It looked as if they were on the war path against their menfolk.

After a while I noticed Dibakar coming. Behind him came all the men of the village. The village chief advanced and said, "Sahib, we misunderstood you. As you said, we will dig the tank for a third less than our usual rate. You arrange it." Oh, how happy the women were! What a ripple of laughter went over them! It still rings in my ears. It was decided that the tank must be renovated.

Ten bighas of marshy land was to be used for the tank. What should be the plan of work? How should we secure the land for the tank? After discussion it was settled that those twenty-two people who had taken lease of the land should give up some land as a gift. It would be a gift to all the villagers. The tank should belong to the village as a whole, and all the adult members there would be its owners. The work would be supervised by the villagers. Selections were made immediately. A tank committee was set up with Bhuku Murmu, Kalu and Jalpa. These three co-opted Renda Majhi, a leading man of the village. Among the women Moni Mejhen was mentioned as a member of the committee. She was vastly amused and said, "Oh no, what do I have to do with the committee? Do I possess the intelligence of a man? I can't do it." She rolled in laughter and continued in modest protestation. We knew however that she was of unusual intelligence.

The day after the committee was formed, our overseer, Siddhananda Chatterjee, with a tape in hand, started working from eight in the morning. He had two hundred men and women of Sukna as co-workers. They worked till 4-30. The Santals made hungry Siddhanta eat *gur* and *muri*.

Then those of you who came to Sukna saw the rest. You met the tank committee and saw the Social Education Centre. Tank renovation was the most important work. Whether they were being able to do the job properly,—those who came here in sympathy should say. Yes, we did spend a good deal of time on this village. We never felt any of it was wasted. We did not regret it. Did we think right?

If any one happens to come to Mahammad Bazar, let him come and see the village of Sukna and its people.

[*Translated by Srimathi Anu Banerjee, Special Officer, Development Department, West Bengal, from the original narrative by Sri Sushil Neogy, Project Executive Officer, Mahammad Bazar Community Development Block.*]

They Were Corrupt

During the month of April 1955, an Executive Engineer of the Public Works Department and a Sub-Inspector of Police were compulsorily retired, a Constable was dismissed, a Prohibition Guard was removed from service and the services of an Oil Engine Driver of the Agriculture Department were terminated.

Sri G. V. Mavlankar, Speaker of the Indian Parliament, was entertained at a tea party given in his honour by Sri J. Sivashanmugam Pillai, Speaker at the Legislative Assembly premises.

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LEGISLATURE

Tiruchendur Temple

By Sri K. K. MENON, B.A., B.L., Executive Officer

Tiruchendur, known to hoary antiquity as "Tiruchiralaivai" or "Jayanthipuram", is probably the most sacred shrine dedicated to Lord Subramania. Situated as it is in an ideally beautiful surroundings at the extreme south of the peninsula, with the foming waves of the Gulf of Munnar washing the temple walls on the north and east, it has for ages been a centre of saivite culture and worship.

Legends

According to legends, it is said that a demon by name Surapadma waged war against Gods and defeated them. They approached Lord Siva and prayed for help. He deputed his young Subramania, to help the Gods. Lord Subramania, marched from Mount Kailas with a host of followers and reached Tirupparamkunram near Madurai. He met sage Parasarar and sent his ambassador Virabahu to Surapadma for peace. But Surapadma was not for peace; he was adamant and for war. War broke out. It lasted for ten days. On the last day, the asura assumed the shape of a gigantic mango tree standing amidst the waters of the sea. Lord Subramania pierced the tree with his mighty "Vel" and transformed the tree into a cock and a peacock. The cock was kept on His flag as its symbol and the peacock as His Vahanam. This victory over Surapadma gave Tiruchendur the name "Jayanthipuram" or "Place of Victory."

History

History says that this is one of the oldest temples in South India. The exact date of its origin is still unknown. Some of the most ancient pieces of literature like Skandapuranam and Silappadikaram refer to this temple. Narkirar the famous poet of the "Third Sangam" has made prominent reference to this temple in his *Thirumurugathupadai*. Historians fix the age of the "third sangham" to be between the 5th century B.C. and 3rd century A.D. So the antiquity of this temple can safely be traced back to at least two thousand years.

Two slabs in the temple record an ancient inscription in Vatteluthu. King Varguna Maharaja made a grant of 1,400 kasus and entrusted the amount with three of his officers, viz., Iruppaikudikilavan, Sattamperuman and Alarrurnattukkon with a stipulation that the money should be lent out and with the interest of 20 per cent according therefrom the requirements of the deity of the "Tirumulattanam" should be met, the capital always remaining in tact. This Varguna Maharaja has been identified to be Varaguna II who lived in the 8th century. Another piece of historical evidence for the antiquity of this temple is the composition "Subramania Bhujangam" attributed to Adi Sankarachariar who, according to historians, lived in the 8th century. It is said that Adi Sankarachariar was attacked with an acute colic pain which he could not get cured by any means. Finally he came to Tiruchendur, prayed to Lord Muruga and got a cure. In happy ecstasy, he sang 33 stanzas in praise of Lord Muruga. These songs are contained in the work known as "Subramania Bhujangam" which is a classical work in Sanskrit extolling the greatness of Senthil Andavar.

Coming down to the Seventeenth century, we are told of how Senthil Andavar blessed Sri Kumaraguruparar with the power of speech: When a boy, Kumaraguruparaswami was dumb. His parents brought him to Tiruchendur. Forty days of continuous prayer did not show any sign of relief. Dejected and disappointed, the parents decided to throw the boy into the sea and commit suicide the next day. But early next morning, they were roused by the ringing melodious voice of a small child singing in praise of Lord Muruga. They opened their eyes. Lo! it was their son, the dumb little boy standing before Lord Muruga composing and singing the highly philosophical verses of "Kandarkalivenba." It was this very boy who later went to Madurai and inaugurated his immortal work "Pillai Tamil" before Tirumalanayak (1623—1659), when Sri Meenakshi herself appeared before him in the guise of a small girl of three years and presented him with a pearl necklace. And again it was this Kumaraguruparaswamy who was initiated as a sanyasin by the then head of the Dharmapuram mutt, who established the famous Tiruppanendal Mutt and who finally went to Benaras constructed the Kedar ghat, mutt and temple there.

Seventeenth century records another miracle performed in this temple. In or about the middle of the century, the Dutch invaders made some futile attempts to destroy this temple. Finally, thinking that the idol of Shanmukhar was made of Gold, they took it and started away. But their ship was caught in a terrible storm. They were told that the presence of the idol in the ship was the cause of ill-luck for them. They immediately threw the idol of Nataraja which they had taken from Nallur and the idol of Shanmughar into the sea. The storm subsided. Later, when the temple authorities took steps to replace the idol, one Vadamalaiappan Pillaiyan, the local renter of the Nayak king, had a dream that the original idol itself was at a particular place in the sea. A search party was sent to the place and the idols of Nataraja and Shanmughar were recovered.

In memory of this, the Vadamalaiappan mandapam was constructed. The temple celebrated the tri-centinary of this recovery in 1954 and the particular day is being celebrated as a festival thereafter. M. Rennel, the French author of "Description, Historical and Geographical, of India," a book published in Berlin in 1785 gives a picture of this temple which he says he got from a soldier in the service of the Dutch Company. He also refers to the Dutch invasion and the incident relating to the recovery of the idol.

The temple

Situated in an ideally beautiful surroundings, with the foaming waves of the sea washing the walls, the temple presents a picturesque scene. In a cliff of hardened sand-stone, a covern has been carved out and fitted with pillars to serve as the temple. The frontage of the temple facing the sea is popularly known as Shanmugha Vilasam. Worshippers usually flock themselves in this hall. The scenic splendours, the salubrious breeze and the sanctified presence of Shanmugha facing them give them their ecstatic realizations. The main deity faces east where there is the sea. So the important gopuram is on the west. This is a colossal structure of nine tiers, 134 feet in height, originally constructed by one Desika Moorthy, a Thambiran of Thiruvaduthurai mutt, about three hundred years ago. This Gopuram was renovated very recently. One remarkable feature in the history of this temple is that renovations to it were not made by the kings or the rich but mostly by three swamies who collected the necessary money by begging.

There are two important places near the temple which arrest the attention of the worshipper, the "Vallis Cave" and the "Nazhi Kinar". To the north of the temple is the picturesque grotto with the frontal mantapam known as "Valli's eave." It is on the border of the sea, the waves washing its sides. It is cut of red sand-stone rock. The frontal shrine faces the sea. Behind it, is a small rectangular hall which is actually cut into bowels of the rock. A small figure of Valli is kept in this hall and is often worshipped through a hole cut through the rock.

Nazhi kinar is a small well and is considered by the devotees as having been dug by Lord Subramania with his "Vel" to quench the thirst of soldiers who followed him to slay Surapadma. A bath in the sea and in Nazhi Kinar is considered to be of high religious merit.

Deities and Pujas

The presiding deity is Sri Subramania. He is in the standing posture with one head and four hands. Just behind the idol and to the left of it is a "linga". It is said that Lord Muruga is offering worship to the "linga" after slaying Surapadma. He has on one of his hands a lotus-flower and in the other a Japamalai. Pujas are performed to Sri Muruga and the linga too separately. Pothis from Malabar perform pujas to the idol in the thantric form. Pujas to Shanmughar are performed by Bhattars according to Agamic form. There are also other idols like Vinayagar, Valli, Deivayani, Mahavishnu, etc. Sandals and vibuthi are given as "prasadam" to the worshippers.

One peculiar feature in this temple is that Vibhuthi is distributed in what are known as "Pannir leaves". According to legends, after slaying Surapadma, Sri Subramania came and sat in this sacred place. The Vedas assumed the form of a 'Pannir tree' and stood by the side of the Lord spreading its branches and leaves over him. Each leaf of the tree therefore signified a Veda. Sri Subramania is the authority on "Pranava mantra"; he taught his father the meaning of the mantra. Thus the 'Vibuthi' given in "Pannir leaves" gets the spiritual sanctity of "pranava mantra" and of the "Vedas". Sri Sankaracharia Swamigal, in one of the stanzas of his Bhujangam, speaks of the high medicinal values of the "Ilai Vibuthi" and says that it would cure even the most chronic diseases.

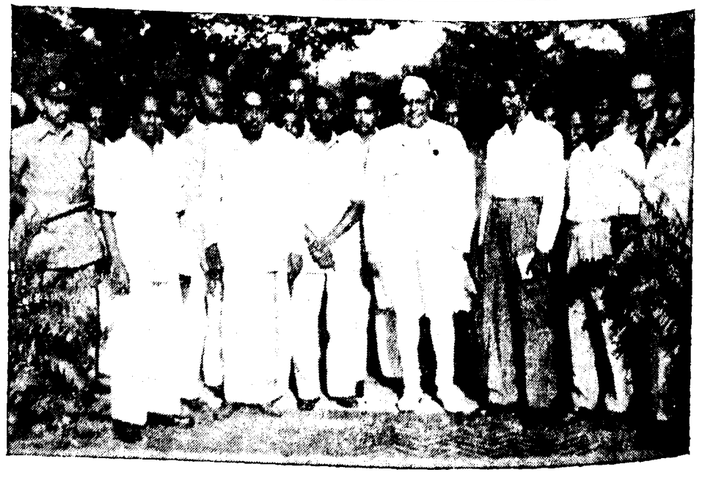
The temple has various important festivals which attract lakhs and lakhs of pilgrims from all over India. The important festivals are, however, in the Tamil months of Avani and Masi. The Vaikasi Visagam attracts the maximum crowd. The Skanda Shashti festival is also a very important one. On the sixth date of this festival, a mock fight is held and Suran is beheaded amidst a chorus of universal shouts and rejoicing of the devotees.

This is a "notified" temple administered by an Executive Officer and five trustees under the supervision of the Hindu Religious and Charitable Endowments Department of the Government. It has an annual income of nearly four lakhs of rupees mostly from hundials and landed properties. The temple runs an excellent choultry and a "Rest house" with all modern amenities, charging only a nominal rent from worshippers. It runs an Orphanage with about 25 boys giving them an ideally Hindu education. Steps are being taken to start an agama Patasala very shortly.

Insurance Business Grows

The annual premium income of Indian general insurance companies was Rs. 60 lakhs in 1931, Rs. 151 lakhs in 1941 and Rs. 676 lakhs in 1953.

These companies have also extended their activities outside India and their income in this sphere rose from Rs. 99 lakhs in 1931 to Rs. 829 lakhs in 1953.



Shri Sri Prakasa, Governor of Madras, with the members of the Madras Secretariat Association. The Association celebrated the Service Week commencing from 20th June 1955.

The Youth Camp at Amaravathinagar

The Coimbatore Federation of College Social Service Leagues with Mr. G. R. Damodaran, M.P., as its President continued to be active ever since its inception. Encouraged by successful endeavours in the past, the President of the Federation ventured to organise a Youth Camp in Summer 1955. The Principals of Colleges in Coimbatore and Secretaries of the Social Service Leagues welcomed the proposal and extended their co-operation. A committee was constituted to choose the venue of the Camp and make necessary arrangements. The Amaravathy Reservoir Project was finally chosen. Though there was some diffidence at the outset how successfully it could be possible to associate the student-campers with various works in the Amaravathy Project, the enthusiastic reception of the proposal by the Superintending Engineer, Mr. Kuttiammu, and his kind encouraging words of every kind of co-operation emboldened the President to decide that the Amaravathy Project would be the best venue of the Youth Camp.

All the seven men's colleges in Coimbatore district deputed volunteers. The strength of the camp was fixed to be only 160. It was considered that it would be difficult to manage with a higher strength than this. Hence, though many volunteered they were all rejected as soon as the strength reached the maximum limit of 160.

They Start

It was on the 30th of April 1955 that all the campers assembled on the platform of Coimbatore Junction. It presented an inspiring and impressive spectacle. Next day, on the first of May, the students and staff engaged themselves busily in making arrangements for the Inaugural Ceremony of the Youth Camp. Mr. N. D. Sundaravadivelu, Director of Public Instruction, Madras, inaugurated the Youth Camp in the evening.

Six members of the staff, three from the P.S.G. College of Technology, and three from the P.S.G. Arts College, with Mr. G. Shanmugam as leader, were in charge of the Camp.

Various committees composed of staff and students were constituted—Mess Committee, Welfare Committee, Entertainment Committee, etc. These committees met periodically to discuss and decide certain matters. Every opportunity was given to encourage the student-initiative in organising and running a camp. All decisions regarding the internal planning of work for the volunteers and the camp life were taken by the council consisting of student squad leaders and staff members of the camp. Such joint sharing of responsibility among the staff and students paved the way for the smooth running of the camp. Students belonging to different colleges who had joined together for a definite endeavour moved with one another intimately and soon a very healthy and wholesome spirit of comradeship was established. It was on this bedrock of fellowship that the success of the camp was built.

The Day's Work

Campers used to be at work at 7-30 a.m. promptly. They worked for 4 hours till 11-30 a.m. in the channel and worked for 5 hours till 12-30 p.m. in the other types of works. After their hard jobs, they had a cup of tea on chill days and a cup of lemon squash on warm days. Campers enjoyed bathing under the taps and the copious flow of Amaravathy water regaled them.

Ramakulam Channel

Among these three works, the excavation of the channel was the most strenuous one. It needed manual strength, skill and stamina. As the excavation became deeper and deeper the earth became hard. It did prove a true test to the power of endurance and perserverence of the able bodied campers. The initial enthusiasm flagged as the work became tougher and not many could continue this work in the same strain after about 10-30 in the morning. The weaker ones among the campers could not withstand the strain and they used to take rest at frequent intervals. But the more many ones battled with the hard earth with pride. The campers handled the pick-axes, hammers, shovels, mammatties, pans, etc., very tactfully and in the long run learnt the art of using them. Their tender palms, unaccustomed to rough usage like this, were irritated and some had bruises and blisters. The application of vaseline and liniment gave them the needed comfort. The forcible strokes of pick-axes and the heavy pounding of hammers by the sturdy campers offered an interesting spectacle. Two among them, Messrs. V. Seshagiri Rao and N. R. Subramanian deserve mention for their hard work. Rain or sun did not scare them. Campers vied with one another in snatching a buster to disturb the unyielding soil.

The Thrill of a Job Done

The excavation of the channel progressed satisfactorily under the guidance and supervision of Mr. Ranganathan, Assistant Engineer. The excavation had to be speeded up as it had to be completed before the closure of the camp. It was possible for the camper to excavate the channel as per specifications. It was left to the Project authorities to give the finishing touches. The quantum of work turned out by each every day for 4 hours was assessed by the Project authorities in terms of wages at Re. 0-7-1 per individual. On the occasion of the Valedictory Celebrations, water was let into the canal dug by the campers. It was one of the memorable events of the camp. The thrill of water flowing through the canal dug by their own hands sent the campers to ecstacies and as the water rushed through the canal their shouts welcoming 'Amaravathy' rent the air.

Elementary School

Most of the labour for the construction of the Elementary School was contributed by the campers while the materials were supplied by the project authorities. The school has 4 rooms

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24 feet by 14 feet each. The rooms were constructed with bamboo trellis over a dwarf wall 3 feet high. The roof was thatched with bamboo mats.

Kala Mandapam

Under skilled guidance, the students had also erected an open air theatre costing Rs. 4,000. Most of the labour for the construction was contributed by the students. Mural paintings done by student-artists and a staff member have decorated the theatre. The students were assisted by the skilled masons and others. But students also acquired the skill erelong. They raised the wall up to a height of 13 feet. It was nervous to see the students at work on the scaffolding at that great height. The movement of the pans of cement mortar and bricks from one hand to the other standing in rows from the ground below to the scaffolding at the top was orderly and artistic. The campers had learnt how to mix cement and sand, how to plaster the walls with cement, how to erect trusses, lintels, etc. In addition to the manual labour, the students had helped the authorities to raise a fund for the 'Kala Mandapam.' A drama "Pon Malar" was staged by the campers under the auspices of the Project Officers' Club which fetched over Rs. 2,500 for the fund. Such work of the Kala Mandapam that needed skill and experience was done by paid labourers. It was completed and the 'Youth Camp' had the glory of celebrating its Valedictory function in the same Kala Mandapam.

The Modified Programme

In the second fortnight, in order that the students may get a diversified experience in the various works connected with the construction of the Dam, the Superintending Engineer was kind enough to draw up a modified programme. The 16 squads were re-arranged into 12 squads. Each squad did a different type of work every day in rotation. They worked shoulder to shoulder along with the skilled labourers in the masonry dam and earth dam. Excavation of foundation, drilling, grouting, benching, dewatering, laying of train lines, etc., were some of the tasks which they tried to do to the best of their abilities. Workshop work and servicing of vehicles gave them some mechanical training.

Among these, the most interesting hard jobs were the laying of Truck lines and loading of Trolley trucks with stones collected at the quarry sites. At each session of 5 hours of work one squad was able to fix up not less than five lengths of truck lines. They had laid truck lines for about 630 feet and they had loaded and unloaded rubbles of 110 trucks amounting to 27½ units. Each student was able to carry only one rubble as it was very heavy. When the work turned out was assessed the wage earned was 11 annas for the 5 hours of work every day by each. The ghat road engaged a squad every day. The Health Officer of the Project was able to provide opportunities for a few volunteers in the camp to cleanse the insanitary areas. The Medical Officer engaged a few students every day in dispensing medicines.

Unflagging Enthusiasm

As days went on, some of the lean and weak volunteers showed signs of slackness. Many, to our surprise, continued to do their manual work with sustained vigour and enthusiasm. A physically handicapped camper also with a decrepit leg continued to do light tasks. Not being accustomed to hard labour of any kind and not having the physical stamina to stand the test of continuous physical labour, some of the volunteers were unable to work continuously for 4 hours in the channel and for 5 hours in the other works. Some would take rest at constant intervals. But their enthusiasm and determination to do the work never flagged. Their devotion to work had earned the appreciation of the Superintending Engineer, Assistant Engineers, Junior Engineers, Mazdoors, etc. The Chief Engineer, Mr. U. Ananda Rao, had remarked that he could not distinguish a student labourer from a mazdoor working in the Dam. Mr. Kuttiammu, Superintending Engineer, had, in his report, expressed his appreciation of the work turned out by the students and their disciplined life in the camp.

Apart from Manual labour, the campers evinced interest in social work activities. An adult school was conducted. There was an average attendance of 45 adults. Hindi classes for the project officials were held. Twelve regularly attended. Another group of students went to the workers' colony and childrens' park and played with them and kept them occupied through healthy recreation during their leisure hours in the evening.

It was arranged to distribute milk, prepared out of milk powder gifted by the Guild of Service, Coimbatore, to about 900 poor children daily in the workers' colony. It could no tbe continued long as the milk powder was exhausted. Students who were interested in social work volunteered for this milk distribution. Every week dramas were staged and films were screened as an entertainment to the workers.

Socio-economic Survey

A group of students undertook a socio-economic survey of all the residents in the Amaravathy Project to study in detail the life and aspirations of the people belonging to different income groups in the project. It is proposed to bring out a pamphlet on the findings of the socio-economic survey.

The 'Youth Camp' has incurred an expenditure of Rs. 11,163–15–0. This expenditure includes travelling expenses, transport charges, mess charges and other incidental expenditure.

The camp came to an end on the 30th of May and the closing days of the Camp were marked by many celebrations and farewell parties. Sri M. Bhaktavatsalam, Minister for Agriculture, presided over the Valedictory Celebrations. Kala Mandapam and the Elementary School were declared open by the Minister. In his address he paid eloquent tributes to the Federation and its President for their remarkable achievement. He referred to the fears and misgivings of the Superintending Engineer when first he agreed to let in over a hundred students from colleges to take part in a construction which was already in progress. He expressed his appreciation that they had proved themselves worthy of the trust and confidence reposed in them.

The campers packed their kit and left the camp on the 30th of May casting love-lorn looks at the Amaravathinagar Project that had so hospitably treated them for over four weeks, that had shaped them into creative artists, that had given them a true insight into the Engineering skill that builds the Dam. All returned with a newly acquired sense of dignity of manual labour and healthy regard for the manual labourer. Fuller light on what the camp has meant to each camper individually is being assessed from the replies to the questionnaire prepared for the purpose and from the diaries submitted by each volunteer recording the amount of work done and his reflections.

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Cover Page: LOWER BHAVANI PROJECT—With the installation of the mechanical sluice gates, the work of the Lower Bhavani Project is practically over. The Goddess Bhavani is now tamed—She will now smile and her ripples and bubbles will murmur sweet words to the peasants of Coimbatore district.

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Planning for Prosperity

By DR. J. C. GHOSH, Member, Planning Commission

"Do not talk of God to a hungry man. Give him food." This appeal of the Mahatma was the guiding principle in the First Five-Year Plan. Hunger must be shown the door, before one can think of social or moral development. Time was, when in the plains and river valleys of India, food could be had with little effort. But as the population grew, home-grown food became more and more inadequate for our needs. In the critical year of 1951–52, we had to beg of America to give us a big loan which was used for importing wheat to feed our starving millions. Political independence has no meaning if such enconomic dependence were to continue.

Food Production

Accordingly, our efforts in the first plan have been mostly directed to increased food production. More and more waste lands have been brought under cultivation. Our people have learnt to use modern machines, like tractors and bull-dozers, for land reclamation. Crop production is ceasing to be a gamble in monsoon rains. Major and minor irrigation projects are being completed all over the land, so that not a drop of rain, which falls on the soil of India, may flow into the sea, except as her people determine it. And in these irrigated lands, intensive cultivation is being practised with improved seeds and increasing supply of manure. Synthetic fertiliser factories have been set up which capture the nitrogen of the air and convert it into a rich plant food. Success has crowned these efforts. Not only self-sufficiency has been achieved, but Government have decided to keep a reserve stock of one million tons of cereals and modern warehouses where the danger of spoilage is small, are being built for this purpose. Having turned the dangerous food corner, Government are now free to plan for prosperity and richer life. We are living in a machine age; those countries are prosperous whose people know how to make machines and use them for productive purposes. In ancient civilizations, prosperity and the fuller life of the few were often based on the slave labour of the many. But today machines may function as slaves; and human muscles need not bear the pain and the drudgery which machines can bear. A man who has the skill to use a machine consuming one unit of electrical energy can do the work which a dozen men can do otherwise. He therefore becomes as efficient as a dozen men, and in one day he does the work of a dozen days. There is again no end of things which these machines can do. Under the guidance of skilful masters, they reclaim the land, till the soil, sow the seeds, harvest the crops and process the produce of the fields and livestock into palatable food. They transport men and goods, on the land, over the sea, and through the air. They can carry messages and even transmit one's voice and pictures to distant lands in practically no time. They can transform raw materials, the minerals within the earth and the vegetation on its surface, into finished goods of almost infinite variety, which men have need of, or wish to possess.

Heavy Industries

In the Second Five-Year Plan, it is intended to pay special attention to the development of heavy engineering industries which will enable us to make machines and capital goods. The basic raw material for making machines is iron and steel. In India, our production of steel today is 1·2 million tons per year. This indigenous production is far below our existing requirements. We can afford to have only limited import of steel and the result has been that even a decade after the war, we have still to ration the use of steel. The pity is, that such a situation should have continued when our cost of manufacture of steel is the cheapest in the world, and we have such an abundant supply of rich iron ore and cheap coal that we can be one of the world's largest steel producers.

A bold programme of steel production has now been adopted and it is hoped that by 1961, the expansion of the existing steel plants at Tatanagar and Burnpur and the establishment of new ones in Orissa, Madhya Pradesh and in the Bengal-Bihar coal fields, will enable us to step up production to six million tons. For the three new plants, we shall have at our disposal, for design and erection, the technical knowledge of the three largest steel producing countries of Europe—Russia,

Oversubscribed

The Government of Madras asked the citizens for a loan of Rupees seven crores. But the people gave instead Rs. 13·72 crores. In one word it means CONFIDENCE. In effect it means: Take all that you want and quite a lot more. We know our money is in safe hands. Give it back to us in the form of more water for our fields, more power for our homes and factories, better roads, more schools, good seeds, more manure . . . Plan is the instrument for executing these programmes of reconstruction. With this spirit no one need be dispirited over curtailed expenditure or pruned estimates. When the spirit of man is aroused Plans have a way of going ahead, finance or no finance.

Shri Sri Prakasa, Governor of Madras, addressing the joint Session of the Legislature on 1st August 1955.

Germany and the United Kingdom. It is hoped that between the three of them, we shall be able to pick up all that is worth knowing about the manufacture of steel. Indian technologists and engineers have the well-deserved reputation of imbibing new knowledge quickly and applying them to practical ends. The magnificent dams, the canals and the power-houses in the many river valley projects that have been, or are nearly completed, bear eloquent testimony to their skill and ability. We have no doubt that the new steel plants will give them scope for displaying equal ability in an allied field.

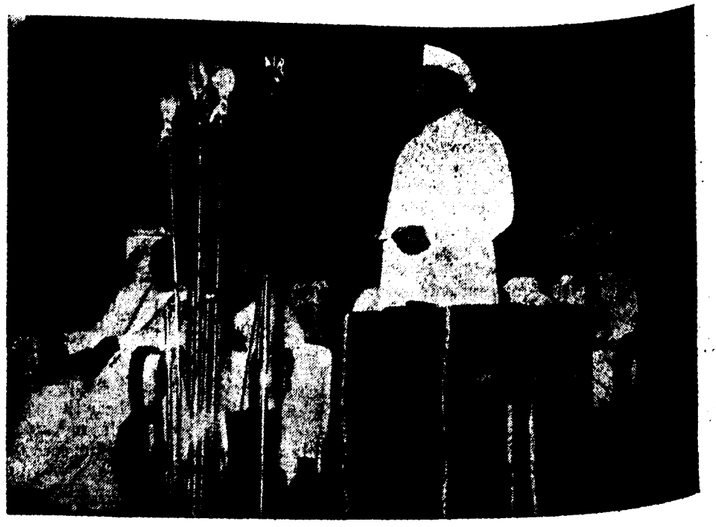
Fuel and Power

The energy of the falling rain is being converted into electric power in our river valley projects. But that is not enough. The per-capita use of fuel and power is today the measure of a country's industrial strength. England with its population of 45 million, raises annually more than 200 million tons of coal from her mines for purposes of industrial and domestic heating, for production of power and for use in steel making. In India, our present production is only 36 million tons of coal. It is intended to raise this production to sixty million tons per year. This is a key industry and too much attention cannot be paid to its development and expansion along right lines.

Again, coal is a wasting asset and every effort should therefore be made to ensure its maximum extraction from the mines and its best utilisation. At Dhanbad, Government have established a School of Mines for the training of mining engineers, a Fuel Research Institute and a Mining Research Institute for research on problems associated with the extraction and utilisation of coal.

Synthetic Oil

A spectacular example of what research can do is provided by the wartime production of petrol from coal in Germany. Petrol and diesel oil are indispensable for aircraft and mechanised transport. Germany had no oil fields of her own, and her supply of oil from overseas was cut off by the Allied blockade. But before the war, she had developed two processes for making oil from coal; and these processes soon formed the basis of synthetic oil production at the rate of eight million tons a year. India has oilfields in the far eastern frontiers of Assam, and the production is no more than 8 per cent of her peacetime requirements. Government have therefore agreed to put up a synthetic oil plant in the near future, which will use our very large reserves of third class coal for manufacture of aviation petrol and other types of liquid fuels in quantities sufficient to meet the peacetime requirements of the Indian Defence Forces.



Shri Sri Prakasa, Governor of Madras, inaugurating the Madras Sangeet Nataka Sangham at Annamalai Manram.

Today, it is universally recognised that the greatest asset of a nation are not the minerals within the country, but the storehouse of scientific knowledge and technical skill in the possession of the people. Unlike natural resources which are depleted with use, this asset improves by use and is enlarged by sharing. In the Second Five-Year Plan, the highest priority will, therefore, be allotted to the development of scientific and technical education and the training of skilled workers.

Modern Tools

It is time that we recognise that hard work alone is not enough. The wealth that a man creates with his primitive skill and ancient tools is insignificant compared with what a skilled worker can do with his up-to-date tools. The real problem before us is to equip the workers of India with modern tools and modern skill, so that they can create enough wealth to enjoy a full life, so that work can be the happy occupation that it should be and not the competition in human endurance that it is. Modern tools are, however, capital goods which can either be had on loan, or have to be paid for in cash. We believe that self-help is the best help; hence the more we save to buy capital goods with, the quicker shall we be marching on the road to prosperity.

Planning for Welfare

Planning for economic prosperity is only part of planning for welfare. A healthy and cultivated mind in a healthy body—that is the kind of plan which every citizen must have for himself at this dawn of new life in India. There is in him the dormant energy to achieve this end. The social welfare organisations of the State are mostly instruments to release this dormant energy. They are there to awaken in him the consciousness of his own ability, the will to enrich and transform his mind through experience and knowledge, and a determination to keep in good health the body, which is the temple of the spirit. It is intended to cover the whole country in the near future with a network of schools, health centres, National Extension Service blocks and Community Development Projects. These are expected to be the nuclei round which will start a people's movement for growing better men, who will take pride in creative work, hate to be parasites, place enterprise ahead of security, learn the secrets of healthy living, will think of "ignorance as the curse of God, and knowledge the wing wherewith to fly to heaven." They are intended to be the agencies through which the pathetic contentment of a helpless and ignorant people, resigned to the vagaries of fate, will be replaced by a mental unrest and a faith in human effort. It is when human nature in India enters upon this phase of development that planning for welfare may be considered to have achieved its main purpose.

(By Courtesy, AIR.)

A view of the audience at the inauguration of the Madras Sangeeta Nataka Sangham at Annamalai Manram.

Do You Know?

1. The Constitution has set a limit of 15 years after which all work of the Central Government will have to be carried on in Hindi instead of in English.

2. A people's encyclopædia, which will supply information about the modern world in simple Hindi, is under preparation by the Central Ministry of Education. The first volume has already been completed.

3. With the introduction of a Hamper Box service in the compartments of trains on sections of the Eastern Railway, a new advance in railway catering in India has been made. For a nominal extra charge passengers can now order a meal containing items of their own choice in a box, and eat it at any time they choose.

4. The Executive Council of the Children's Film Society have decided to have two children's films produced by March 1956. The Council would invite writers throughout the country to send suitable stories for the films. Three stories will be selected and the Society will pay Rs. 3,000 for each story.

5. The Bhakra Dam, when complete, will be three times taller than the Qutub Minar in Delhi.

6. The Government of India have decided to award scholarships for post-Matriculation studies to all eligible Scheduled Castes and Scheduled Tribes candidates who have passed in their last annual examination and applied for scholarships.

Facts and Figures

Till the end of March 1955, the total value of people's contribution towards the Community Development Programme in terms of labour, land and cash amounted to Rs. 10·21 crores as against a total Government expenditure of Rs. 20·50 crores.

The staff employed in the Community Projects and National Extension Service Blocks on March 31, 1955 numbered 14,392.

Community Development in Madras

Progress reports coming from the Community Development areas in all parts of the State follow almost the same pattern and tell the same story. It is the story of the changing attitude of the rural folk to their problems, their surroundings, and above all, their future. In the early days of the Community Development Programme, when the officials went about collecting data and surveying rural resources and requirements, people were perturbed. Was this the preliminary to some new controls, rations and coupons, they asked themselves, and were naturally suspicious of the statements that a new programme was being launched for their welfare, their uplift.

When the survey and preliminary investigations were over and the people were approached with plans for building roads, digging wells, starting medical centres and opening new schools, and when they were told that all this could be done by the people themselves, they grew cynical but were no doubt interested and willing to experiment the idea.

The next stage came when the plans got under way and with the growing participation of the people the roads were built or wells dug to the entire satisfaction and some surprise of the folks.

After this came the hectic days of hard work, widespread plans, and unbounded enthusiasm. The people no longer stood aloof and let the officials prepare the plans, only ready to work when they were asked to do. But they knew their requirements, their resources, their potentialities. They planned for themselves and they carried out the plans; the officials only helped them with proper direction, technical advice and if necessary with funds.

Early beginning in Madras

So far as Madras State is concerned this period had set in long ago and had well advanced. In Madras State the programme had a wider background. The idea of rural development by self-help of the villagers with the Government participation began much earlier here.

Immediately after the assumption of popular Ministry in Madras State in 1946 the Government had chalked out a Rural Welfare Scheme with the primary objective of helping the rural population to build a new life for themselves by means of sound agriculture and other subsidiary economic developments. The programme which was approved by Mahatma Gandhi was in operation in 108 selected firkas in the composite Madras State (i.e., including the present Andhra State) until the National Extension Service was launched on all-India basis in October 1953, and these two programmes were merged in Madras State.

Meanwhile in 1952–53, the Community Project Scheme was introduced all over India and out of the 55 rural-cum-urban Community Projects selected throughout the country, four were allotted to Madras. Each of these projects consists of about 300 villages and a population of about 200,000 persons.

The next year the Community Project Scheme was launched in four Community Development Blocks of the size of about 100 villages each with a population of about 66,000 people.

The National Extension Scheme was inaugurated on 2nd October 1953, in 28 blocks, each block consisting of about 100 villages covering a population of about 66,000. The scheme was later extended to 20 additional blocks of about the same size.

Out of the 48 National Extension Service Blocks in the State 20 were converted into Community Development Blocks with effect from 1st April 1955.

Target Achieved.

Thus there are at present four major Community Projects, twenty-four Community Development Blocks and twenty-eight National Extension Service Blocks. All these schemes together cover a population of about 76 lakhs out of a total rural population of about 290 lakhs in the State. The target of the First Five-Year Plan to cover one-fourth of the rural population

Sri M. Bhaktavatsalam, Minister for Agriculture, switching on an "Original Heilderberg" automatic printing machine at the Southern Regional School of Printing on the occasion of the opening of the school at the Central Polytechnic, Madras.

by the end of March 1956 has already been achieved in Madras State, a year in advance. The entire State population is expected to be covered by the Community Development Programmes by the end of the Second Five-Year Plan, i.e., by 31st March 1962. In these areas the spirit of self-help and the desire to lead a better way of life have taken deep roots and this spirit and desire are fast spreading to neighbouring areas.

New Life in Villages

The reports coming in from various Development Blocks are no longer the dull, drab, monotonous tables of figures and charts. They are interesting accounts of a new life, throbbing with a new vitality, a new spirit among villagers. These stories show the new trends in rural areas, and ardent desires till now dormant in the community which have taken constructive shape in recent times with the new awakening among all sections of the population, men, women and children.

In Tanjore district, the "Granary of the South", Community Development Programme has been launched on an extensive scale. Besides the two N.E.S. Blocks inaugurated on 2nd October 1953, covering an area of 274·92 square miles with a population of 211,934 persons which have been converted into Community Development Blocks with effect from 1st April 1955. A special N.E.S. Scheme has been introduced in all the villages in the Revenue Divisions of Kumbakonam and Mayuram comprising of 893 square miles and a population of 919,962. Under this special scheme emphasis is laid on the villagers helping themselves, constituting themselves into Village Development Panchayats and determining their requirements with the guidance and assistance of the N.E.S. staff. Intensive Cultivation Programme has been given the topmost priority in the scheme.

"At the time of the inauguration of the scheme, there was a mixed reception to the scheme. Now the people have come round to a certain extent, to think, plan and work for themselves and to develop ideas of self-help, self-reliance and self-confidence. They are now coming forward to give their lands free for forming roads and to extend their help to achieve improvements by their labour. There is a healthy competition in offering contributions in labour, kind and cash for development works to be taken up and in securing more amenities for their villages. In some villages, the villagers have decided that each family in the village should contribute free labour for a day or two for certain items of community works and they have also arranged for free food for those who have taken part in the execution of the work by voluntary labour. This has given a great incentive to men and women, old and young, to come in increasing numbers and join in the common endeavour in carrying out the work like formation of roads, deepening of tanks, etc. The introduction of this scheme to some extent is responsible for the eradication of internal differences among the villagers. Another feature of the Community Development work is that the idle man-power available in the countryside has been utilized to the best possible advantage for the welfare of the community as a whole. The

Sri M. Bhaktavatsalam, Minister for Agriculture, examining the "Original Heilderberg" automatic printing machine at the Southern Regional School of Printing.

Governor of Madras inaugurated on 29th July 1955 the band saw installed in the Tinnevelly Co-operative Works for Ex-Servicemen—Photo shows the Governor switching on the machine.

enthusiam exhibited by the villagers is so much that owing to paucity of funds, it is not possible to meet their entire requirements."

Newly Found Initiative

In Tirumangalam firka in Madurai district the old Rural Welfare Scheme had already installed in the minds of the people the idea that self-help and mutual assistance alone will bring prosperity to them. People's participation, the cardinal principle underlying the Community Development Programme has gained much momentum and tempo in the last two and a half years. Their ready participation in the programme can be witnessed in all phases of human requirements, viz., Communications, Water-supply, Public Health, Sanitation, Co-operation, Agriculture, Animal Husbandry and Social and Recreational activities.

"In this block comprising 112 villages with a population of 122,195 people the old days of 'masterly inactivity' is gone. One sees round only cheerful faces, bright with hopes. Factions have gone down and a belief in the policy of 'Live and let live' is gaining ground. The idea of co-operative effort with its resultant advantages is being imbibed, though slowly, but steadily."

"Local leadership and intiative which were latent in the humble folks are manifesting themselves in a wide range of activities. People have come to know of the Biblical saying: 'Ask and thou shalt be given.' People are now boldly voicing their requirements in common and this naturally brings the Government to attend to their needs."

From Indifference to Active Co-operation

In Tiruchirappalli district the N.E.S. Scheme was introduced in 1953 in three blocks out of which two have since been converted into Community Development Blocks. Another block was inaugurated in Alangudi in October 1954.

In the early stages, the people as a whole were rather hesitant to participate and as such the scheme had to start as a Government Programme with people's participation. But, later, as the people realized the advantages gained by the villages which joined this movement earlier they came forward in large numbers for improving their lot by forming new roads and putting up drinking water wells, adult schools and radios, etc. This itself was a healthy sign of the interest taken by the people in working their plan. Thus the integrated plans for all the blocks were drawn up based on the felt needs of the people.

"The old casual and indifferent way in which people used to treat the works under execution in their villages is gradually disappearing. This is illustrated by the way in which the people take to improved methods of agriculture and better sanitation. Though this cannot be termed as a cent per cent change still there has been a marked change in the pattern of participation. Instead of the people participating in the schemes of Government, now the people expect the Government to help them to carry out their schemes for their own betterment."

"A concrete instance where the typical Community Development spirit manifested itself occurred in Perumalapalayam village in Musiri block. This is a small hamlet and was without any road connecting the main road. The villagers wanted that a road should be laid and approached the Panchayat Board. The Panchayat Board was prepared to form the road, but to avoid land acquisition, it had to be unnecessarily long and circutuous. But the villagers decided to have the road by a direct route passing through patta lands and the owners of these lands gifted their lands required for the road."

The total road work was parcelled out into small bits and quota for each family was fixed. Men, women, boys and girls participated in the work and completed their quota with a keen sense of duty and joy and formed the road for a mile. It was a good example of what co-operative effort can achieve. Exhilarated by this example, the villagers have this year proposed an extension of road facilities connecting their village with the main road. Several Panchayat Boards have taken up works and schemes such as communications, wells, buildings, drains, latrines, libraries, social education clubs, radios and games materials.

New Leadership, New Atmosphere

In Chingleput district, near Madras City, where there are three Community Development Blocks functioning in 319 villages with a population of 309,936 persons, a new atmosphere has been created. Persons holding a good record in agriculture, social service, good house-keeping, cattle care, etc., were constituted into a committee which was publicised in a chart painted on the most prominent wall in the village. The chart provides columns for the next two years in which the names of the new record-holders to be organised into committees will be publicised. This device has tended to keep the village leaders on their toes, while at the same time gratifying those whose names have been publicised.

Sri K. Kamaraj, Chief Minister, addressing a public meeting at Karaikudi in connection with the opening of a local water-supply scheme.

"These wall charts giving statistics of population and production and leaders have created a new consciousness in the villages of Chingleput district. The villagers know more about themselves, while the leaders publicised have a new sense of responsibility. Civic service of the social nature is being shown in organising youth clubs, adult information centres, civic improvement squads, etc. The names of the organisers of each of these activities, and also of others concerned with the health, education and actual activities of the people of the ward are publicised as social leaders."

The youth of the village has been organised for development work by being formed into teams of development volunteers, six men and six women in each village, who are given uniforms and badges. The duties of the volunteers are to improve the targets of development by house-to-house visits. Youth clubs have been organized to provide sports and dramatic entertainments and teach people to make best use of their leisure. Children's parks consisting of a ladder and slide outfit, swing outfit and a see-saw have been set up in about 10 centres per block during this year at a cost of Rs. 150 each to the block, with an equal contribution from the villagers, in order to provide particularly the children of the poor with exercise and amusement, which they cannot otherwise have. It has been programmed to provide at least 30 more such combination sets during the plan period and cover almost all the areas where schools for the children are available.

"Improvement to houses at least in the way of white walls, painted doors, properly thatched roofs with newly cut hay spread over is being stimulated by grant of materials required. Walls are being rasied at least to one foot, and provision of doors and windows with the requisite heights arranged wherever they are badly needed. This experiment was tried in the villages of Kulipanthandalam, Mahabalipuram and Poonjeri in Tirukkalikundram block, besides some more villages in other National Extension Service and Community Development Blocks. On an average at a cost of Rs. 5 a mud hovel has been transformed into a properly white-washed and thatched house. Adult centres have been converted into listening-in-clubs at which newspapers and books are read twice a week to the assemblage of illiterate persons."

Gramaseva Sanghams

In Malabar district, 'Gramaseva Sanghams' have been organized by the people in every village and all the activities are carried out through them. These sanghams are purely non-official bodies and are constituted by the village leaders. The felt needs and the immediate problem of a village are brought to the notice of the Sanghams and they are solved by the people themselves with the assistance of the N.E.S. staff.

"Public contribution is insisted on for all activities in these blocks and the villagers have been magnificently contributing their share, wherever required. The people have begun to realise that N.E.S. is a people's programme and that they should not look forward to Government help for everything. They have never failed to come forward with their share wherever and whenever necessary."

"The villagers have been conducting agricultural exhibitions and they were successful. After the introduction of the N.E.S. Scheme in these areas, the percentage of literacy is steadily going up. Adult literacy schools are functioning in the villages and the pupils show much eagerness for learning. Sports clubs are also functioning at different centres in the blocks. All these were organised with 50 per cent contribution from the villagers. The villagers have also got a community hall with reading room and library in almost every village. Eighteen buildings worth Rs. 54,000 were put up by villagers in Tellicherry block with a Government grant of Rs. 9,000. This would show how the people are interested in carrying out the programme under the N.E.S. Scheme. "Kala Samithis" are also functioning in these blocks. There are also a good number of adult education centres working in these areas. Besides, youth leagues formed by the villagers are also working there. The people in these blocks are higly interested in conducting recreational programmes, folk dances, dramas and songs. The youth clubs are engaged in the physical and cultural programmes. In schools social service leagues are organised and they form the nucleus for the youth welfare organisations and educational activities."

These short accounts might have helped the reader to make an overall assessment of the increasing tempo of people's participation in the Community Development Programme, gradually converting it into a "People's programme with Government participation". Individual citizens in these areas also have shown great keenness to organise their fellow villagers in this "great adventure of building a new India", details of which would hardly fit within the compass of a short article like this.

N.C.C. Girl Cadets from Punjab recently visited Madras. They were entertained to tea by the local N.C.C. authorities.

Irrigation in Madras State

Ever since India became independent, the National Government have been engaging themselves in stupendous irrigation projects, involving huge capital outlay and human labour. The anxiety of the Government to make use of the large net-work of rivers in our country by constructing dams so that the water could be used for irrigation purposes can only be understood if we look at them in the proper perspective in the context of the fact that India is essentially an agricultural country, whose large mass of the population depend on agriculture for their livelihood. Further, the problem of giving a fillip to agriculture and placing it on a rational basis, is closely linked with the wider question of the impact of agriculture on the economy of our country. It is but fitting that the Government should have addressed itself to the task of the construction of irrigation projects, for it is a known fact that the agriculturists in our country live in a constant state of insecurity since they had to depend on rains for the cultivation of their lands.

Historically considered, the Madras State had done pioneering work in the case of irrigation projects. Under the Cholas, the rulers dug up several canals to facilitate agriculture. At the close of the British period, the Chief irrigation systems in Madras State were (1) the Cauvery Delta System, (2) the Lower Coleroon Anicut System, (3) the Ponniar River Systems, (4) The Tambraparni River Systems, (5) The Periyar System, (6) The Palar Anicut System, (7) The Cheyyar Anicut System, (8) The Poiney Anicut System, (9) Willingdon Reservoir, (10) Pelandorai Anicut System, (11) Shatiatope Anicut System.

But these irrigation projects could not answer to the needs of the State since the policy that guided them was conservative in nature and was founded on the idea of getting a *quid pro quo* for the capital invested in each of them. But the Government after the dawn of independence, wedded as it was to the Welfare State ideal, had to view this question from the point of view of the welfare of the people. Financial considerations, return for investment, etc., were only secondary.

Among the new irrigation projects in Madras, the most notable are (1) The Lower Bhavani Project, (2) The Malampuzha Project, (3) The Manimuthar Project. The other projects under execution are—

1. Mettur Canal Scheme.
2. Amaravathi Project.
3. Vaigai Reservoir Project.
4. Sathanur Project.
5. Krishnagiri Reservoir Project.
6. Araniar Project.
7. Walayar Reservoir Project.
8. Mangalam Reservoir Scheme.

The Lower Bhavani Project

The Bhavani is a tributary of the Cauvery and has a major portion of its course in the Coimbatore district. It drains a catchment of 2,376 square miles. The project consists in the construction of a dam across the river about ten miles upstream of Satyamangalam. The dam is 28,862 feet long. The main canal taking off on the right side is about 124 miles long and it will irrigate a new area of 207,000 acres mostly dry crops and cotton. The cost of the project is estimated to be nearly Rs. 10 crores. The work on Headworks is completed and that on Canals is nearing completion. The project has already come to beneficial use.

The Malampuzha Project

The project is for the construction of a dam across the Malampuzha river, a tributary of Bharatapuzha, about 5 miles from Olavakode in Palghat taluk of Malabar district. The capacity of the reservoir is about 8,000 M.Cft. The dam will be 6,066 feet long made up of five sections. There will be two canals, one on the left and another on the right for irrigating II crop 40,000 acres and 6,000 acres respectively. The project is expected to produce 11,500 additional tons of rice. It is expected to stabilise the irrigation over 46,000 acres of II crop. It is estimated to cost Rs. 5·2 crores and

Sri K. Kamaraj, Chief Minister of Madras, visited the School of Technology at Coimbatore on 19th August 1955.

Sri K. Kamaraj, Chief Minister, during his recent visit to Coimbatore, inspected the Departmental Tractor Workshop. In the picture is seen a Diesel Engine Small Tractor.

was sanctioned in 1949. The work on the Left Bank Canal is almost nearing completion; the Right bank is just taken up. The project has already come to beneficial use.

Manimuthar Project

This project is for the construction of a reservoir across the Manimuthar river (a tributary of the Tambraparni river) 4 miles from Kallidaikurichi in Tirunelveli district and taking a canal therefrom. The catchment area of the river at the site of the reservoir is 62·4 square miles. The capacity of the reservoir is 5,511 M.Cft. The total length of the dam is about 11,145 feet. It would irrigate about 20,000 acres existing under rainfed tanks. It will also provide assistance to 83,000 acres of existing irrigation under the Tambraparni system. An extra quantity of 20,000 tons of rice is expected to be achieved by the project. The total cost of the project is estimated to be Rs. 505 lakhs.

Mettur Canals Scheme

The proposal is to take a canal from the Mettur Reservoir for irrigating 45,000 acres in Coimbatore and Salem districts. The canal in its two branches east and west would irrigate 27,000 acres in Salem and 18,000 acres in Coimbatore districts, respectively. The schemes was sanctioned in 1949 and it will cost about Rs. 266·85 lakhs. The additional food production is expected to be about 17,400 tons of foodgrains.

Amaravathi Project

The project consists of a storage reservoir across the river near the foot of the Western Ghats. The dam will be about 3,715 feet long. The project is expected to irrigate 15,000 acres of land besides stabilising 32,000 acres existing. Its total cost will be of the order of Rs. 297 lakhs. The additional food production expected is 5,400 tons of rice and 2,200 tons of millets.

Vaigai Reservoir Project

The scheme is to divert a greater part of the surplus waters of the Periyar which now find their way into the Arabian Sea. The Vaigai Reservoir is proposed mainly to store the waters drawn off from the Periyar lake, through the existing Periyar Tunnel and secondarily to store the surplus waters of the Vaigai river which now go to waste in the sea. The project will be worked in conjunction with the Periyar Hydro-Electric scheme, which is also under execution by the Electricity Department. The dam to be constructed across Vaigai is near Narasingapuram, 20 miles above Peranai and will be 11,675 feet long. The reservoir will have a capacity of 6,800 M.Cft. Its total cost will be Rs. 330 lakhs. The project is expected to irrigate an additional crop on an area of 20,000 acres and the additional food production expected is 7,500 tons of rice.

Sathanur Project

This is in North Arcot district. The present project consists of a storage reservoir across the river Ponniar about 4½ miles from Sathanur village and 22 miles from Tiruvannamalai. It will bring to irrigation an extent of 16,700 acres of new land and assure supplies of 3,300 of existing wet lands (15,300 in North Arcot and 4,700 in South Arcot district) besides benefiting the existing ayacuts below

(*Continued on page* 20)

Sri K. Kamaraj, Chief Minister, during his recent visit to Coimbatore inspected the Departmental Tractor Workshop. The picture shows a cutting machine at work.

Our Legislature

The Regulation of Debate

By Sri A. J. SABESAN, M.A., Secretary to the Council

"Debate has been historically and is still theoretically a determinant of legislative action. Only through discussion and the expression of opinion by rank and file as well as by leaders can a Legislative Assembly secure the necessary information, isolate issues, determine the 'sense' of the body and proceed to an intelligent decision."

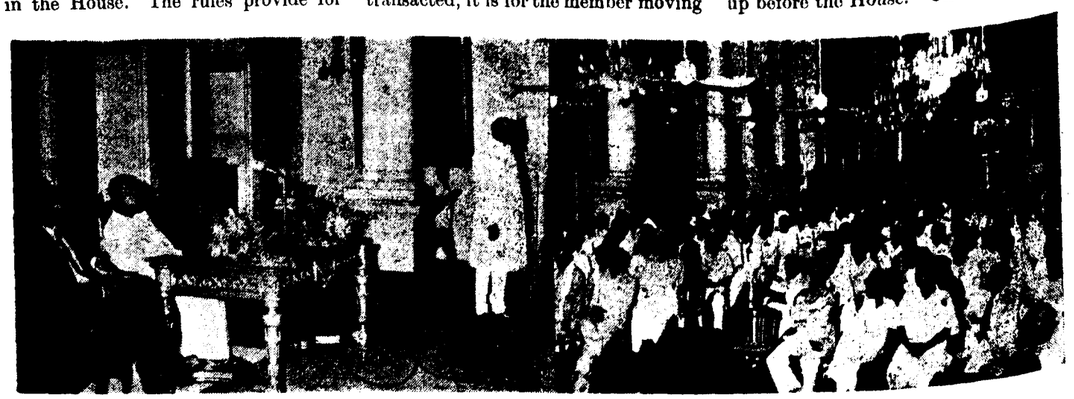
—Lindsay Rogers

Parliament itself as modern Legislatures are usually called derives its name from *Parlement* (O.Fr.), any meeting for discussion or debate (*Parler* to speak) and originally meant a talk, a Conference, and modern parliamentary Government may be said in a sense to be "Government by discussion" with the nations's representatives. But as distinguished from a deliberate Assembly in the ordinary sense, the debate has to be conducted with freedom and in an orderly manner with the decorum and dignity befitting the "Council of the Nation". There are formal conventions governing the standard of speaking and behaviour in the House. The rules provide for maintenance of order and acceleration of business. Tradition and etiqutte combined with the rules of the House regulate the procedure by which the debate in the Legislature is to be conducted.

Quorum

Any meeting to be regularly constituted must have a certain necessary attendance or "quorum" as it is called. Under Article 189 (3) of the Constitution, the quorum for the Assembly is 24, and for the Council 10. The attention of the Chair may be drawn by any member of the House to the want of quoram at any time. The division bells are then rung and if after an interval of not less than 15 minutes a quoram is till not present, the House is adjourned to the next day on which the House ordinarily sits or to a later hour on the same day to be named by the Speaker/Chairman. (There is no prescribed method of counting and is usnally done by eyesight.) It is part of the function of the Government Whip therefore to "keep a House" when official business is on and when non-official business is transacted, it is for the member moving the motion to choose a subject which would attract other members. There have been occasions in the House of Commons when a member had himself counted out to his utter confusion and disappointment. Sir Reginald Palgrave records the case of a member who angered by the scanty attendance, "joked about the crowded benches, the packed House that he pretended to see around". Mischael MacDonaugh records a still more amusing story of a member who began ironically, "Mr. Speaker, look at the condition of these benches—is it not disgraceful that the weighty topic on which I propose to address the House has not attracted even the presence of a quorum ?" The jest was fatal in both cases. A count was taken and for want of a quorum, the House broke up.

There can be no vote and no decision without a precisely framed question. A proposal submitted to the House for formal decision is, therefore, framed in such a manner as to raise a definite issue when it is called a motion, and is moved by the member in whose name it stands on the day it comes up before the House. On such motion being moved and seconded (where necessary), the Speaker/Chairman states or reads out the question (in the same terms as the motion) as the subject of debate. Members speak on it in the order in which they are called upon by the Speaker/Chairman and on the conclusion of the debate, the Speaker /Chairman puts the question to the vote of the House and decides by voices whether in his judgment the Ayes or Noes have it. If the opinion of the Speaker/Chairman as to the decision of the House is challenged, a division follows.



Shri Ajit Prasad Jain, Union Minister for Agriculture, inaugurated the State Farmers' Forum at Rajaji Hall recently

Division

Ministers who are not members of the House leave the House as they have only the right of taking part in the discussion of the House and not in voting. ...The electric bells in and around the Chamber "ring out a summons to Members to hurry to the Chamber for the division" and they come rushing into the House from the lobbies, the library, the canteen or the party room. After a certain interval, the doors are locked, and the opponents and proponents to the motion in each block successively are counted by the Secretary as they rise in their places on being called by the Speaker/Chairman. After all the blocks have been so counted, the result of the count as given by the Secretary is announced by the Speaker/Chairman to the House and is not to be challenged. The votes of members are published in the official debates so that the constituencies know "who did and who did not do their duty". Before the result is announced, the Speaker/Chairman may, if satisfied that any mistake has been committed in the recording of the votes, allow the same to be corrected. The rules of the Council further provide that if in the Chairman's opinion a division is unnecessarily or frivolously claimed, he may call upon the members who supported and who challenged his decision, successively to rise in their places and may, after counting them, declare the result of the division. The Speaker also on one occasion declared the result after counting those who stood for and those against the motion.

Decision by Majority

The House may either agree to the motion or negative it. It may also alter the motion by agreeing to an amendment to it. Motions of formal or ceremonial nature are usually passed *nemine contra decente* but unanimity is not always possible in "an adventure involving the participation of two parties—the Government and the Opposition." All questions at any sitting of a House of the Legislature are therefore determined by a majority of the votes of the members present and voting other than the Speaker/Chairman or person acting as such. In the case of an equality of votes, the Speaker /Chairman gives his casting vote with due regard to the principle laid down by Speaker Addington in 1795, namely, to give an opportunity for the discussion of a matter when that was the question before the House and to maintain the *status quo** and also states the reasons for giving his vote in one way or the other. This imposes a great responsibility on the Chair as is illustrated by the oft quoted case of Speaker Abbot's casting vote in favour of the impeachment of Lord Melville.

The will of the majority ascertained as stated above is accepted in lieu of unanimity. At the same time, the minority in the Opposition should be at liberty to criticise the Government, for, as Ilbert says: "The arguments and attitude of minorities and individual members are factors of the greatest importance in determining the action of the Government." The rules of procedure of the Legislature, therefore, secure to the minority, the rights of stating its objections to any proposed measure and of moving amendments thereto. But a minority disagreeing with the majority on fundamental issues may practice "obstruction"—as Speaker Brand put it, "the abuse of the privilege of freedom of debate for the purpose of defeating the will of the Parliament."

In the old Legislative Council, for instance, the Bill to re-enact the Madras Hindu Religious and Charitable Endowments Act, 1923, was discussed for 12 days, 42 members spoke and 39 divisions were taken. In the House of Commons in the session of 1881 which lasted for 154 days, 14 Irish Members between them delivered, it is said, 3,828 speeches—a daily average of about 25 speeches from that group alone. Such obstruction is in the words of Redlich "the most terrible of foes to Parliamentary order."

Closure

To prevent such wilful obstruction by minorities and as a means of getting through the Government's work without waste of time, a procedure known as the 'Closure' has been adopted. This ends a debate by securing the immediate putting of the question under discussion and had its origin in the celebrated *Coup D'etat* by Speaker Brand on Wednesday, the 2nd February 1881—a historic day in the annals of Parliament—when after the

Sri M. Bhaktavatsalam, Minister for Agriculture, speaking at the meeting of the Employees' and Trade Unions' representatives held at Secretariat on 4th August 1955.

* (eg) Cut motions under Budget Demands on 17-3-1923, 18-3-1924 and 23-3-1925. Amendment to the Madras Borstal Schools Bill on 17-12-1925. Motion to postpone resolutions on 5-8-1932. Adjournment motion to postpone resettlement in Salem and Tiruchirappalli districts on 22-2-1935. Amendment to the resolution relating to elementary education in the Assembly on 29-7-1953.

House had sat for 41 hours, he took a "new and exceptional course" and put the question while the Irish members still wished to continue the debate. At any time after a motion has been made, any member may move that the "question be now put", which is, in effect, that the subject-matter of the motion under discussion be put to vote and if it is carried the question on the particular motion, the debate on which has thus terminated is put and decided without amendment or further debate. In the House of Commons when a motion that the question be now put has been carried and the question consequent thereon has been decided, the further right is given to claim subject to the discretion of the Chair and without having recourse to any further closure motion, that any further question be now put which may be requisite to bring to a decision any question already proposed from the Chair. It lies entirely within the discretion of the Chair to accept the application for closure, or refuse it if it appears to be an abuse of the rules of the House or an infringement of the rights of reasonable debate.

Two other kinds of closure have developed from this in the House of Commons, namely, the "Closure by compartments" by which a time limit is fixed by parliamentary sanction for discussion on the various portions or clauses of a particular Bill and the "Kangaroo Closure" by which the Speaker is empowered to select amendments and so called because "the House hops over the intervening amendments." In our Legislature the Business Advisory Committee of the Assembly-Council, as the case may be, recommends the time to be allocated for the discussion of the stage or stages of such Government Bills as are referred to them and on the House agreeing to the proposed time-table, it takes effect as if it were an Order of the House. The Speaker/Chairman is also given power to select amendments to a Bill or motion under consideration but only to select one out of several identical or substantially identical amendments to be proposed.

Correct Behaviour

There is a standard of correct behaviour for members of the House sanctioned by long usage in the Legislative Assemblies and intended to preserve an atmosphere of calmness and uphold the dignity of the Chair. In the words of an eminent authority on the subject:

"Members are to stay in their places during a debate, not to walk about the House or stand. When they enter or leave the Chamber they must do so in a dignified way and use the customary ceremonial, making an obeisance to the Chair. Nobody is allowed to pass between the Chair and a member who is addressing him. Speeches are not to be disturbed by noise or interruptions and private conversations must be carried on in a low tone or voice."

Members should not leave the House when the Speaker/Chairman is addressing them. In the interest of the dignity of the House, members of the Opposition in the Council were once advised by the then Chairman not to walk out of the House but to remain in the House and make their protest by abstaining from participating in the deliberations. The Speaker has drawn attention to the objection to members walking out as a protest against his decision. He has also pointed out that members making allegations against the Government should be present at the time the Minister replies to them. Bringing umbrellas or walking sticks into the Chamber, spinning on the Takli, clapping of hands and shouting and reading books, newspapers or other publications except for the purpose of preparing a speech on the subject under discussion are also forbidden. Members are not allowed to make a speech sitting except with the permission of the Speaker/Chairman in exceptional circumstances as for instance, when a member is sick. A member should address his remarks to the Chair and resume his seat if at any time the Speaker/Chairman rises.

Relevancy

The speeches should be relevant to the subject under discussion and should not be merely repetitive of previous discussions. Influencing the debate by bringing in the names of men in authority or criticism of their conduct is not also allowed. Manuscript eloquence is ordinarily deprecated as it takes away the "cut and thrust" of the debate but an exception is made in cases where publicity and accuracy of expression is needed (e.g.), a pronouncement of policy by a Minister and in the case of members who cannot for obvious reasons make extempore speeches. A second speech on the same motion is not allowed except in exercise of the right of reply admissible in the case of a substantive motion and a motion for adjournment of debate to discuss a definite matter of urgent public importance. A substantive motion does not include an amendment to a resolution and an amendment to a motion on the Governor's Address.

Catching the Speaker's Eye

Members are also to speak in such order as the Speaker/Chairman may call upon them and are not entitled to speak unless called upon by him. The visitor will therefore find members competing with one another to "catch the Speaker's eye"—in the words of Baldwin "that most elusive organ that Nature has ever yet created," which ordinarily means that in case two or three members rise to speak, the Speaker calls on the member who on rising in his place is first observed by him. A former President described the process involved in this operation as not merely physical but intellectual, and a former Speaker said that members should not try to catch the ear of the Speaker but that they must catch his eye. Our Sepaker has often reminded members that they should not try to catch the Speaker's eye by show of hands. The principle generally followed is that the two sides should be heard alternately—an opponent following an advocate. The whips also give the Speaker/Chairman a list of speakers though he is not bound to "see" according to that list. In the Lords all speeches are addressed to "My Lords" and when two or more members rise to speak, unless one of them gives way, the House calls upon one of them to speak.

An essential requisite in a Government by discussion is formal courtesy as a safeguard against all appearance of personality. The Speaker alone calls a member by name. All members refer to other members as "Honourable" and by the office they hold or the constituency they represent, and not as 'you' as in parliamentary language it means the Chair. An opponent is addressed as an "Honourable Gentleman" and a member of the same party as an "Hon'ble Friend." All members of His Majesty's Counsel are "Honourable and Learned" and all who hold His Majesty's Commission "Honourable and Gallant". This round about method of address serves as "a brake on the swift, acid retort or too personal attack."

Moderate Language

It is also necessary that the language used must be good-tempered and moderate. "Bhajanakoodam" with reference to the Assembly, "Shame", "Lie and deceit" (பொய்யும், பித்த லாட்டமும்), "Sinister motives", "Colossal ignorance"; "abysmal ignorance", or "gross ignorance" with reference to Members, are some of the expressions ruled out as unparliamentary. Certain expressions are parliamentary or not according to the circumstances in which they are used. "Challenge" as such is not unparliamentary but "challenge for a duel" is. "Wilful falsehood" is in order but not "deliberate lie." 'A member should not refer to another member as "insolent swine" but if he were to call him "an arrogant porker" it might not be challenged'! "Lie" is unparliamentary but it can be said instead that "a statement when regarded from the stand-point of strict accuracy leaves something to be desired." "Wonderful" with reference to a Minister is not allowed but "Wonderful motion and wonderful retrenchment" are not objectionable. It is not proper to characterise a statement by a Minister as a "Cock and Bull story" or the Government's acquiescence in the policy of the Union Government as "Do Do Basavanna" or to say that "My friend jumps at every statement of mine like 'Jack in the Box'." Strong objection has also been taken to reflections on the Chair as for instance, "An appeal to the Speaker not to be led by the Government in the matter of procedure" or that the Speaker gives protection to the Minister by passing on to the next question when a series of supplementaries are put. Words which may or may not be used in debate cannot however be definitely stated and expressions allowed in one Legislature have been disallowed in others. It is therefore necessary to get familiar with the "nuances of parliamentary life" to know what is, and what is not, in order during a speech. Generally speaking, as one Speaker of the House of Commons is said to have stated long ago "a member is entitled by the rules of debate to use such expressions as he may think necessary provided they do not convey any personal reflection on another member and are not disrespectful to the House." Any point of order regarding an unparliamentary expression should be raised then and there as soon as the expression is used. A member is not usually interrupted in his first effort in oratory, a maiden speech, as it is called, if he oversteps the limits but this concession shown to the 'novice' is not extended to the "Father of the House."

"Order! Order'! says the Speaker/Chairman when there is a breach of any rule as for instance, passing between the Chair and the member "in possession of the House". Irrelevancy "the chief temptation to Parliamentary oratory" and repetition the repression of which Lord Ulswater declared to be "beyond human capacity" are promptly interfered with and a member is directed to discontinue his speech if he persists in irrelevancy or repetition. When a member makes a personal attack or uses an unparliamentary expression, the Speaker/Chairman persuades him to withdraw the offensive words he had spoken.

Disorder breaks out at times in spite of all rules and usages relating to debate. A member walked out of the Assembly as he was not given an opportunity to take part in the general discussion on the Budget. A Member of the Legislative Council whose conduct was disorderly was ordered to withdraw from the House. In the event of grave disorder, the sitting itself may be suspended for an hour or adjourned.

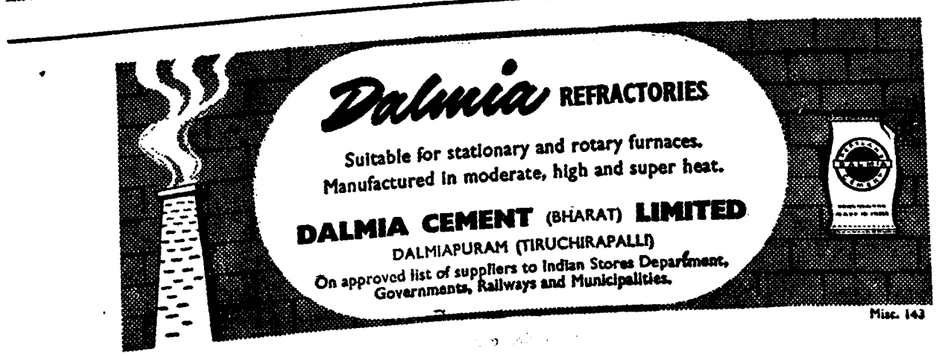
The relationship between the Speaker/Chairman and the individual members has been rightly compared to that between a great Headmaster and a single pupil, and the bedrock on which the authority and usefulness of the Speaker/Chairman depend in his ability as "helmsman" of the House to conduct its business and inspire its deliberations so as to keep the debate on a high level of order, courtesy and dignity, to save the good ship from sinking when it is caught in a winter gale, in short,

(Regulation of Debate).

Electricity Output in April

During April 1955, 690 public utility power stations in India generated 688·6 million kwh (Kilowatt hours) of electricity of Which 563·9 million kwh were sold to ultimate consumers. The new additions during the month were one diesel generating undertaking in Borgarh in Orissa and three purchasing undertakings at Rajangapur town in Orissa and at Nawsari and Rahalgaon in Madhya Pradesh. As compared to March, the electricity output decreased by 7·5 million kwh.

The corresponding figures of output and sale for April 1954 are 604·9 million kwh and 504·4 million kwh and for April 1939 are 204·7 million kwh and 172·0 million kwh respectively.



An Experiment in Rural Housing

By Sri R. BALASUBRAMANIAM, I.A.S., Formerly Project Execution Officer, Erode and now Collector of Salem

Cheap Houses, a vital need

Every foreign visitor to our country is struck by the squalid state of our villages; they are shocked by the tumbled down, mud walled and thatched huts in which our people live in the midst of dirt and filth. This state of affairs is generally found wherever the Harijans live. No one can deny that unless we can improve the living conditions of the villagers and provide them with cheap, yet well-built houses we cannot be said to have really improved the villages. This question of how to provide cheap houses for the people, especially for those in the lowest stratum of society has been engaging the attention of the various State Governments from time to time. In Lower Bhavani Project Area an attempt was made to tackle the problem and it met with some measure of success. This article gives the details of this experiment so that other projects can improve on it and tackle the problem effectively.

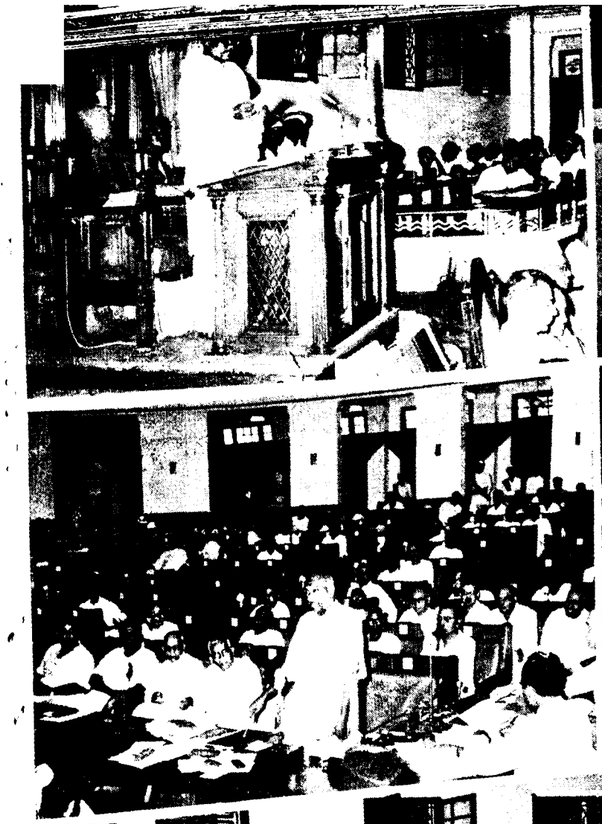
In the schematic budget prepared by the Community Projects Administration, no amount was earmarked for rural housing. A sum of Rs. 2 lakhs was proposed to be spent on the housing of the Community Project staff. This was one of the loan items. This amount of Rs. 2 lakhs was proposed to be spent on improving rural housing in a few places atleast as demonstration. Rules were framed by the State Government by which loans could be granted from this amount to people in the villages for building new houses or for improving their existing houses, the maximum loan that could be given in each case being Rs. 750. The object behind this was that by such loans, some people could be persuaded to put up cheap and good houses which could serve as models and encourage others in the village to follow their example. We, in this project, decided that, as much as possible out of this sum was to be spent on providing better houses for the poorest of the poor and the most downtrodden stratum of society, namely, the Harijans.

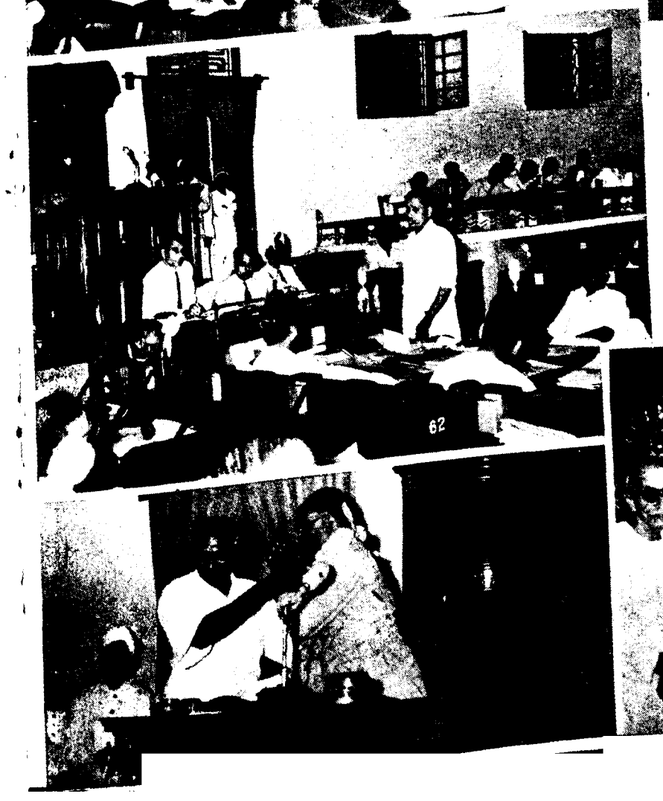
Loans

The difficulties in this were many. The money had to be given as a loan. No subsidy was allowed. The expectation was that the person who was given the loan was to repay it in 20 years. The Harijans in this part of the country, as a class, have no habit of saving, and consequently have no reserve worth the name. What they earn generally is just enough to keep body and soul together. Even if by chance the Harijan earns something extra some time or other, he does not save it, but has a celebration and spends it all. From such people, it was difficult to expect repayment of a loan, even if the sum were as low as Rs. 750. To get over this difficulty, it was decided that the amount to be given as loan should be reduced to the minimum possible and it was fixed at Rs. 250, repayable in 20 years.

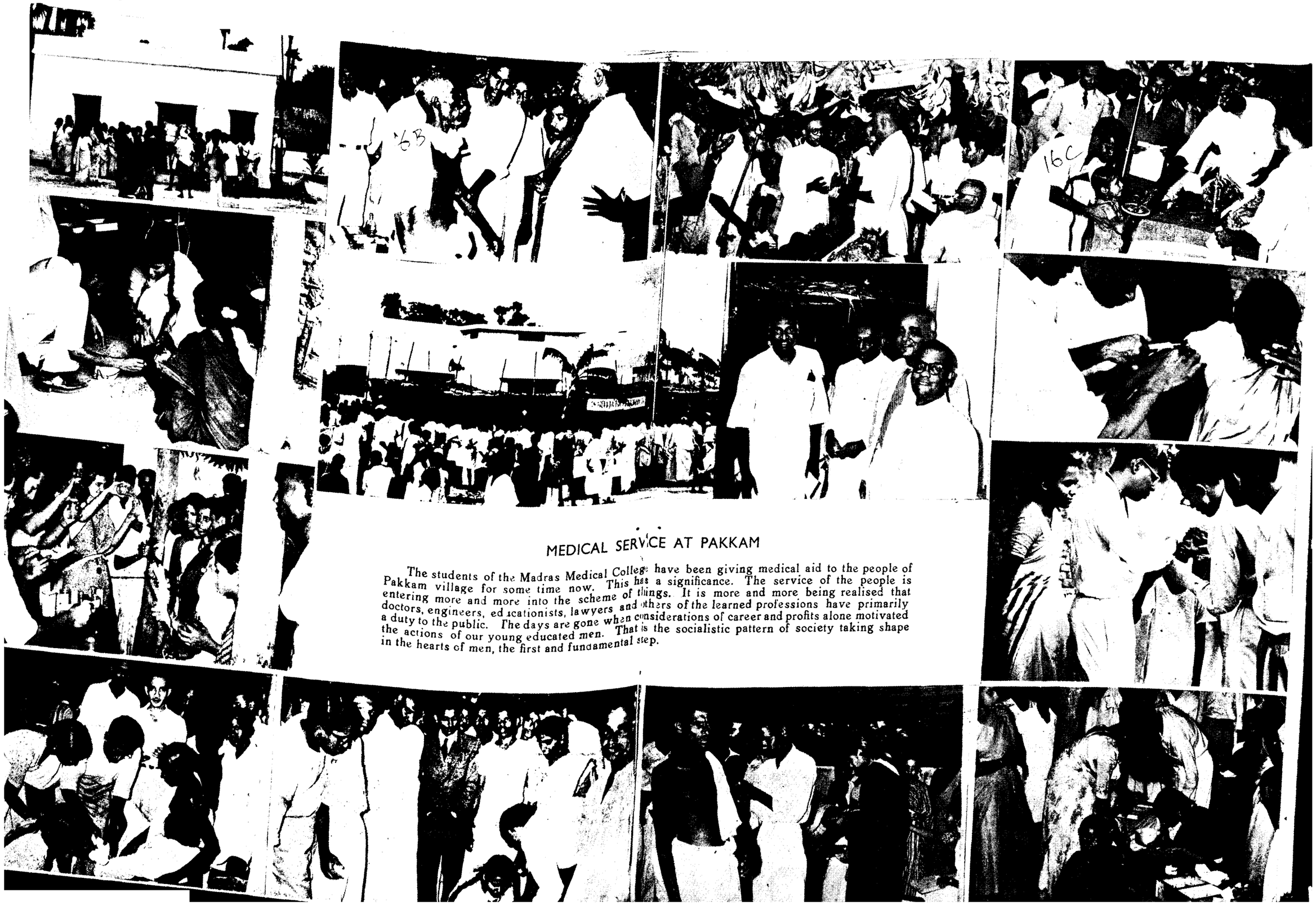
For any loan given, from Government funds, adequate security is always demanded. In the case of the poor Harijans, it was useless to expect that any of them would have any land which he could offer as security for the amount given as loan. The house was no doubt some security,

The Harijan colony





When Sri J. Sivashanmugham Pillai relinquished the office of the Speaker of the Madras Legislative Assembly tributes were paid to him by all sections of the Assembly. This is indeed a very tame way of putting it. For, Sri Sivashanmugham Pillai, by the supreme serenity of his truly Gandhian mind, which transcended the heat and passions of day-to-day politics, lovingly protected the interests of all sections of the house, irrespective of their political affiliations.



MEDICAL SERVICE AT PAKKAM

The students of the Madras Medical College have been giving medical aid to the people of Pakkam village for some time now. This has a significance. The service of the people is entering more and more into the scheme of things. It is more and more being realised that doctors, engineers, educationists, lawyers and others of the learned professions have primarily a duty to the public. The days are gone when considerations of career and profits alone motivated the actions of our young educated men. That is the socialistic pattern of society taking shape in the hearts of men, the first and fundamental step.

The people of Coimbatore were eager participants in a function which they were awaiting, for long. That was when Sri K. Kamaraj, Chief Minister, ceremonially operated the mechanical sluice gates of Lower Bhavani Project signalising more or less the end of the work on the project. (*Bottom right*) Sri M. A. Manickavelu, Minister for Land Revenue, opened the bridge near Sathanur Project site recently.

but as a matter of fact, it was not sufficient, as, in the event of the Harijan defaulting in the payment of the loan, the house, being in a Harijan locality sold, would not fetch a price to cover the loan amount. With this in view, Government had laid down that where sufficient security could not be given by the loanee, collateral security should be obtained. This was quite a difficult job. In the villages, the caste Hindus are generally not much interested in the Harijans, except for the work they can get out of them. Knowing the thriftless habits of the Harijans, almost all of them were extremely reluctant to stand surety for the Harijans. They felt that the Harijans were sure to default in repayment of the loan and that they would certainly be called upon to make good the loan amount sooner or later. Except in a few cases, it was quite a job to get the richer landlords to agree to stand surety for the Harijans.

Though getting others to stand surety for the Harijans was in itself a problem, it had its advantages as well. Even though the loan was as small Rs. 250 the yearly instalment came to nearly Rs. 18. As said previously, the Harijan is generally thriftless, and we felt it would be difficult for him to scrape together a sum of Rs. 18 or so once a year when called upon to pay the instalment due. As the person who stands surety has an interest in the Harijan not defaulting, we hoped that he would be able to persuade the Harijan to make monthly payments of Rs. 1-8-0 or so, which would not be very difficult for the Harijan. It is to be seen how far this hope is realised.

The nature of the structure

It was impossible to conceive of any decent dwelling being put up on Rs. 250. As the loan was repayable in 20 years, it was necessary that the house which was put up with the amount should last 20 years at least, (i.e.), be either a permanent or semi-permanent structure. This automatically ruled out the usual thatched hut. Further it was felt that if, after all this the Harijan could not be given anything more substantial than a thatched hut, with its heavy annual repairs and risk of fire, the scheme was not worth trying. The house which was aimed at had therefore to have pucca tiled roof and was to have a cement floor which could be washed and kept clean. How to build such a house at a very low cost was a problem. The solution obviously lay in eliminating everything except the bare essentials, consistent with the safety of the structure and in using the materials which were locally available either free or cheap. The problem was posed to the engineers working in the Community Project area and various suggestions were given to them. Finally a design which had been drawn up by the consulting Architect to Government of Madras was taken, modified suitably and was used.

Stone is cheap and is easily available in this area. Hence, it was decided to use stone in the construction of the houses. Also, since stone has to be blasted out wherever wells were dug, it was felt that it would be possible to persuade the villagers to give the necessary amount of stone free. The weight of the roof was to be supported on pillars made of stone in clay and the intervening walls were to be of earth. (I may mention here that the earth available in this area is very good and the walls built of this earth dry out very hard and firm, and are capable of taking quite some load.) Palmyra scantlings and country wood reapers were to be used for the roof. The roofing material was to be country tiles or Calicut tiles whichever was cheaper at the place. To protect the pillars and the walls from the action of weather, they were to be plastered all over with lime mortar. The floor was to be plastered with cement mortar. All this, when worked out, was estimated to cost not less than Rs. 500.

Their Contribution

As only Rs. 250 was being given as loan, the balance of the cost had to be met otherwise. It was found that the amount being given as loan would be just sufficient for the tiles, cement, a quantity of timber and skilled labour. The rest of the materials, etc., for the house had to be found by local contribution and by voluntary labour. We decided that, if the villagers gave stones and earth free and also lent their carts for the carting of these to the work spot, if they further gave each Harijan two palmyra trees (palm gur experts may kindly note that only trees not fit for tapping were to be used) and if the Harijan put in labour on the houses either free or at subsistence wages, it would be possible to put up these houses with the amount advanced as loan.

We went around various villages canvassing support for this scheme. In most villages, the richer ryots felt shy of undertaking the responsibility. In some villages, the Harijans felt that it was up to Government to give them good houses and that they should not be expected, nor could afford to contribute labour free. We were very keen to have this scheme tried out in one village at least, as we felt that the scheme was feasible and that once the people saw that such houses could be built they would come forward in larger numbers to take up such schemes. Fortunately, we were able to enlist the co-operation of one Sri Muthuswamy Gounder, a public spirited Social Worker of Monjanur village in Karur taluk of Tiruchirappalli district. This gentleman had faith in the honesty of the Harijans and was not only prepared to stand surety for them, but also undertook the difficult job of supervising the construction of the houses.

A good piece of Government land, which was fit for assignment as house-site was chosen. The land was divided into suitable plots and a layout was prepared. Applications were taken from the Harijans concerned and the plots were got assigned to them. The villagers, thanks to the efforts of Sri Muthuswamy Gounder, gave stones, earth and palmyra trees free of cost to the Harijans. The Harijans themselves worked on the houses for nearly two months at subsistence wages of about 10 annas per day. A colony of 16 houses was thus constructed in Kandaswamypalayam, a hamlet of the village of Monjanur mentioned before.

Colony Opened

Sri M. Bakthavatsalam, the Minister for Agriculture and Community Development in Madras State, laid the foundation stone for the colony on 28th November 1954. The colony was completed and was declared open by the Chief Minister of Madras State Sri K. Kamaraj Nadar on the 3rd February 1955. Thanks to the constant and untiring efforts of Sri Muthuswamy, the colony was completed in the record time of two months.

As can be seen from the account given above the scheme of Harijan Colonies tried out in this project is an example of real community work, in

which members of all classes of society in the village co-operated to improve the living conditions of their poorer brethern. As such, this project is proud to hail such Harijan Colonies as an important achievement in the sphere of Community Development. Apart from the material aspect of the scheme, in that it provided well ventilated good houses for the Harijans, another welcome aspect was noticed. It was that there was an improvement in the relationship between the Harijans on the one hand, and the other villagers on the other. An example of this was seen in the behaviour of the masons who were called in to do the skilled work on the houses at Kandaswamipalayam. These at first refused even to work with the clay puddle mixed by water drawn by the Harijan women, but gradually, as the work progressed, it was found that they, by themselves, gave up their objections and towards the end, they were found taking their food side by side with the Harijans.

Some criticisms have been levelled against this scheme and it is but fair that I should mention them. We do not claim perfection for the scheme and it should be borne in mind that all along our attempt was to provide the Harijans something better than what they were having now so that their way of life received a forward impetus and that this was to be done at no great cost to the State.

Criticisms

The first criticism was that the houses were very small. To this our answer would be that the houses were definitely bigger than what the Harijans were having now and that they were cleaner and better built. The second criticism was that in making the richer ryot stand surety for the Harijan, there was the likelihood of the poor Harijan coming under the power of the rich ryot who stood surety for him. To this, my answer is that every rose has a thorn and that every scheme has some risk involved in it. Even when lands were assigned on conditional terms to Harijans, it has been found that in a number of cases, the lands were mortgaged to the richer ryots. It is the usual law of life that the poorer people do in some way or other become dependent on the richer ones. In the case of these colonies, however, we hope that the Community spirit that gave rise to the colonies will continue and that the risk envisaged above may not materialize. There is also the fact that since these houses are built in a Harijan area, the richer caste Hindus may not be interested in acquiring any of the houses.

An Incentive

We are glad to see that as was anticipated, the completion of one colony has acted as an incentive for people in a number of other villages to take up similar schemes. We have a number of such colonies under construction in this project and we are happy and proud to have been able to do something to better the conditions of the Harijans in this area.

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The Tennesse State University Survey Team on a visit to India under Indo-American Technical Assistance Programme visited the Madras Veterinary College recently. The picture shows the members of the Team at the College Laboratory.

Making the Good Earth Better

Change in Perspectives

"Ugh!" said old Lalu, bending over the pale leaves of a paddy plant in the hands of his grandson. At the back of his mind he felt a nagging perplexity. No answering look of comprehension came from his rheumy eyes till a while later, when he gave a toothless grin.

His wizened knoutty fingers ran over the leaves with a caressing touch.

"Your friend must be right," he seemed reminiscing, nostalgically hugging the past though, "you know, the times have changed." His grandson looked at his companion nearby, a cheerful youth who was the newly-come village extension worker.

Yes, times have changed.... And what is more, Time has placed Indian agriculture in perspective. The more so in post-Independent India, with planned development aimed at both by the Centre and State Governments.

Not so long ago, India farming, at least most of it, was a hit-and-miss affair. It was a simple routine and had a narrow boundary. Land was prepared, seed sown, what manure was available applied. The rest was guesswork, hope and prayer—the last mostly. It had existed for a long, long time that way, in a state of backwardness and misery, behind the thin veneer of a compacent faith that the pencil of Fate—Kismet to the Indian farmer—has no eraser.

But times have changed tangibly. Farming in India is ceasing to be a haphazard venture. Knowledge and experience, coming washed up on the stream of Government research spread over the years, but beyond the reach of Lalu in his youth, is available in good measure for his grandson. In Lalu's days who had, for instance, heard of radio isotopes holding out better hopes for the farmers? Yet, today, radio isotopes are being used in experiments at the Indian Agricultural Research Institute to detect causes of malnutrition in plant life.

Soil Surveys

Half a century ago, the composition of soils hardly aroused the interest it does today. Soil surveys have now become an integral part of agrarian development. Soils differ from region to region; some are deficient in phosphate, others in potash or trace elements, almost all in nitrigen. Soil surveys have been in progress for some time, and the composition of some areas have already been mapped out.

Why all the fuss over soil surveys, old Lalu might ask. His grandson has a ready answer. Soil studies render easy the task of applying fertilizers effectively, the minimum with maximum effect.

During nearly the first half of the present century, the response of soils to phosphates had perplexed many. Surface dressings failed to produce results. As science probed deeper, it discovered that phosphates could encourage root-growth. Lalu had never known that phosphates placed with seeds at defined depths would produce better crops. Fertilizer placement has assumed an importance today which it never had before.

Manures and Fertilizers

Even in the field of manures and fertilizers, new aids to increase production have been introduced. Rural compost might not have been anything new even in Lalu's time, but urban compost was. Both are now fairly well organized. There exist today farms fed by town sullage and sewage.

Mere ploughing of a sort is not enough to prepare the land for cultivation. It is the way that the land is ploughed that matters. Old implements which Lalu handled never turned the soil well. Modern ploughs do. So, with other agricultural implements, too. Labour-saving efficiency has come with modern threshers, just to cite one instance.

In the old days, after ploughing the seeds were broadcast. The advantages of line-sowing were unknown. Adopted

The American members of the Indo-American Team set up for reviewing agricultural and veterinary research, education and extension in India for assistance under the T.C.M. Aid met Sri M. Bhaktavatsalam, Minister for Agriculture, at the Secretariat and had discussions with him.

and tried by countless farmers, line-sowing has shown its superiority over the broadcast method.

Again, correct sowing alone is not enough. It is what one sows that really matters. Lalu could sow only what came his way from his old seed-stocks. His grandson is more favourably placed, having access to improved and better seeds.

And from where have the improved seeds come ? Plant breeding and plant introduction experiments conducted at the various Government research institutes make available to the farmers today high-yielding and disease-resistant strains of various crops.

Some thirty years ago, tube-well irrigation was almost a rumour. Later, as the concept took roots, it emerged first as a State enterprise and then as a mode of irrigation popular with thousands of farmers. The tube-well is something new by way of irrigation methods successfully tried in India.

Crop Care

When crops are growing, they require a lot of care—especially against pests and diseases. Plant Protection as a State Service is a new wing to agricultural development unknown a decade ago. The importance of this service is highlighted by the fact that India annually loses about 20 per cent of her food crops due to pests and diseases. Research spread over half a century is today producing practical results beneficial to the farmers. Control of weeds by hormone weed-killers, and aerial operations against pests undertaken successfully in recent years, are facets of development unknown a generation ago.

Dry farming opens up a new vista for Indian farmers. Borrowed from the West and developed in recent years, it goes to help grow millets in areas of uncertain rainfall. Where farmers once used to look up woefully at the sky, scanning for the slightest hint of even a meagre rainfall, the prospect is not so hopeless today.

So does soil conservation with its concomitant measures like contour bunding, unpractised generally a few decades ago, but today calling a halt to the erosion of precious top-soil.

Nor are good harvests alone enough. Comes the question of storage —and marketing. In both, vast changes have made themselves felt, and greater benefits have accrued in the wake of movements like Co-operation and Agricultural Grading. The former brought economic security and progress easily accessible to cohesive groups of rural communities in chosen lines of endeavour ; the latter, with its finger on the pulse of quality, assured the cultivator of a reasonable price for his produce. In the field of fruits and vegetables, new ideas of preservation and canning have leavened progress, and fostered a new industry.

Animal Husbandry

Animal husbandry, an important aspect of agriculture, has made equally important strides in recent years. Artificial insemination of cattle, modern methods of preservation of sera and vaccine, herd registers—all have gone to improve cattle development in India. Rinderpest is no longer the scourge that it was. Dairy development has registered considerable progress, evidenced in the milk colonies found in most of the big cities of India today. More recent and of great promise are the dry milk powder factories, now proposed, which will save surplus milk from going to waste.

Even meteorology has been tapped to help the farmer. In his youth, Lalu would have, with palms cupped over his eyes to shut out the glare, scanned the horizon to unravel weather from the mood of wind and sky. But his grandson, today, has special Farmer's Bulletins, given regionwise, telling him what to expect of weather, the farmer's friend and foe alike, tipping him off how to regulate farm operations in his region.

Persuasive Approach

Here comes Extension a new philosophy of persuasive approach as between the farmer and the village worker a two-way street of tutorial public relations which keeps the contacts between the villager and scientist a continuous, live process. The results of research are brought to the doors of the farmer and his problems conveyed back for remedial suggestions. Extension workers encourage improved farming techniques and bring new life to all farm activity. Lalu never had this benefit, now so freely available to his grandson.

Old Lalu's toothless grin is more than a happy gesture. It is an overt tribute to the changing yet beneficial milieu in which his grandson finds himself today.

IRRIGATION IN MADRAS STATE

(*Continued from page* 11)

the reservoir. The total cost of the project is estimated at Rs. 263 lakhs and got technically sanctioned for Rs. 289 lakhs.

Krishnagiri Reservoir Project

The proposal is to form a reservoir across the Ponniar in Krishnagiri taluk (Salem district) at a site about 2 miles west of mile 163/4 of the Madras-Calicut Trunk road in the village limits of Periyamuthur. The capacity of the reservoir will be 2.410 M.Cft. The cost of the Project is expected to be Rs. 184·03 lakhs including direct and indirect charges. The project was sanctioned in 1954 and inaugurated early in 1955. The additional food production will be 3,500 tons.

Araniar Project

The project is expected to irrigate a new area of 2,530 acres and stabilise supplies to 2,970 acres by the reservoir channels and supplement supplies to 5,700 by the Pick-up anicut and channel all in Chingleput district.

Walayar Project

The Walayar Scheme in Palghat taluk of Malabar district contemplates assurance of better irrigation facilities to 6,500 acres of II crop which are now entirely dependent on rains. The proposal is to form a dam consisting of both masonry and earth sections of a total length of about a mile across the Walayar. The scheme sanctioned by Government is for Rs. 99.92 lakhs including direct and indirect charges but due to certain changes in design etc., the estimate is under revision.

Mangalam Reservoir Scheme

Mangalam River which joins the Gayatripuzha in Padur village limtis of Palghat taluk at its western boundary, forms just above the confluence, the dividing line between Travancore-Cochin State and Madras. The cost of the scheme as sanctioned by Government originally was Rs. 44·20 lakhs inclusive of direct and indirect charges and this is for a storage of 250 M.Cft, contemplated to benefit 3,735 acres. The scheme as modified now is to benefit 6,000 acres in Madras State limits besides giving 300 M.Cft. to Travancore-Cochin State. The revised cost as approved by Government is Rs. 88·65 lakhs. It has been technically sanctioned for Rs. 97·51 lakhs.

Tirumalai Kumaraswami Temple, Panpoli

By Sri V. SANKARANARAYANAN, Executive Officer

Tirumalai Kumaraswamy temple is built on the top of a bare steep rock two to three hundred feet high near the village of Panpoli, eight miles north-west of Tenkasi. The temple with its detached shrines forms a conspicuous object on the landscape for many miles around. It is approached from the south by some hundreds of steps cut in the solid rock. By the side of the temple is excavated a tank which traps all the rain that falls on the summit but runs almost dry during summer. The temple has no architectural merit and is much patched. The tamarind tree with an Amman and a spear உத்தண்ட வேலாயுதம் at the foot is said to be the earliest symbol of religion on this rocky summit.

The idol of Subramaniaswamy appears to have been brought from an old fort " Kottai Tiradu " near the river Hanumanadhi on the north. A small temple was built at first and its enlargement to its present state is a work of comparatively recent times. The chief author of the work is a marava woman named Sivagami Pâradesi who levied contributions of labour and money and recovered by law suits the lands that passed from the hands of the temple. She even approached the then Collector of the District, Sir Henry Levinge, who allotted 22 kottahs of land suitable for wet cultivation on darkhast for the benefit of the temple. She died 60 years ago and the temple authorities built a matam over her samadhi and daily pooja is done to it by the Devasthanam. The temple is well endowed. The main festival comes off every January in the month of THAI. Sri Subrahmaniaswamy is then taken to the branch temple (Nagariswarammudiar Koil) in the village Panpoli where the ten days festival is celebrated with much pomp. There are a few inscriptions in this branch temple dated 15th and 16th centuries relating mostly to the services of later Pandya rulers who endowed lands for the various services in the temples. Two years ago the temple and its approach were provided with electric lights. Fresh water is baled up and distributed from a deep well from below for the convenience of the pilgrims.

Vaikasi Vishak day in May–June attracts a very large crowd when offerings of Kavadi and coins are made to God Murugan. The nearest Railway Station is Shencottah five miles south of the temple.

Dairy Goats of Malabar

The outstanding dairy animal of the West Coast is the Malabar Goat. The Malabar goat is also the best dairy goat among the goats of this State.

The present stock of Malabar dairy goats is the progeny of the imported goats from Arabia, Kutch, Surath and the local goats. The coastal trading Arabs seem to have played the main part in the introduction of the goats in this area in the by-gone days.

The colour, confirmation and the milking qualities vary from animal to animal. The goats are white in colour, are of medium size with short ears. Goats of black colour big size body, long ears and Roman nose are also found in the tract. The colour of these animals may range from pure white to different shades and to jet black.

These dairy goats are heavy milkers, yielding on an average 450 lb. in a lactation period of 150 days. They are prolific breeders also.

The general taboo against the scrub goat should never go against the dairy goat. The dairy goat is a very economical animal which produces the wholesome milk. The milk of the dairy goat has no smell as is generally believed by the people, when milked in hygienic conditions. The goat's milk is exactly like the cow's milk in taste.

An attempt is now made in the District Livestock Farm, Malabar, to breed a homogenous stock of Malabar dairy goats with heavy milking qualities from the stock selected from the tract.

The following chart will give a Comparison between the Composition of Goat's Milk and Cow's Milk.

Species.	*Fat. per cent.*	*Protien per cent.*	*Lactose per cent.*	*Ash. per cent.*	*Total Solids percent.*	*Authority.*
Goat ..	4·09	3·71	4·20	0·78	12·86	Frahm
Cow ..	4·00	3·50	4·90	0·70	13·10	Computed.

India's Exports

India's exports of food, drink and tobacco during 1954–55 were valued at Rs. 198·6 crores.

Her exports of raw materials and mainly unmanufactured articles during the same period were valued at Rs. 118·33 crores, while the value of articles wholly or mainly manufactured was Rs. 250·64 crores.

During the first three and half years of the Five-Year Plan, 330 miles of new roads were constructed, 2,434 miles of existing roads improved and 25 major bridges completed.

Truth About B.C.G.

The Government of Madras have published a pamphlet 'Truth about B.C.G.—Why Government have launched a Mass Campaign'. The pamphlet is divided into two parts, the first giving in the form of simple questions and answers the truth about B.C.G., and the second dealing with the specific criticisms levelled by Sri C. Rajagopalachari in his booklet on B.C.G. The pamphlet deals with the various aspects that have caused certain misgivings in the public mind as a result particularly of the campaign carried on by Sri C. Rajagopalachari, viz., the harmlessness or otherwise of the B.C.G. vaccination, its suitability for Indian conditions, the results obtained in foreign countries, and the views of leading medical men of the word and so on.

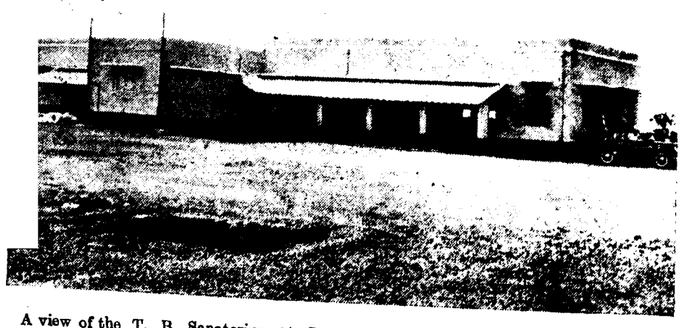
Sri C. Rajagopalachari bases his campaign "on the definite pronouncements of most eminent and illustrious medical men of the civilized world". Is this correct? Are all the experts whose statements he has cited with approval, in favour of the conclusion which he has drawn from those statements? Are the experts who agree with his conclusions, in fact among the "most eminent and illustrious medical men of the civilized world"?. The pamphlet proves that the answers to these questions are clearly in the negative.

We will now quote in extenso from the first part of the book, giving some of the basic facts about B.C.G. for the benefit of our readers.

The Basic Facts

What is B.C.G. vaccine?

B.C.G. vaccine is made from a special strain of Tubercle bacilli which has been attenuated, so that, it is now incapable of producing, on injection progressive tuberculosis. It was discovered many years ago by two French Scientists, Professor Albert Calmette and Dr. Guerin of Pasteur Institute of Paris. Hence the name B.C.G. (Bacillus Calmette Guerin) vaccine.



A view of the T. B. Sanatorium at Somanathapuram, Ramanathapuram District declared open by Sri K. Kamaraj, Chief Minister recently.

What is B.C.G. vaccination?

Just like vaccination against small-pox, this is a vaccination for preventing Tuberculosis. It is one of the effective methods of reducing the incidence of T.B. and also the mortality from it. It is at present the only known practical method of inducing specific resistance to T.B.

Can every one be vaccinated with B.C.G.?

B.C.G. vaccine is not to be administered indiscriminately, because it can be of benefit only to those persons who have not developed a natural resistance against tuberculosis infection. Also B.C.G. vaccine has no value in the treatment of Tuberculosis disease.

How can it be found out whether a person has any resistance against Tuberculosis or not?

By means of a simple test known as the Tuberculin test. Tuberculin is an extract prepared by special methods from killed Tubercle Bacilli. It has the property of causing a local reaction, when it comes into contact with a person who has developed a natural resistance against T.B. but not with one who has no such resistance. Tuberculin test is made by injecting a drop of a suitable dilution of purified tuberculin into the skin of the forearm. A positive reaction is one that shows a small reddish thickness at the site of injection on the third day, when the reading is made. The reaction is negative, if there is nothing seen at the site of inoculation or if the thickening is below the standard size. (6m.m.)

What does a positive Tuberculin reaction indicate?

It indicates that the person has had a natural infection some time previously with Tuberculosis which has resulted in the development of anti-bodies in the system against Tubercle bacilli. Those anti-bodies offer a considerable amount of protection (immunity) against a future tuberculosis infection from outside. From wide experience, it is known that this protection is not absolute, but about 80 per cent.

If natural Tuberculosis infection can give 80 per cent protection, why not allow the people to obtain immunity in this way?

It is true that obtaining infection from natural sources, viz., from other human beings, affords a certain degree of protection. Nevertheless in some cases, this same infection may lead to acute tuberculosis immediately or at a later date. Such a danger of tuberculosis arising from first infection can never occur after B.C.G. vaccination which produces an immunity without any disease in the lung.

How does B.C.G. vaccination help the tuberculin non-reactors who need protection?

B.C.G. vaccine has the power to convert the non-reactors into reactors to tuberculin in a harmless way. It confers almost the same immunity as occurs after a natural infection with T.B. but it does so without the risk of some devoloping T.B. as a result of it.

How effective is B.C.G. vaccination?

By vaccinating non-reactors a very high percentage of them (98–99 per cent) may be converted into reacters. That means, that they will have, as long as they continue to be tuberculin positive, the same immunity as that obtained through a natural (but dangerous) infection.

From extensive experience in Scandinavia, U.S.A., Canada and other countries, it has been determined that B.C.G. vaccination can cut down the number of new cases and deaths from T.B. to about one-fifth of what it would be without vaccination. This is not only of enormous value by itself, but by reducing the sources from which the disease can spread, vaccination will indirectly further control the incidence of new cases.

Is B.C.G. vaccine safe for vaccination?

Not one single case has been published to prove that B.C.G. has caused progressive T.B. At the first International Congress on B.C.G. held in Paris in June 1948, workers from 35 countries all over the world unanimously affirmed the complete harmlessness and efficacy of B.C.G. from their experience of over 10 million vaccinations. B.C.G. work started in August 1948 in Madanapalle has confirmed the same observation.

What precautions are taken to ensure the safety of the vaccine?

B.C.G. conference held in Washington in September 1946 made certain recommendations on the control and use of B.C.G. vaccine. Accordingly, the Government of India have restricted the production of B.C.G. to a single centre at the B.C.G. Laboratory in the King Institue, Guindy, to ensure a uniform standard of potency. The Chief of the Laboratory, an experienced bacteriologist and his assistant were deputed to the State Serum Institute, Copenhagan, were they studied and practised the technique of vaccine production. They also visited the leading B.C.G. laboratories in Europe.

The B.C.G. laboratory is housed in a separate new building belonging to the Government of India. No other bacteriological work is done in this laboratory. The cultures, vaccine, etc., are always handled by the staff who have all been X-rayed to rule out T.B. in them. The X-ray controls are repeated every six monts. Every batch of vaccine produced is put through the most stringent controls in one laboratory and on animals for purity, potency and virulence. Major General Sri Sahib Singh Sokehy, Director of Haffkine Institute, Bombay, who has been requested by World Health Organization to visit the Laboratory at Guindy and report on the facilities to produce a reliable safe vaccine, has reported to the high standard of techinque and competence of the staff and suitability of the building.

The original strain of the Bovine Tubercle bacilli provided by the Pasteur Institute, Paris and used with such remarkable safety all over the world is the one used in our laboratory also.

What is the procedure followed for vaccination?

Every one is tuberculin-tested according to the approved technique. The non-reactors are recommended vaccination, which they are at liberty to accept or refuse.

Which age groups will be selected for B.C.G. vaccination?

Non-reactors in any age group can be vaccinated and will profit by vaccination. For mass vaccination, that age group in which a high percentage will be negative is selected, as they stand in need of protection urgently. In every country the school children and young adults are first tested and vaccinated because they form the bulk of non-reactors.

Sri K. Kamaraj, Chief Minister, opening a park at Karaikudi.

How is the vaccine administered ?

B.C.G. vaccine (1/10 c.c. or 1/20 mg.) is injected into the skin on the left shoulder in the same way as the Tuberculin test with a very fine needle. It is a painless procedure.

What happens after the vaccination ?

When the vaccine is injected a wheel about ¼" in diameter will form a d this will disappear in about 10 minutes. There are no reactions whatever following the injection—no fever or the like and the children can attend school, play, bathe, etc., as usual. Two to three weeks after vaccination a painless nodule of the size of a pin's head will develop at the vaccinated spot. This may increase slightly in size, and some times may become soft and discharge a drop of matter. The resulting tiny ulcer will heal up spontaneously by 8—10 weeks. At this time, all that is seen is a small hardly visible scar. No dressing is necessary at any time.

Are there any complications after vaccination ?

Comparatively very few. Very rarely (less than 1 : 2,000) a small abscess may develop at the vaccinated site or a gland in the arm pit may become swollen. They need no special treatment and will disappear spontaneously.

How long does the protection last ?

On an average from 4 to 6 years—when 90 per cent will be found to be tuberculin positive. Very often it is much longer. It is advised that vaccinated persons be tuberculin tested 2 to 3 years after vaccination and every year thereafter. Generally, a natural infection will occur on the top of B.C.G. immunity, when B.C.G. immunity will merge into natural immunity. The aim of B.C.G. vaccination is to help the non-reactors to withstand and arrest a natural infection in which the dose and virulence are unknown.

This pamphlet is recommended to the public, to all those who are interested in fighting one of the worst killers prowling silently amidst us, killing very often before one has even a chance to see the stealthy enemy.

During April–September 1954, the Indian Telephone Industries factory produced 26,040 telephones and 14,000

Rural Electrification

The number of villages electrified during the month of June in the various systems was as follows :—

Pykara System	6
Mettur System	10
Papanasam System	10
Madras System	3
Total ..	29

The names of villages together with the details of taluk and district are given below :—

Name of the village.	*Taluk.*	*District.*
	Madras Electricity System.	
Gerugambakkam	Sriperumbudur ..	Chingleput.
Periappanamacheri	Do. ..	....
Tandalam	Trivollore ..	....
	Pykara System.	
Mangalakarai	Avanashi	Coimbatore.
Kothamoopanpudur	Gobichettipalayam ..	....
Ayyampalli	Palni	Madurai.
Kullampatti	Dindigul	....
Karadikuttam	Palni	....
Vadipatti	Do.	....
	Mettur System.	
Vangur	Wallajah	North Arcot.
Govindacheri	.... ..	....
Kannaikapuram	.... ..	....
Kalavaipudur	.... ..	....
Agaram	.... ..	....
Mallikapuram	.... ..	....
Edapalayam	Tiruvannamalai ..	....
Anaikarai	.... ..	....
Kolathupalayam	Erode	Coimbatore.
Tirumalacheri	Wallajah	North Arcot.
	Papanasam.	
Urappanur	Tirumangalam ..	Madurai.
Nambithalavanpattyam ..	Nanguneri	Tirunelveli.
Thirukarangudi	Do. ..	Do.
Puliamkurichi	Do. ..	Do.
Dulapalanisamudram	.... ..	....
Adikulam	.... ..	....
Rajakulamangalam	.... ..	....
Karupatti	Nilakottai ..	Madurai.
Balakrishnapuram	.... ..	....
Sundarapandian	Srivilliputhur ..	Ramanad.

A large number of rural extension schemes were progressing. The following are the particulars of length of new lines constructed and energised during the month in the various system :—

	Length of line in miles added	
	H.T.	*L.T.*
Pykara System	4·00	9·16
Mettur System	11·09	22·32
Papanasam System	11·47	40·24
Madras System	2·76	14·73
Total ..	29·32	86·45

The Bridge Across Noyyal River

By SRI K. K. NAMBIAR, Chief Engineer (Highways)

The Noyyal river crosses the Erode–Karur road at mile 27/1 and through communication was difficult without the river being bridged here. This river which takes its origin in the Western Ghats gets flooded during heavy rains when communication between the two important commercial centres of Karur and Erode used to get interrupted sometimes even for three or four days at a stretch. During such periods of interruption, the traffic on this road had to take a circuitous route via Vellakoil in Erode taluk. Considering this difficulty the State Government sanctioned the construction of a bridge at this crossing. The work was put on hand in April 1953 and is just completed.

Commercial Importance

This Erode-Karur road is classed as a Major District Road and connects the adjoining districts of Tiruchirappalli and Coimbatore. The road for a major portion of its length runs through richly cultivated lands growing mostly sugarcane and rice. Naturally the road is subjected to heavy vehicular traffic conveying these commodities. The bridge at Pugalur on the Cauvery River was thrown open for traffic some time ago and with the completion of this bridge across Noyyal river the commercial crops from a wide area in Namakal and Tiruchengode taluks of Salem district, Karur of Tiruchirappalli district and Erode of Coimbatore district will find an easy inter-district movement. From this one can imagine the importance of this road in the immediate future from the commercial point of view. Also a lot of passenger traffic leading towards Erode, Bhavani, Mettur and Gobichettipalayam from Tiruchirappalli, Karur, Dindigul, Dharapuram, Pollachi, etc., will have to take this route and the volume of this passenger traffic is expected to increase considerably.

Looking back on the communication system in Coimbatore district, I have to say that in the early part of 18th century there were hardly any good roads, but only beaten tracks and consequently carts were unknown, the whole traffic being conducted on pack-bullocks or ponies and occasionaly by basket boats on the rivers. From that time onwards, the district seems to have gradually improved and in the latter part of the 18th century there were some good roads. The principal roads then eixsted were the Madras Trunk Road and those leading to Tiruchirappalli, Madurai and Hassanur pass, aggregating a total length of 266 miles.

Roads in Tiruchirappalli district

The Gazetteer of the Tiruchirappalli district published in 1907 speaking of the roads of the District says that this district is traversed by many important roads such as those running from Tiruchirappalli to Perambalur, to Salem through Musiri and Namakal ; to Erode via Karur ; to Attur through Turaiyur and to Madurai and Dindigul. All these were in charge of the District Board. The condition of these roads was generally fair and only a few trunk roads were metalled. However, the absence of wells and other means of water supply rendered it imposible to repair them except in the rainy season. The average annual expenditure on these roads was only Rs. 128 per mile. Of the bridges of the district the most important are those which cross the Cauvery and Coleroon on either side of the Srirangam Island. They are known as the Cauvery and Coleroon bridges respectively and carry a great deal of traffic. Apart from these bridges, there are a few number of bridges across the rivers, Koraiyar, Kodamurti, Kulaiyar, Uppar, etc.

The Cauvery bridge above mentioned consisted of 32 spans of about 48 feet each and is 1,876 feet in length. It was completed in 1849 and a tablet erected on the parapets of the bridge states that it was dedicated to the memory of one Dalton, Kilpatrick and four other officers of the English army which fought gallantly to save Tiruchirappalli from the French in the middle of the 18th century. This brick arched bridge was washed away in the floods of 1924 and was re-constructed on the same foundations with steel truss superstructure and opened to traffic by Lord Goschen on 24th January 1929.

This bridge which is situated on the National Highway No. 45, Madras-Tiruchirappalli-Dindigul road, has a clear roadway of 18 feet only and was designed to take up the old Madras 'B' Class loading. The intensity of traffic over the bridge is at present very heavy being about 8.000 tons per day. Also the existing bridge gives constant trouble with cracks developing in old masonry in piers where free

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In the Madras Electricity System a total number of 195 D.C. services with an approximate connected load of 241 K.W. were changed over to A.C. Supply on a voluntary basis.

During the month 16 extensions were sanctioned by the Chief Operation Engineers and Chief Engineer for Electricity at an estimated cost of Rs. 6·29 lakhs.

During the month of May the following services were connected under Papanasam and Madras Electricity Systems :—

	Services Connected		
	Agricultural.	*Industrial.*	*Domestic.*
Papanasam Electricity System ..	68	12	654
Madras Electricity System ..	39	24	402

ends of the trusses rest. In view of the heavy traffic, certain constructional defects in the existing bridge and the resulting inconvenience and trouble to public, it is proposed to construct a new bridge at a cost of about 48·5 lakhs on the down stream side of the existing bridge by passing the Tiruchirappalli Town. The existing bridge will also be repaired and maintained for the use of the pedestrians, cyclists, and light motor traffic, etc.

Upgrading of Roads

All these bridges and roads were constructed long before the advent of the Railways and the first railway line between Erode and Karur was opened only in the year 1868. The emergence of the motor vehicle in the present century revolutionized the outlook for road transport for, the motor and lorry traffic had the advantage of being more tractable than the railways for short hauls. Improved surfacings for auto-vehicles require a great investment of money which in those days they would not afford. Hence the construction of a number of black top and concrete roads and construction of bridges over unbridged crossings are undertaken. The increased allotment which is being given in recent years has made it possible to upgrade a fairly good percentage of the heavily trafficked roads in the district.

Prior to the formation of the Highways Department in 1946 the growth of communications in this State has been spasmodic and poor, due to lack of co-ordination in planning and finance. Rest of the routes were but fair weather types with the right of way demarcated. Thanks to the efforts of our Government, who are taking every possible step to improve our communications with the limited finance available, Madras has now more mileage of roads per square mile than in other States of this country. Of course the post-war plan, known as 'The Nagpur Plan of 1943', envisaged the entire Highway system of India as a single concept, and to bring the different segments of society into contact. Attempts to put the recommendations into practice by way of First Five-Year P.W.R.D. Plan, 1947-52, and followed by First Five-Year All-India Plan, 1951-56, have not been completely successful in all aspects due to paucity of finance.

It is increasingly realized by all including the Planning Commission that sooner the Highways grid and the rural road net work are established the greater and faster will be the pace of economic and social development. A good road system will facilitate cultural contacts, stimulate the growth of trade and commerce, and generally tend to increase the prosperity of the country.

Highways and Reconstruction

If the well knit railway system and the efficient post and telegraph system have contributed much to the common weal the long-awaited and overdue *Highways system* should complete the process of unification of the entire area and population. Indeed Highways will ensure an all round realistic approach to the raising the standard of living in Rural India in contrast to the Railways, Airways and Waterways which can serve only a limited area.

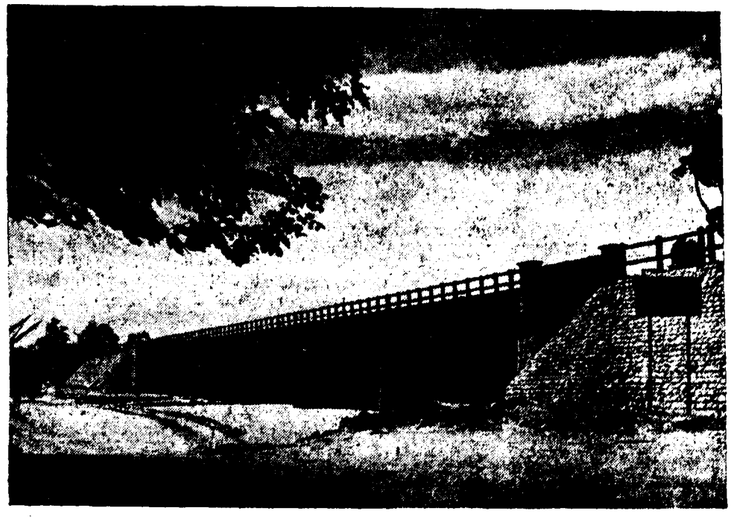
The Highways problem is colossal. The planning must be continuous foreseeing the future pattern and type of traffic. Basic planning surveys and fiscal studies and policies on the interrelated transport and growth of industry are essential. The days may not be far off when we also will be having roads like the *Express* ways of America *Autobohn* of Germany and *Austrogrades* of Italy.

In the Second Five-Year Plan, it is contemplated to provide improved surfaces to all important roads, to bridge a number of unbridged crossings and to form new roads to link the villages with the important town centres.

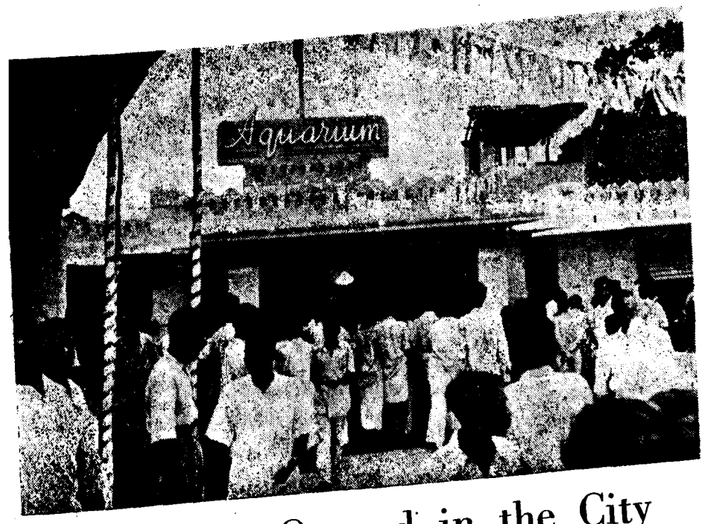
Details of the Bridge

Now let me give a few details of this Noyyal Bridge. It has 6 spans of 45 feet clear each and carries a roadway of 22 feet between kerbs. The bridge rests on rock which is available at depths varying from 15 to 26 feet below the bed of the river. The left half of the bridge is supported on well foundations whereas on the right half the piers, abutment and wings are laid directly on the rock after exposing the same by open excavation as rook is available at shallower depths. The substructure of the bridge is of mass concrete. The superstructure of the bridge consists of Reinforced Concrete Tee beams and slab. The deck slab is 7½ inches thick and is supported by 4 Tee ribs 15 inches by 58½ inches spaced at 6 feet centres. The bridge is designed for the heaviest live loadings prescribed by the Indian Road Congress Standard specifications. About 90 tons of steel and about 555 tons of cement have been used on the work. The cost of the bridge including its approach roads is Rs. 3·20 lakhs.

[*From the speech of the Chief Engineer for Highways when the bridge was opened by Sri M. Bhaktavatsalam, Minister for Agriculture, on 23r* 1955.]



Noyyal bridge at mile 27/1 of the Erode-Karur road opened on 23rd July 1955 by Sri M. Bhaktavatsalam, Minister for Agriculture.



Aquarium Opened in the City

The original Marine Aquarium which was in this place was one of the oldest Aquaria in the East. It came into existence as a result of the efforts of Mr. Edger Thurston who was then the Superintendent of the Madras Museum. It was opened in 1909 as an adjunct to the museum. Its value and usefulness increased so much that it came to be recognized as an unique institution. In 1919 it came under the administrative control of the Fisheries Department which took steps to increase the number of varieties of the exhibits from time to time. The existing building was found unsatisfactory and proposals were made more than once to house the aquarium in another and better building. However when the War broke out in 1939 the Aquarium had to be closed for security reasons. After the close of the War, proposals for the construction of a new and modern Aquarium were again taken up. A site on the sea-shore opposite to the Madras University buildings has recently been selected and approved by Government and plans and estimates for a modern and up-to-date Aquarium have been called for. The construction of this new Aquarium has been included as one of the Schemes of the Fisheries Department in the Second Five-Year Plan.

We are hoping that the new Aquarium that we are contemplating will be an accomplished fact within two or three years; but it was felt that meanwhile the old building here which was hitherto used as a Departmental Library might be put to use to house a small fresh water Museum.

This State has one of the longest coast lines in India of nearly 700 miles besides possessing extensive areas of inland water for development of inland fisheries. During the past few years when this State was faced with an acute food shortage, we were obliged to look upon fisheries as one of the methods to meet the shortage. This was done mostly by the development of inland fisheries by intensive stocking of reservoirs, rivers and tanks with edible fishes. Deep sea fishing was also given a fillip though not to the same extent due to the paucity of efficient fishing vessels and improved tackles. Side by side, I hope that this small Aquarium and the bigger one that will come up in one or two years will be a epitome of rare fishes caught or introduced in our waters. It is bound to continue to be a source of attraction not only from the point of view of educational and biological interest but also as a small store house of the aquatic beauties of Nature.

[*Extracts from the Speech of Sri M. Bhaktavatsalam, Minister for Agriculture, when the fresh water Aquarinm at the Marina was opened by Sri Ajit Prasad Jain, Union Minister for Food and Agriculture, on 18th August* 1955.]

Shri A. P. Jain, Union Minister for Food and Agriculture, opened the Marina Aquarium organised by the Fisheries Department of the Madras Government on 18th August 1955 The picture shows the Union Minister opening the aquarium by pressing a button.

Tamil Literature : The Ancient Period

By SRI R. P. SETHU PILLAI, Head of the Tamil Department, University of Madras

Early History

The early history of the Tamil language is veiled in the mist of the distant past. According to legend, the language originated from Lord Siva and its first grammar was composed by Saint Agastya who lived in the Pothiya Hills of South India. Poets of eminence have paid their tribute of gratitude to this saintly grammarian who formulated the principles of Tamil grammar for the first time. But nothing authentic is known about this grammar.

The earliest grammar available to us is *Tholkappiam* and its author is said to be a disciple of Agastya. It consists of three parts. The first deals with orthography and phonetics ; the second deals with etymology and morphology ; and the third deals with the subject-matter of poetry, prosody and rhetoric. The age of *Tholkappiam* has not yet been finally settled. It is generally assigned to the third century B.C. "Whatever antqiuity may be attributed to *Tholkappiam*", says Dr. Caldwell, "it must have been preceded by many centuries of literary culture. It lays down rules for different kinds of poetic composition which must have been deduced from examples furnished by the best authors whose works were then in existence."

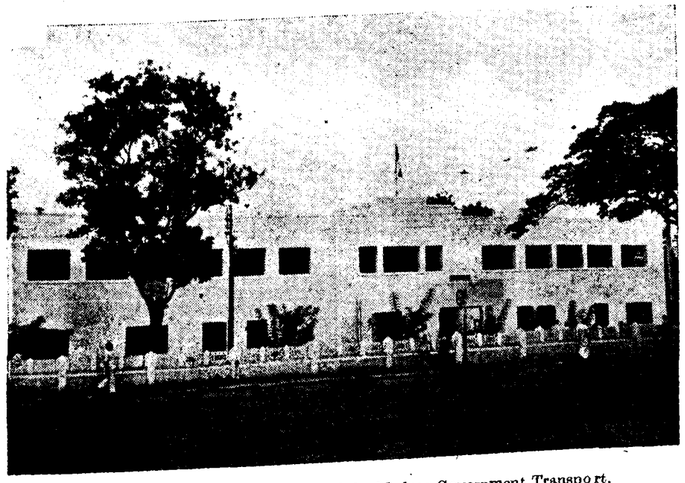
The literature belonging to this period has not survived the ravages of time. Nevertheless, anthologies compiled during this period have come down to us. The *Pattupattu* and *Ettutokai* are store-houses of information on the princes and peoples of the ancient Tamil country. They are cherished as "wells of Tamil undefiled."

Sacred Kural

The great literary work of this period was the *Sacred Kural* of Tiruvalluvar. No poet of the Tamil country commands the respectful admiration of poets and people alike as this great poet. He is praised by a Western savant "as the bard of universal man". His work entitled *Tirukural* is a code of morals expressed in poetical aphorisms. Very little is known of the life of Tiruvalluvar, but he is generally believed to have lived in Mylapore which is now a suburb of the City of Madras. A distinguished European missionary who translated the first two parts of the *Kural* into Latin, says that "the prefix 'Tiru' in the name Tiruvalluvar signifies 'divine', in the sense in which we say 'the Divine Plato'." It is no exaggeration to say that every noteworthy poet who came after Tiruvalluvar has deemed it a privilege to incorporate in his poem the luminous ideas and lucid expressions of the *Sacred Kural*. The Buddhists and Jains, the Saivites and Vaishnavites vie with one another in adoring it as their scripture. This unique feature is perhaps responsible for its being called 'Podumarai' (Common Scripture) and 'Tamil Marai' (Tamil Scripture).

The ancient kings and princes of the Tamil country were patrons of Tamil learning and some of them were scholars and poets of no mean order. The pride of place among them is given to the Pandya kings who established a Tamil academy in their capital city of Madurai and patronised scholars by munificent gifts. The reputation of the academy was so great that authors and poets sought its recognition and approval for their writings. Tradition has it that Tiruvalluvar submitted his Kural for the approval of this academy and secured its approbation after answering the searching questions put to him by the learned critics. This period is generally called the Sangam Age of Tamil literature.

Sri K. Kamaraj, Chief Minister, addressing the function held in connection with the opening of the new administration building of the Government Transport.



The new administration building of the Madras Government Transport.

Epic Age

The age of the SACRED KURAL was followed by the Epic Age of Tamil literature. Five great epic poems are said to have been composed in the Tamil language but of these, two have almost perished. The remaining three poems have been critically studied and they have contributed greatly to an appreciation of ancient Tamil civilisation and culture. 'Silapathigaram', the *Lay of the Anklet* and 'Manimekalai' are considered to be twin epics, and their authors are said to have been contemporaries. In elegance of style and wealth of information on the arts of poetry, music and dancing, the *Lay of the Anklet* stands out as a unique literary composition. Chastity which has always been cherished in the Tamil country as an inestimable virtue of womanhood, is deified in this great poem. Kannaki, the heroine has been the object of adoration ever since this epic poem came into existence. The other epic poem 'Manimekalai' presents the ideal of renunciation which captured the imagination of the Tamils after the advent of Buddhism. The heroine called Manimekalai devotes herself to a religious life. She is courted by a handsome prince, but remains firm and faithful to her vow and ultimately renounces the world and embraces Buddhism. Incidentally the author describes the six schools of philosophy which were popular in his time and shows himself to be a master of logical subtleties.

A period of confusion

This Augustan Age of Tamil literature was followed by a period of confusion which is called by historians the Kalabra Interregenum. It is possible that during this dark period, Buddhism and Jainism gained popularity in the Tamil country. The Pallava kings of Kanchi then came on the scene and for three centuries there was a vigorous struggle for supremacy between Buddhism and Jainism on the one hand and Saivism and Vaishnavism on the other. Tirugnanasambandar was the chief exponent of Saiva faith. He was challenged at Mathurai by the Jaina monks who were basking in the sunshine of royal patronage. The challenge was taken up and in the memorable contest that followed, the Saiva saint came out triumphant. The great opponents of Buddhism were the Vaishnava saint Tirumangai Alwar and the Saiva saint Manickavasagar. The defeat sustained by the Jains and Buddhists evoked great enthusiasm in the country. The atmosphere was surcharged with religious spirit. Devotional hymns were composed by the Saiva and Vaishnava saints, which were chanted by the people throughout the country. "The emotional theism of these masters of popular song", says a historian, "running in the parallel channels of Vaishnavism and Saivism is in many ways the most characteristic product of Tamil religious experience." The sacred hymns of the Saiva saints known as *Tevaram* and *Tiruvasagam* and the bulk of four thousand sacred hymns of the Vaishnava saints laid the foundations of the Bhakti cult. In a memorable poem entitled 'Tiruthondathogai', Saint Sundarar, the last of the Saiva hymnists, paid his homage to the saintly persons who attained salvation through Bhakti. This poem formed the basis of the illustrious work known as *Tiruthondarpuranam* or *Periyapuranam*. The author of this work was the Prime Minister of the Chola Empire during the reign of Kulothunga, who honoured him by the title *Thondarsirparavuvar* —the singer of the glories of the saints.

Although Buddhism and Jainism ceased to be a vital religious force in the Tamil land after the great religious struggle, their contribution to Tamil literature and culture, was substantial. One of the five great epic poems, *Chintamani* was composed by a Jaina monk in the 10th century A.D. It was the first epic in Tamil literature to employ the metre called *viruttam* which has gained increasing popularity as the medium of poetic expression ever since. *Yapparungalam*, a treatise on prosody, was written by a Jaina ascetic. It offers an exhaustive treatment of the variety of metres in Tamil. The author of the medieval Tamil grammar known as Verasoliyam was a Buddhist. Metrical lexicons like *Nikantu*, *Gudamani* and grammatical treatises like *Nannul*, which are considered to be standard works by the Tamils even to this day, are the contributions of Jaina scholars.

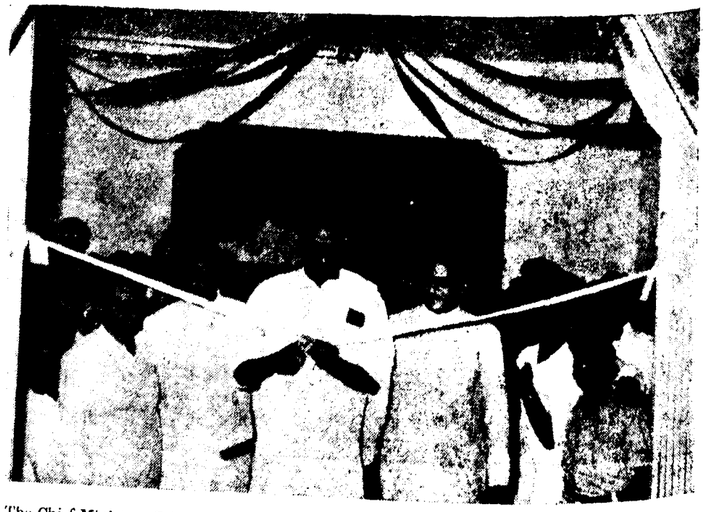
Kamban, of Immortal Fame

The age of the Imperial Cholas constitutes the most creative epoch in the literary history of South India. Three great poets flourished during this period and they are known to Tamil literature as *Kavichakravarthis*. One of them was Kamban, of immortal fame. His 'Ramayanam' is the greatest epic in Tamil literature. "His work" says a historian, "is no mere translation nor even an adaptation of the Sanskrit 'Ramayana.' In the treatment of the incidents in the story and in the portrayal of the chief characters in it, Kamban made a very wide departure and handled the subject matter with a mastery and originality and a depth of poetic experience seldom equalled in Tamil literature. A war poem known as *Kallingattuparani* earned the title of Poet Laureate for the poet Jayangondan. The conquest

of Kalinga by a Chola king is celebrated in the poem. The pomp and circumstance of war are depicted in a masterly way, which has made the *Kalingattuparani* a model and masterpiece in that kind of literary composition. The third Poet Laureate was Ottakuttan who was patronised by three successive Chola emperors.

The age of the Imperial Cholas witnessed the vigorous growth of the Saiva Siddhanta philosophy. Dr. Pope has characterised it as "the typical product of the Dravidian intellect". Saint Meikandar formulated the principles of this philosophy in forty lines of poetry, which have been expounded and elucidated by his disciples. "This system", says Gowdi, "possesses the merits of great antiquity." As a system of religious thought, as an expression of faith and life, the Saiva Siddhanta is by far the best that South India has produced. A clear and authoritative exposition of the doctrines of Saiva Siddhanta is the *Sivagnanasidyar*. It is a classical treatise on Tamil Saivism and has been the subject of several commentaries.

In the field of literature some of the great commentaries on the classics came into existence during the period of Imperial Cholas. The *Sacred Kural* had nearly ten commentaries of which the commentary of Parimelazhagar is considered to be the best and last. Students of Tamil literature are greatly indebted to Naccinarkkiniyar who has written erudite commentaries on the *Pathuppattu*, *Kalithogai* and *Chintamani*. The commentary of Adiyarkunallar on *Silappatikaram* is a valuable mine of information on the ancient arts of music and dancing that were popular in the Tamil country in the early centuries of the Christian era. Several treatises on music and dance are cited in his commentary. Of these we have no other information besides the references in this work. The commentaries on *Tolkappiam* were also written during this period.



The Chief Minister, Sri K. Kamaraj, opening the new administration building of the Madras Government Transport.

The language of these commentaries gives us an idea of the ancient and medieval prose of Tamil literature. There are a few passages of prose in *Silappatikaram* and in the commentary of Nakkirar on a treatise on love. The prose style of these works is almost as terse and elegant as classical poetry. In fact, it may be called rhythmic prose or poetic prose.

Manipravalam

In the medieval period of Tamil literature, a new style of writing known as Manipravalam was employed by some of the great writers of the Jaina and Vaishnava religions. A sacred book of the Jainas known as *Sripuranam* was written in that style and the valuable commentaries on the *Tiruvaimozhi* of Nammalwar, the greatest of the Vaishnava saints were written in the Manipravala style. The Manipravalam was the quaint style in which phrases of Sanskrit and Tamil are harmonised in rhythm. In spite of the eminence of the scholars who sponsored the style it died a natural death in course of time. In order to preserve the philosophic thoughts contained in the commentaries attempts are new being made to render them into Tamil.

(*Continued on page* 32)

Sri B. Parameswaran, Minister for Transport, ceremonially launched the new fleet of 10 buses added to the City Transport.

Rural Broadcasts for September 1955

Thursday, 1st September 1955—
Farm Forum : Discussion.
Musical bouquet.
Market rates and water-level readings.
Topical discussion : Weather report.

Friday, 2nd September 1955—
Parisal Thurai : Musical feature.
Market rates and water-level readings.
Topical discussion : Weather report.

Saturday, 3rd September 1955—
National Extension Scheme in Tanjore district—Talk in Tamil, arranged by the Department of Agriculture, Government of Madras.
En Arumai Tamizh Nattil : Song.
The Adult Literacy Class : Tirukural: Adakkamudaimai (Kural Nos. 12 and 122).
Weekly Review of Market rates; Water-level readings.
Topical discussion : Weather report.

Sunday, 4th September 1955—
Oil Seeds : Discussion.
Methinikku Menmaitarum : Song.
The Pial School of Political Science.
Market rates and water-level readings.
Topical discussion ; Weather report

Monday, 5th September 1955—
Dairying : Discussion.
Folk songs lesson.
The Village Women's Forum.
Market rates and water-level readings.
Topical discussion : Weather report.

Tuesday, 6th September 1955—
Grama Chiruvargal.
Market rates and water-level readings.
Topical discussion : Weather report.

Wednesday, 7th September 1955—
Typhoid Fever and Treatment : Discussion.
Folk songs.
Market rates and water-level readings.
Topical discussion : Weather report.

Thursday, 8th September 1955—
Farm Forum : Discussion.
Vasanai Kalanjiyam : Pannir : Musical feature.
Market rates and water-level readings.
Topical discussion : Weather report.

Friday, 9th September 1955—
Uriyadi Utsavam : Musical feature.
Market rates and water-level readings.
Topical discussion : Weather report.

Saturday, 10th September 1955—
Cottage Industry : Oil Pressing.
Ellamahi Kalandu : Song.
The Adult Literacy Class : Tirukural : Adakkamudaiumai (Kural Nos. 123 and 124).
Weekly review of market rates; Water-level readings.
Topical discussion : Weather report.

Sunday, 11th September 1955—
Bharati Kanda Graman : Musicial feature.
Market rates and water-level readings.
Topical discussion : Weather report.

Monday, 12th September 1955—
Hemp Sore : Discussion.
Satya Jothiyai : Song.
Irulil oli : Feature.
Market rates and water-level readings.
Topical discussion : Weather report.

Tuesday, 13th September 1955—
Farm Forum : Discussion.
Grama Patasalaiyil : Asu Kavirayar.
Market rates and water-level readings.
Topical discussion : Weather report.

Wednesday, 14th September 1955—
How to combat Ant trouble : Discussion.
Suddha unavilum : Song.
Listeners' letters.
Market rates and water-level readings.
Topical discussion : Weather report.

Thursday, 15th September 1955—
Farm Forum : Discussion.
Musical bouquet.
Market rates and water-level readings.
Topical discussion : Weather report.

Friday, 16th September 1955—
Karayadi Vayal : Play.
Market rates and water-level readings.
Topical discussion : Weather report.

Saturday, 17th September 1955—
Cottage Industries : Talk in Tamil arranged by the Department of Industries and Commerce, Government of Madras.
Un arul allal : Song.
The Adult Literacy Class : Tirukural : Adakkamudaimai (Kural Nos. 125 and 126).
Weekly review of market rates; water-level readings.
Topical discussion : Weather report.

Sunday, 18th September 1955—
Stage-*cum*-Exhibition : Nam Sadanai : Feature on the Five-Year Plan.
Market rates and water-level readings.
Weather report.

Monday, 19th September 1955—
Stage-*cum*-Exhibition : Engal Oor : Play by Ramesh Mehta.
Market rates and water-level readings.
Topical discussion : Weather report.

Tuesday, 20th September 1955—
Stage-*cum*-Exhibition :
Grama Panchayat Oor Koottam.
Feature on the importance of people's co-operation in the Five-Year Plan.
Market rates and water-level readings.
Topical discussion : Weather report.

Wednesday, 21st September 1955—
Importance of Vitamins : Discussion.
Tamizhnadu : Song.
Social Education under Five-Year Plan : Talk.
Market rates and water-level readings.
Topical discussion : weather report.

Thursday, 22nd September 1955—
- Farm Forum : Discussion.
- Have You Heard This Song ?
- Market rates and water-level readings.
- Topical discussion : Weather report.

Friday, 23rd September 1955—
- Kathakalakshepam : Rukmani Kalyanam.
- Market rates and water-level readings.
- Topical discussion : Weather report.

Saturday, 24th September 1955—
- Dancing in Kashmir : Discussion.
- Ennenna Vandalum : Song.
- The Adult Literacy Class : Tirukural: Adakkamudaimai (Kural Nos. 127 and 128).
- Weekly review of market rates and water-level readings.
- Topical discussion : Weather report.

Sunday, 25th September 1955—
- Reclamation of Alkaline Soil : Discussion.
- Tamizhar Idhayam : Song.
- Kona Ezhuttu Kunchithapadam : Serial sketch.
- Market rates and water-level readings.
- Topical discussion : Weather report.

Monday, 26th September 1955—
- Cotton Seed as Cattle Feed : Discussion.
- Sathya Jothiyai : Song.
- Irulil Oli : Feature.
- Market rates and water-level readings.
- Topical discussion : Weather report.

Tuesday, 27th September 1955—
- Farm Forum : Discussion.
- Folk songs.
- Market rates and water-level readings.
- Topical discussion : Weather report.

Wednesday, 28th September 1955
- Spitting a Bad Habit : Discussion.
- Sathya Vritam : Song.
- Listeners' Letters.
- Market rates and water-level readings.
- Topical discussion : Weather report.

Thursday, 29th September 1955—
- Farm Forum : Discussion.
- Musical bouquet.
- Market rates and water-level readings.
- Topical discussion : Weather report.

Friday, 30th September 1955—
- Makkal Tiruppani : Play.
- Oyil Kummi.
- Market rates and water-level readings.
- Topical discussion : Weather report.

Trained to Serve

Five hundred Block Level Extension Officers will be trained every year under the Community Project Administration's intensive programme to provide adequate training to the personnel engaged in the development of small-scale, cottage and village industries in the Project areas.

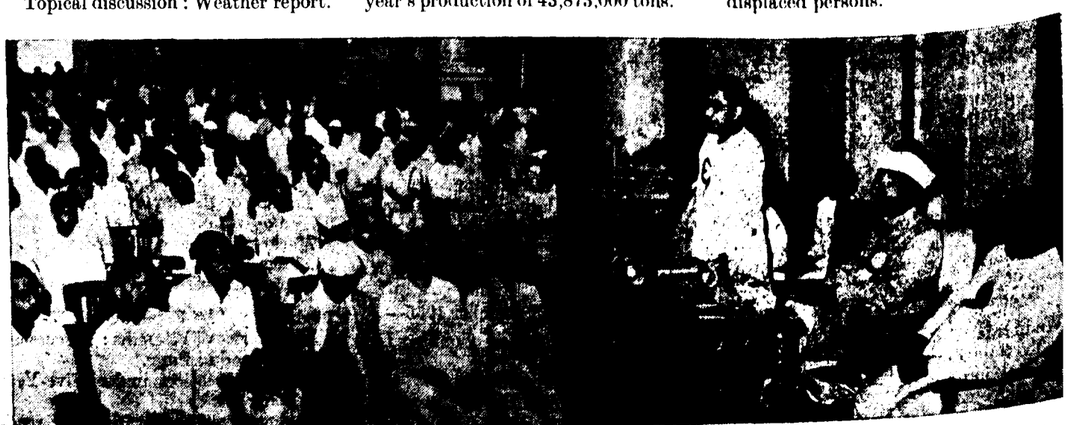
The production of sugarcane for 1954–55 shows an increase of 10,775,000 tons or 24·6 per cent over the previous year's production of 43,873,000 tons.

(*Continued from page 30*)

After the fall of the Chola Empire religious institutions known as Muthathenams became centres of learning and culture. There are several such in the Tamil country where literature and religion are fostered. The Tiruvavaduthurai and Dharmapuram Mutts are great centres of learning in the heart of the Tamil country. The ascetics belonging to these institutions have made valuable contribution to the growth of the Tamil language and literature. One of these ascetics, Saint Kumaraguruparar, lived in the sacred city of Benares for several years, expounding the philosophy of Saiva Siddhanta and the elegance of Tamil literature. It is said that he was able to obtain the grant of a plot of land from the great Moghul Emperor of his day by his persuasive eloquence. The Mutt that he erected on the site still exists on the banks of the Ganges. There is a tradition that he gave a series of discourses on the *Kambaramayanam* in Hindustani, for the benefit of the Rama Bhaktas of the North. Tulsidas who is said to have attended the lectures was greatly inspired by the Bhakti or devotion portrayed in the *Kambaramayanam*. There is a Mutt in South India dedicated to the memory of this great saint, who in the 17th century sought to interpret the literature and culture of South India to the peoples of North India.

(*By courtesy, All India Radio.*)

Up to May 31, 1955 the Rehabilitation Finance Administration disbursed Rs. 956·59 lakhs as loans to displaced persons.



Sri C. Subramaniam, Minister for Finance and Information inaugurating the conference of Indian Federation of Working Journalists held recently in the City.

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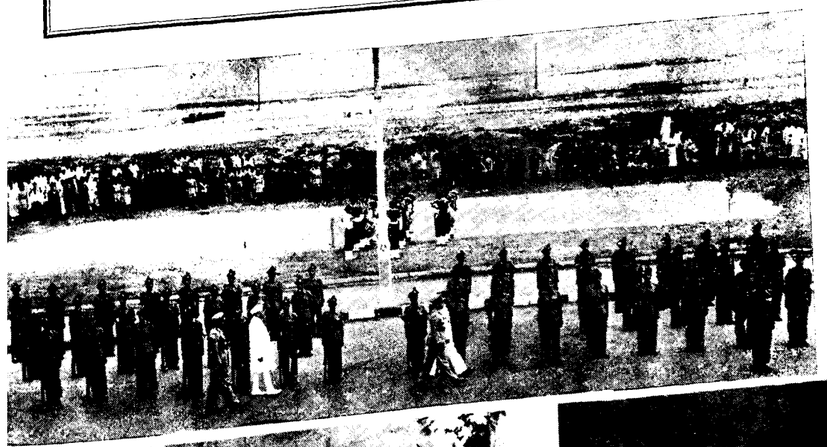

INDEPENDENCE DAY

On August 15th, we renewed our pledge to serve the people.

Wreaths were also placed on the monument to the war dead with the silent prayer that conditions may not again arise when the youth will be wrenched from homes to die in far-off lands.

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5-OCT 1955

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OUR THANKS.

Our thanks are due to Sri A. Arunachalam, Advocate, Madras, for the photograph of Mahatma Gandhi reproduced on the cover, and to the "Hindu", Madras, for the photographs of Mahatma Gandhi published in the text.

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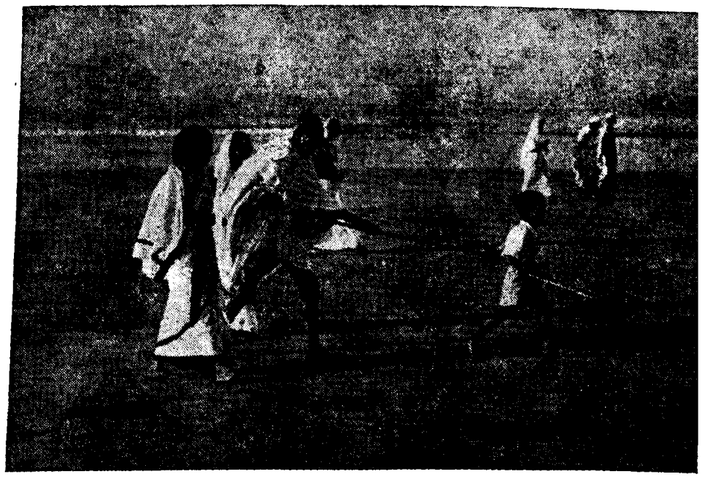
Bapu's Unconditional Love



Bapu loved children. And children in turn loved Bapu. Wherever he went, whether be it the East End of London, Bhangi Colony of Delhi, Juhu beach of Bombay, children flocked around him. They felt thoroughly at ease in his presence. Was it, who knows, the divine radar in children that detected the purity and godliness in the Mahatma ?

Bapu's love enveloped all—the inmates of the Sabarmati Ashram, Congressmen and non-Congressmen, Field Marshal Smuts, Churchill and his colleagues, all, all . . . . . ! Bapu never asked before he loved a man : "Do you hold a membership card of the Congress? Do you spin? Do you read the Gita?" No ! He just loved. Unconditional love ! The more we ponder over this aspect of Bapu, the more we are enthralled. Because, we are all too familiar with the brand of love which stipulates conditions. "Are you with us? Are you within such and such a frontier? Then we love you !" This conditional love at once holds within its fold seeds of hatred. The moment you deviate, move out of the order, or cross the frontier, you are an outsider, an enemy. But Bapu's mind knew no such limitations. Is this unconditional love the answer to the threat of the nuclear age? For, then, the children on the banks of the Yalu, the Yiangtze, the Volga and the Missisipi equally become lovable, equally worthy of being protected from the fumes of the Hydrogen bombs ! At least on October 2, will men of goodwill everywhere ponder over this supreme message of the Mahatma ?

Sun or rain never prevented Bapu in the discharge of his duties to the Indian people. He knew no rest. Here you see the great Karmayogi walking in torrential rain, indifferent to surroundings, but thinking, thinking of the destiny ahead, the destiny of the millions of his Countrymen whose symbol he had become, of all their aspirations, all their hopes.

Salvation for the Villager

By SRI G. VENKATACHALAPATHI, Director of Rural Welfare

The problems of Rural India are worth repeating any number of times; because they are so vast and varied, complicated and chronic. They deserve deep study and practical approach from time to time.

It is often said that 'the real India is the Rural India.' Of the 360 millions of people living in India, 300 millions live in villages and depend on agriculture. Therefore, the main problems of India relate to rural population and agriculture. Any plan of development for the Indian Republic, should necessarily aim at the rehabilitation of rural public.

The Rural Welfare activities, consisting of the Community Projects, National Extension Service, Local Development, Rural Arts and Crafts, etc., aim at the economic uplift of the rural masses. What, then, is 'Rural Welfare'? The tiller of the soil should secure better food. Men, women and children in villages should get better clothing. There should be healthy housing facilities for the villagers. The daily necessities of life should be produced and made available to the villagers. In short, every village should live as a happy family unit, with an urge for co-operative endeavour, aiming at mutual welfare and prosperity for all.

Need for subsidiary occupation

There is no use in all villagers depending on agriculture for their livelihood. No doubt, agriculture is the main occupation in rural areas. But, this should not be the only occupation. Agriculturists are engaged for less than eight months in a year in this occupation. The other four months are spent in utter idleness. Under-employment and unemployment rampant in rural areas, have nurtured inertia, disharmony and litigation in those areas.

All the hard-earned money they earn during the eight months in the year, is used up for the purchase of their daily necessities such as food products, clothing, etc. Is it not possible for the villager to supplement his income by engaging himself in a subsidiary occupation? What prevents him from producing yarn for his own clothing? Especially, those who do not possess sufficient land for cultivation, should make it a point to take to village industries. Unless that is done, there can be no salvation for the villager.

The New Way

The Hiriadka Panchayat in South Kanara District managed to form certain roads in the Panchayat area with the co-operation of the Anjar Villagers' Committee and the Hiriadka Educational Society with very little expenditure from the panchayat funds. The roads formed were about nine miles in length and the estimated value of the work is about Rs. 11,000. It is reported that about 61 volunteers assisted the formation of the roads for a period of three months. The panchayat had only to pay Rs. 250 to the Anjar Villagers' Committee and Rs. 500 to the Hiriadka Educational Society towards the cost of construction of culverts, etc., on the newly formed roads.

Way to Self-sufficiency

No doubt, the villagers produce so many raw-materials like cereals, cotton, groundnut, sugercane, etc. The villager should see that raw-materials are converted into useful products at the village itself. This requires careful planning for utilizing them in the proper way. Agro-industries should be developed, according to the requirements of local conditions. For example, the cotton produced in the village, instead of being sold away as a raw-material, as it is done today in many villages, can be spun into yarn and woven into clothes, which will be used by the villagers. Oilseeds need not be disposed of as raw materials for reduced prices. Oil can be extracted by the country 'ghani.' By such activities, we can save the trouble of running after oilcakes, found in town mills. At the same time, good edible oil will be made available for the villagers. Gingelly and groundnut oil and cakes can be obtained in plenty, in rural parts. That is how the agro-industries should be fostered.

Unless we do this, Rural India cannot prosper. The villagers will always be at the mercy of a few business and industrial magnates and there will be no end to the economic bondage of the villagers. This state of affairs should change. For, the independent India has resolved to evolve a Socialistic Pattern of Society, based on Gandhian lines, and necessary steps are being taken to achieve that goal. The All-India Khadi and Village Industries Board, the Planning Commission and the Governments—both at the Centre and in the States—have given due importance to the planned development of the village industries in the Second Five-Year Plan. It is left to the people in rural areas to utilize the opportunity offered to them, to raise their own standard of living. The technical guidance and voluntary assistance in this direction, will always be offered by the Development staff in rural areas.

Khadi Development In Madras State

By SRI S. SWAMINATHAN, Khadi Special Officer

In a letter, dated February 15, 1922, Gandhiji wrote: "Of all my outward activities I do believe that the spinning wheel is the most permanent and the most beneficial. I have abundant proof now to support my statement that the spinning wheel will solve the problem of the economic distress in millions of Indian homes, and it constitutes an effective insurance against famine." Again, in the issue of "*Young India*," dated 4th September 1924, Gandhiji wrote: "The spinning wheel for us is the foundation for all public corporate life. It is impossible to build any permanent public life without it. It is the one visible link that indissolubly binds us to the lowest in the land and thus gives them a hope." Khadi work, therefore, formed an important plank in Gandhiji's programme.

The Government of Madras following the high ideals set by the "Father of the Nation", framed in 1946 the khadi scheme to make the villages in this State, as far as possible, self-sufficient economic units. In accordance with Mahatma Gandhi's advice, it was decided, to begin with, that this scheme should be introduced in certain selected centres where khadi had already made substantial progress under the All-India Spinners' Association and in which, therefore, it was hoped that the self-sufficiency ideal would be attained very quickly. It was proposed to extend the scheme gradually to other areas. The scheme was thus conceived in two parts, viz., intensive and extensive.

Intensive Khadi Scheme

Brief history of the khadi work in the State: The centres selected for the intensive part of the scheme were three in the Tamil Nad, viz., Avanashi, Vellakoil, Chinnasalem, one in Kerala, viz., Payyanur and three in Andhra, viz., Guruvareddipalem, Kota Uratla and Erragondapalem. The centres were taken in or about January 1947.

THE PICTURE of an epoch!

The immediate objective of the scheme was to arrange for the production of khadi in each of the centres sufficient to make available to the local population supplies at the rate of 20 yards for an adult and 10 yards for a child per annum. It was proposed to achieve this by securing at least one efficient spinner from each family residing in the centre. Provision was made for supplying Charkas to new spinners at cost price. The spinners were to be encouraged to grow their own cotton with a view to make them self-sufficient in respect of cotton also ultimately, but provision was made to procure and stock cotton in the centres and supply to the spinners at cost price till such time as they were able to make their own arrangements. The authorities in charge of the scheme were required also to take steps to increase the weaving capacity of each village, so that the ideal of getting all the yarn spun in a village woven into cloth in that village itself might be reached as soon as possible.

The Centre Khadi Committees and the Village Khadi Committees constituted under the scheme were charged with the duty of carrying on intensive propaganda in the centres to create public opinion in favour of khadi and also to enlist the necessary spinners by house-to-house propaganda. A paid staff was also appointed to assist the committees in their work. The day-to-day administration of the centres was left to be supervised by the Regional Secretaries of the All-India Spinners' Association, who were appointed to be Honorary Regional Khadi Officers in their respective regions. The All-India Spinners' Association furnished the majority of the personnel required for the staff and even the few outsiders who were recruited were selected by the Honorary Regional Khadi Officers.

But owing to differences between the All-India Spinners' Association and the State Government that arose later, the All-India Spinners' Association withdrew their co-operation and the centres were thenceforward worked by the Government.

Though originally it was the expectation that the khadi produced in the centres would be consumed by the local population, in March 1948, the Government decided that all Government departments should use khadi and khadi only. This decision was entirely based on the considered view of the Government that the use of khadi would have a unifying influence and would be the best expression of the homage to the memory of Gandhiji.

Brighter Outlook

The outlook for khadi is, therefore, very much brighter now. The Planning

Commission has recognised it as an important village industry deserving to be developed. An All-India Khadi and Village Industry Board has been set up by the Central Government. There is also State Khadi and Village Industry Board functioning. The Government of India departments and the State Government departments are placing huge orders for the supply of khadi for the use of their departments. Excepting a few departments, all the rest have to use khadi only for their departmental purposes. The excepted cases are also slowly being reduced in number. The All-India Khadi and Village Industry Board is drawing up plans for the Second Five-Year Plan Period for greatly increasing the production and for expanding the market. To achieve these ends, the Board has been announcing several concessions from time to time. The following are the concessions among others now in vogue :—

1. Grant of capital expenditure as loan for opening of new sales emporia in big cities to serve as sales centres and for printing, dyeing, embroidery and tailoring activities.

2. Grant of a rebate of three annas per rupee on the retail khadi sales to the consumer.

3. Grant of a subsidy to recognized Khadi producing institutions to the extent of 6¼ per cent of their retail Khadi sales subject to the maximum of Rs. 2,000 .

4. Grant of loans to recognized institutions for financing production and sale of khadi.

5. Grant of a subsidy to recognized Khadi producing institutions to the extent of 6¼ per cent of their value of production subject to a maximum of Rs. 2,000.

6. Grants for holding Khadi and Gramodyog Exhibitions on an All-India, provincial and district scale.

7. Concession on distribution of implements and accessories in the shape of a subsidy equal to 50 per cent of the cost.

8. Grant of 50 per cent of the weaving charges or five annas per square yard up to the maximum of 20 square yards a year to the self-spinners to get their yarn woven.

9. Training in salesmanship of Khadi and holding courses.

Development Programme

The State Government have also recently decided to take the following measures for developing the production of khadi in the Government Centres so as to double it with a view to cope with the increased demand for it :—

1. Opening of 35 additional visiting centres attached to the various existing sub-centres.

2. Appointment of eight Additional second grade assistants and eight additional boy assistants.

3. Opening of four additional sub-centres attached to the existing centres.

4. Opening of a new centre at Kuruvikulam with three sub-centres.

5. Opening of two independent sub-centres at Rajapalayam and Vedaranyam.

6. Employment of two Khadi Inspectors and Khadi designers.

7. Opening of a Government factory for manufacturing charkas and instruments.

8. Purchase and sale of silk and other special varieties in Government sales depots.

9. Opening of three more sales depots at Mangalore, Kumbakonam and Cuddalore.

10. Functioning of all sales depots as centres for the purchase of yarn also.

11. Appointment of separate staff for running the sales depots.

12. Continuance of payment of commission to selling agents.

13. Payment of commission on sales effected to All-India Khadi and Village Industry Board and other certified institutions.

Improvement in Technique

The State Government are also planning on a large scale to improve the khadi technique by doing research work, impart sound knowledge in khadi work by giving special training to those who take it up, increase the facilities for propaganda and marketing, etc.

The expenditure and receipts under the scheme from its inception are given below :—

Year.	*Gross expenditure.*	*Deduct receipts.*	*Net expenditure.*
	RS.	RS.	RS.
1946–47	1,60,072	23,155	1,36,917
1947–48	14,69,291	6,44,344	8,24,947
1948–49	13,36,241	8,01,311	5,34,930
1949–50	14,83,774	12,87,708	1,96,066
1950–51	17,21,058	17,60,083	39,025
1951–52	43,45,233	33,84,625	9,60,608
1952–53	39,34,572	29,80,405	9,54,167
1953–54	21,02,412	24,31,278	– 3,28,866
1954–55	30,83,952	24,21,132	6,62,820

The following are the figures of production of Khadi :—

	Cotton distributed.	*Yarn purchased from spinners.*	*Khadi production.* On Government account.	*Khadi production.* By self spinners on subsidy basis.
	LB.		YDS.	YDS.
From the inception of the Scheme till December 1949.	415,716	645,189 lb.	1,722,279	863,607
In 1950 ..	136,702	272,809 ,,	634,344	269,370
In 1951 ..	570,755	553,794 ,,	1,078,712	386,911
From 1st January 1952 to 31st March 1952.	132,386	1,977,507 hanks.	372,055	31,027
In 1952–53 ..	571,499–2	8,845,305 ,,	1,705,551	72,911
In 1953–54 ..	598,612–12	3,680,808 ,,	612,628	52,059–10
In 1954–55 ..		(Figures are not yet ready.)		

Extensive Khadi Scheme

The Extensive Khadi Scheme was sanctioned in May 1949. It was introduced in the first instance in 19 selected Firkas. The scheme provided for the introduction of 1,000 charkas a year in each of the 19 selected Firkas. Under the scheme, arrangements were also made for supplying charkas at a concessional price and for the supply of cotton and instruments. Subsidy was also paid to self-spinners as under the Intensive Khadi Scheme. The intention was that the Extensive Khadi Scheme should pave the way for introduction of the Intensive Khadi Scheme in due course. The scheme was extended to 36 more Firkas in the year 1950–51. The services of the Rural Welfare Officers were availed of to implement the scheme. With the formation of the Andhra State, the scheme was in force in 33 selected firkas and parts of firkas administered by 13 Rural Welfare Officers assisted by the Khadi workers and Gramasevaks in the Madras State. Consequent on the merger of the Rural Welfare Scheme in the National Extension Service in October 1953, the working of the scheme has been entrusted to the Block Development Officers-in-charge of the National Extension Service Blocks of the respective Firkas. At present the scheme is in vogue in 26 blocks.

Recently the Government have introduced a comprehensive Khadi Scheme on the lines of the Extensive Khadi Scheme in the Community Project and Community Development blocks. This is just being put into operation. The general outline of the scheme is as follows :—

1. Charkas will be introduced at the rate of 1,000 for every block in a year at subsidized rates.

2. Cotton will be purchased and supplied at cost price.

3. Yarn produced will be purchased by the Government from the spinners at the rate fixed under the Government Intensive Khadi Scheme from time to time and transferred to the nearest Intensive Khadi Centre.

4. Ten carding machines and sliverring sets will be supplied free of cost so each block.

HERE YOU SEE BAPU in the Prayer Hall of the Harijan Colony in Delhi. By his side you see a great and trusted Colleague, carew by the weight of the epic struggle—today our beloved and revered President !

The Agricultural Scene—A Gandhian Assessment

By SRI N. MURUGESA MUDALIAR, Deputy Secretary to Government, Agriculture Department

Village the Pivot

On Gandhiji's birthday, let us make an assessment whether the agricultural developments are moving towards the ideals set by him.

To Gandhiji agriculture was not a mere question of raising of crops but was part of an integral concept of village development. To the most careful student of agriculture it would be apparent that the problem of agriculture is vastly more economic [illegible] human than merely technological. an[illegible] therefore frequently wrote Gandhiji [illegible] and spoke about village uplift and poverty of the peasants. He said, "To serve our villages is to establish Swaraj. Everything else is but an idle dream." When Swaraj was in sight, he turned his attention more and more to problems like soil fertility, organic manuring and cattle improvement. In all his thoughts, the village was the pivot for emancipating the poverty stricken masses of India. "To-day, the villages are dung heaps. To-morrow they will be like tiny gardens of Eden where dwell highly intelligent folk whom no one can deceive or exploit." That was his hope. Are we working for the fulfilment of that hope?

It used to be the fashion to consider that the villagers' methods of farming were outmoded. Gandhiji did not entirely share this view. "The Indian villagers' method of farming was certainly not bad," he wrote, "many are decisive that he has a workable knowledge of agriculture which is not to be despised." The villagers' inability to adopt better methods is largely economic. His margin of income is so low that he could not find the investment to use better seeds, improved implements, or manures. Things have fortunately changed a little during the past few years since Independence. Under the stress of a serious food shortage, the villagers have been liberally helped by the State with subsidies and loans and provision of supplies and services. A slight advantage in increased prices has also improved the situation.

Irrigation

The most basic factor in agricultural improvement is irrigation. "The need for providing irrigation facilities for all the villagers cannot be emphasized too greatly. This is the foundation upon which agriculture depends for its progress, in the absence of which it remains a gamble. A drive for sinking wells, enla[illegible] tanks and [illegible] and dredging [illegible] building canals has to be launched. The power engines used in rice and flour mills now can be acquired by the Government to pump up water from tubewells". These are views endorsed by Gandhiji. Madras was the first to realize the advantage of providing small-scale irrigation facilities dispersed throughout the State. A campaign for sinking new surface wells or deepening old ones by giving subsidies to the villagers was organised. About fifty thousand wells were sunk or deepened and they served to tide over the drought years and saved the villagers from total loss of crops and unemployment.

Many small tanks have been restored and it is still on the State's programme to renovate more tanks, to desilt them and to dig more tanks, particularly in the ex-zamindari areas. Power engines and electric motors have been supplied to the villagers on hire or on easy instalment basis to lift water for irrigating their crops. Over 30,000 motors and engines are now under operation and over 3,000 have been given on hire. Wherever these are in use, the fields put on a green look as crops could be raised almost throughout the year. Small filter point tubewells have been brought into vogue and to-day there are probably more than 1,000 such tubewells in many districts.

Manure

Gandhiji placed the greatest importance on utilization of night-soil and compost manuring of lands. In fact, intensive work was done in this respect by his disciple Mira Ben. "This organic manure ever enriches, never impoverishes the soil. The daily waste turned into compost returns to the soil in the form of golden manure causing a saving of millions of rupees and increasing manifold the total yield of grains and pulses. In addition, the judicious use of waste keeps the surroundings clean. And cleanliness is not only next to godliness, it promotes health." So he wrote in 1947. Composting has been made popular [illegible] Almost all Municipalities and many major Panchayats are [illegible] making manufacturing this manure and [illegible] it available to cultivators. The cost of transporting manure has not made it however popular in some places.

There is however no need to depend on Panchayats to make the manure or to pay for transport if Gandhiji's simple advice is heeded. He said, "the chief thing to remember is not the various methods of disposing of refuse so much as the necessity of burying all the refuse for the double purposes of promoting the villagers' health and their material condition through the better yield of their crops which the manure must produce." This is an observation which we have not followed so far. He said: "By this method the cost of digging is lessened and that of removal avoided altogether or certainly lessened. Add to this the fact that excreta is turned into manure in almost a week's time for the reason that the bacteria which live within six or nine inches of the surface of the earth and the air and the rays of the Sun act upon the excreta and turn them into sweet manure much more quickly than when the refuse is buried deep." We should emphasize the advantages of covering excreta in the villages where composting in pits

not followed. There is much practical wisdom in this hint. "If we all become scavengers," he exhorted, "we could know how to turn what to-day poison into food for plant life."

Gandhiji favoured the collection of bones which are being wasted now in the villages and their being put to use as manure. The bones should be charred a little and crushed locally in village chakkis into bone meal and applied to the soil. The bones contain phosphate much needed by the soil. To give only nitrogen manuring is, to say, to give it only one lung and subject it to galloping consumption. We should lay more stress on phosphates and bones are easily available in the villages.

Goseva

To Gandhiji, the condition of the village cattle reflected the prosperity of farming in the village. "Without model cattle, we cannot have a model village" he said. He advocated the bullock for agricultural operations and for village transport and also stressed the importance of proper maintenance of milch cows and the duty of *goseva*. In a talk to villagers, he said, "you have to find out whose animals are the best to discover how he manages to keep them so well. You will find out which was giving the largest amount of milk and discover how he keeps her and feeds her. You may fix some prize for the best bullock and the best cow in the village." Cattle Shows are held in many places in this State but the idea of village shows and competitions must be popularized. This should form an important item in the Agricultural Week Celebrations that we are organizing during the Pongal Week.

As regards rural industries, Gandhiji had a firm faith in spinning. "The charka supplemented the agriculture of the villages and gave it dignity. For the charka included all the anterior and posterior industries, ginning, carding, warping, sizing, dyeing and weaving. These in turn kept the village carpenter and blacksmith busy" he explained. Spinning is no doubt emphasized in our rural development programmes but its character as a cognate industry to agriculture is yet to be emphasized.

Gandhiji had the instinct of a practical farmer and was not dismayed by problems that confronted us during the food shortage. Some one had complained that the land at the disposal of Talimi Sangh at Sevagram was of poor quality and hardly fit for agriculture. Gandhiji brushed aside the objection and said, "You do not know the kind of land we had to begin with in South Africa. But by dint of application we were able to convert it into a fruit orchard. If I were in your place, I would not use the ploughs to begin with. I would arm our children with the hoe and teach them to use it effectively. It is an art. The bullock power can come later. Similarly, I would not like you to be deterred by the poor quality of the soil. A thin top layer of compost can enable us to grow many a useful vegetable and pot herb. A beginning can be made at once by converting night-soil into manure by shallow trenching system. The conversion does not need more than a fortnight. Every pint of water both from bathing and ablutions or from the kitchen should be turned into the backyard vegetable beds. Not a drop of water should be allowed to be wasted. Greens can be grown in earthen pots and even in discarded old tins. No opportunity should be neglected however trifling. The cumulative result of the practice is on a nation-wide scale will be colossal." These hints could not have come better from an extension worker.

Happily Gandhiji's ideas of village workers have found some fulfilment in the ideals set before the Gramasevaks trained for our rural development programmes. He repeatedly stressed the importance of body labour and would not believe that money alone would transform the village. "You cannot bring a model village into being by the magic wand of money", he said.

A new social order

Gandhiji conceived land tenure reforms as a means of ensuring, what he called, a non-violent rural economy. "The real implication of equal distribution", he said, "is that each man shall have the wherewithal to supply all his natural needs and no more. To bring this ideal into being, the entire social order has got to be reconstructed. A society based on non-violence cannot nurture any other ideal." Once he said, "Real socialism has been handed down to us by our ancestors who taught that all land belongs to Gopal. Where then is the boundary line? Man is the maker of that line and he can therefore unmake it."

In his dream of village Swaraj, Gandhiji envisaged that "every village's first concern will be to grow its own food crops and cotton for its cloth. It should have a reserve for its cattle, recreation and play grounds for adults and children. Then if there is more land available, it would grow useful money crops." It is a simple and sane formula for land management for village planners. We are trying to make the villages self-sufficient but considerably far remains to be done.

Gandhiji advocated co-operative farming. In an article entitled "Individual or collective?" he put his point in the following words: "I firmly believe that we shall not derive the full benefits of agriculture until we take to co-operative farming. Does it not stand to reason that it is far better for a hundred families in a village to cultivate their lands collectively and to divide the income therefrom than to divide the land anyhow into a hundred portions? What applies to land applies equally to cattle." These ideas about collective action and Community endeavour are being encouraged to some extent in our Community Development and National Extension Blocks and in Land Colonization Societies but the success is meagre.

Gandhiji regarded the import of food as colossal waste probably as much as the drain of India's wealth by the purchase of Manchester cloth which aroused his feelings many years earlier.

Role of the Cultivator

Gandhiji had the highest esteem for the cultivator. "Years ago I read a poem in which a peasant is described as the father of the world. If God is the provider, the cultivator is His hand. What are we going to do to discharge the debt that we owe to him?" he asked. To-day after the travails of drought and famine, the role of the cultivator in the nation's economy is more vividly realized.

The agricultural scene is slowly moving, though not as fast as we could wish towards the ideals of Gandhiji. More than the outward forms of improvements and reforms, all activities should be imbued with the spirit and feeling of Gandhiji. Particularly in this State where the possibilities of agriculture are immense there is need to keep in view the social objectives of agriculture as the provider of all good and as the basis of a durable economy as envisaged by the greatest man of our times.

Place of Basic Education in Educational Reconstruction

Basic Education, as conceived and explained by Mahatma Gandhi, is essentially an education for life and, what is more, an education through life. It aims at creating eventually a social order free from exploitation and violence.

This article is based on a Working Paper which was submitted by Sri K. G. Saiyidain, Additional Secretary, Union Ministry of Education, for the consideration of the Standing Basic Education Committee.

In this feature are explained the concept and technique, implications and salient features of Basic Education.

The term 'Basic Education' has been interpreted and sometimes misinterpreted, in a variety of ways. This is to some extent understandable because it is a comparatively recent development and its concept and technique are still in the making. It seems necessary, therefore, to state clearly what we mean by Basic Education.

Broadly speaking, the concept of Basic Education is the same as defined in the Report of the Basic National Education Committee (The Zakir Hussain Committee) and elucidated by the Central Advisory Board of Education. It is clear that the basic principles and techniques, as made out in that Report, should guide and shape educational reconstruction in India. So far as the provision of eight years of compulsory universal schooling, and the use of the mother-tongue as the medium of instruction, are concerned, there is no difference of opinion about them. They have now come to be universally accepted and need no further elucidation, except in so far as it may be necessary to stress the intrinsic wholeness of the entire period of basic education, covering the Junior as well as Senior basic grades. The other implications and features of Basic Education that need to be clarified and stressed are the following:—

Basic Education, as conceived and explained by Mahatma Gandhi, is essentially an education for life and, what is more, an education through life. It aims at creating eventually a social order free from exploitation and violence. That is why productive, creative and socially useful work in which all boys and girls may participate, irrespective of any distinction of caste or (class) is placed at the very centre of Basic Education.

Importance of Basic Crafts

The effective teaching of a basic craft, thus, becomes an essential part of education at this stage, as productive work, done under proper conditions, not only makes the acquisition of much related knowledge more concrete and realistic but also adds a powerful contribution to the development of personality and character, and instils respect and love for all socially useful work. It is also to be clearly understood that the sale of products of craft-work will meet some part of the expenditure incurred on running the school or that the products will be used by the school children for getting a mid-day meal or a school uniform or help to provide some of the school furniture and equipment.

As there has been controversy and difference of opinion regarding the position of craft work in basic schools, it is necessary to state clearly that the fundamental objective of Basic Education is nothing less than the development of the child's total personality which will include productive efficiency as well. In order to ensure that the teaching of the basic craft is efficient and its educative possibilities are fully realised, we must insist that the articles made should be of good quality, as good as children at that stage of their development can make them—socially useful and, if necessary, saleable.

Productive Aspect

The acquisition of skills and the love for good craftsmanship have deeper educative significance than merely playing with the tools and raw materials which is usually encouraged in all good activity schools. This productive aspect should in no case be relegated to the background as has been usually the case so far, because directly as well as indirectly, efficiency in the craft practised undoubtedly contributes to the all-round development of the child. It sets up before children high standards of achievement and gives them the right kind of training in useful habits and attitudes like purposeful application, concentration, persistence and thoughtful planning.

While it may not be possible to lay down specific targets for productivity at this stage, it should be the teacher's endeavour to explore its economic possibilities fully with the emphatic stipulation that this does not in any way conflict with the educational aims and objectives already defined. However, it has to be stated that, in the upper classes of junior basic schools and in the senior basic schools, it should not be difficult for States to lay down certain minimum targets of production in the light of carefully assessed experiences.

Liberal Approach

In the choice of basic crafts which are to be integrated into school work, we should adopt a liberal approach and make use of such crafts as have significance from the point of view of intellectual content provide scope for progressive development of knowledge and practical efficiency. The basic craft must be such as will fit into the natural and social environment of the school and hold within it the maximum of educational possibilities. The idea that has been wrongly created in the minds of some people that the mere introduction of a craft in a school, e.g., spinning can make it a basic school does grave injustice to the concept of Basic Education.

In Basic Education, as, indeed, in any good scheme of education—knowledge must be related to activity, practical experience and observation. To ensure this, Basic Education rightly postulates that the study of the curricular content should be intelligently related to three main centres of correlation, viz., craft work, the natural environment and the social environment. The well-trained and understanding teacher should be able to integrate most of the knowledge that he wishes to impart to one or the other of these centres of correlation, which form important and natural facil of interest for the growing child. If he is not able to do so, it either means that he lacks the necessary ability or that the curriculum has been burdened with items of knowledge which are not really important and significant at that particular stage.

It should also be realised, however, that there may be certain items in the syllabus which cannot be easily correlated directly with any of the three above centres. In such cases, there should be no objection to these being taught according to the methods of teaching adopted in any good school. This means, that, even in the case of such lessons, the principle of interest and motivation and the value of expression-work will be utilised. In any case, forced and mechanical 'associations' which pass for correlation in many schools should be carefully avoided.

Place of Books

The emphasis on productive work and crafts in basic schools should not be taken to mean that the study of books can be ignored. The basic scheme does not postulate that the book is not the only or the main avenue to knowledge and culture and that, at this age, properly organised productive work can in many ways contribute more richly both to the acquiring of knowledge and the development of personality. But the value of the book, both as a source of additional systematized knowledge and of pleasure cannot be denied and a good library is as essential in a basic school as in any other type of good schools.

School and Community

The basic scheme envisages a close integration between the school and the community so as to make education as well as the children more social minded and co-operative. It endeavours to achieve this, firstly, by organising the school itself as a living and functioning community, with its social and cultural programmes and other activities—secondly, by encouraging students to participate in the life around the school and in organising various types of social service to the local community.

Students, self-government is another important feature in Basic Education which should be envisaged as a continuous programme of training in responsibility and in the democratic way of living. In this way, the basic school not only helps in cultivating qualities of self-reliance, co-operation and respect for dignity of labour but also becomes a vital factor in the creation of dynamic social order.

Basic Education should no longer be regarded as meant exclusively for the rural areas. It should be introduced equally in urban areas both because of its intrinsic suitability and also to remove the impression that it is some kind of inferior education designed only for the village children. For this purpose, necessary modifications may have to be made in the choice of basic crafts for urban schools and even in the syllabus but the general ideals and methods of Basic Education should remain the same.

STAFF IN HAND he walks . . . and memories surge through our minds of marches, struggles, the trek in Noakhali . . .

Some Production Figures

The production of automobiles in the country during the period January-March 1955 rose to 5,357 from 4,601 in the preceding quarter and 3,785 in the corresponding quarter of 1954.

There were 31 sugar factories employing 33,900 workers in the country in 1932 and the numbers rose to 170 and 91,997 respectively in 1953.

India's exports to the Soviet Union increased from Rs. 1·15 crores in 1953–54 to Rs. 2·11 crores during 1954–55, while her imports from that country increased from Rs. 59·7 lakhs to Rs. 1·61 crores during the same period.

Youth Camps and Manual Labour

By SRI R. PARTHASARATHY, B.A. (Hons.), Assistant Professor of Economics, Presidency College, Madras

The idea of social service camps for University students and scouts originated from the Ministry of Education, Government of India, as part of an educational programme designed to change the outlook of the student population and make it more conscious of its duties towards the country at large. Broadly speaking, the objective of the youth camps are, (1) to impress upon the minds of the students, the dignity of manual labour; (2) to provide an opportunity for the students to live in typical rural surroundings and thereby acquire an insight into rural problems; (3) to mingle freely among the villagers and explain to them in a telling way about village co-operation, sanitation and the need for their participation in community project.

It is stated that during the past ten months, since the scheme was launched, 404 camps have been conducted and about 40,000 youths have participated all over the country. In Madras State, about 22 camps were conducted in the months of April and May of this year and over 2,000 students may be said to have participated. Planning and conducting of Social Service Camps are much more difficult than the organization of N.C.C. camps. The N.C.C. has a tradition in training the cadets in aspects of manual labour. Further, it has a ready administrative machinery for planning the camps right from inauguration. On the other hand, social service camps are only recent essays for infusing a new spirit into the non-N.C.C. students. The machinery for planning these camps is still in the making. Further, their activities are diversified. While targets of work are no doubt a consideration for social service Camp Officers, their main duty is to remove the antipathy of the urbanised students towards the village and bring about a large measure of sympathetic understanding of rural India.

Work in Chingleput District

The writer has had the opportunity of conducting social service camps in three villages in Chingleput district. A remarkable feature of this district is that, a favourable psychological background has been created for the social service campers by its energetic Collector who has a flair for innovation. The 'New Look' campaign and the drawing up of wall-charts in strategic places in every village are the fruits of his originality. Students whom I accompanied were assigned by the Community Project authorities, the following pieces of work :-

1. Mud-plastering.
2. White-washing.
3. Painting.
4. Decoration.

Campers were divided into nine batches, and each batch was entrusted two mud-houses for imparting the 'New Look.' The emphasis throughout was on community outlook and team work than on individual distinction. Initially, the campers were beset with certain difficulties. While the Block Development Officer and his team of Officials were ready to help with tools, materials and technical advice, some of the villagers offered mild resistance. Some of them felt that each student was paid by the Government and as such, he must do the work himself. Some of the campers complained to me that the inmates in certain houses did not offer any co-operation. For instance, water for mixing up the mud was not readily supplied, nor even vessels with which campers could fetch water. In some of the houses, the campers were subject to a regular commentary which brought out the distrust of some of the villagers of all schemes of rural development. Some of the villagers felt that it was unworthy of college students to take up any type of manual labour. The campers had to explain to the villagers that they were no superior human beings and that, as fellow countrymen, they were anxious to know about the problems of the villagers. After exercising a good deal of patience and tact, the campers succeeded in weakening the resistance of the villagers in restoring an atmosphere of co-operation. In majority of the households there was a keen desire to give a new look to their thatched mud-huts. In some of the tiled houses, the inmates supplied their own lime and painting and requested the campers to white-wash and decorate the walls of their houses. On the whole, the students derived great joy from their work.

Quick Attainment of Proficiency

The remarkable feature of the 'New Look' campaign is that any novice can pick up sufficient skill within a few days in aspects of manual labour. For instance many of the campers, who were just freshers, attained proficiency in mud-plastering within a few days. Success of mud-plastering depends on the softness of the mud, as well as the fine proportion in which mud is mixed up with water. Before commencing mud-plastering, the camper has to find out how rough and uneven the mud-wall is. Sprinkling of water is necessary for preparing the wall to take in as much of soft mud as possible. Once the wall has taken in sufficient mud, the subsequent task is to make it smooth and uniform. On the whole, mud-plastering is more strenuous a job than white-washing or painting. The difficulty is all the more increased in villages where soft mud is not readily available.

White-washing was the most popular type of manual labour among the freshers in the camp. Success of white-washing is determined by the proportion in which lime is mixed with water and the way in which the first coating is imparted. As mud-walls take in more of line, care has to be taken to

give a thin coating at the first instance. Once it dries up, the camper goes in for a second-coating. Some waste of lime is inevitable, when the students are in the process of picking up the technique of white-washing.

Painting the doors and windows is a semi-skilled job, and here again it becomes difficult for a novice to practise economy in the use of paint. Decoration of the walls with pieces of flower designs and letter painting is a skilled job in the 'New Look' programme. Campers who had a flair for drawing were put in charge of decoration. The best piece of painting and decoration came off during the last week of the camp.

Socio-Economic Survey

Without prejudice to manual labour, social service camps can conduct socio-economic survey of nearby villages. Such a survey would provide a great insight for the students into the socio-economic conditions of the rural set-up and incidentally provide a useful training in the collection of vital social and economic data. Conducted under qualified officers, the socio-economic surveys can provide a revealing background in which local and State Governments can plan their development schemes. The writer had conducted an intensive socio-economic survey of three villages in Chingleput district. The questionnaire utilized for the survey related to the size of the family, the number of dependants, size of the property, income from the property per annum, land revenue, monthly consumption of food-stuffs, amount of debt, interest charges, subsidiary occupations and infantile mortality. The response of the villages, after an initial distrust, turned out to be whole-hearted and the writer had a remarkable experience throughout the different stages of investigation.

New Spirit of Service

In conclusion, the usefulness of social service camps can be reiterated. Such camps evoke a new spirit of service and self-sacrifice on the part of the campers. They help to narrow down the gulf between the town-dweller and the rural folk. Antipathy is replaced by better understanding. The resistance of the village to any new suggestion is gradually replaced by the offers of co-operation to the campers. The camps in brief provide for a useful interaction between sensitive minds and hard-set hardy villagers.

(*Continued on page* 30)

DR. A. LAKSHMANASWAMI MUDALIAR, Vice-Chancellor of the Madras University, inspecting some of the exhibits at the Medical Exhibition at the Madras Medical College.

Our Legislature :

The Budget

By SRI A. J. SABESAN, M.A., Secretary to the Council

Derivation of the word

"BUDGET" comes from the French "bougette", a diminutive of the old French *bouge*, meaning a small leather bag or wallet and has by custom, come to mean the Chancellor of Exchequer's annual estimate of the revenue and expenditure with statement of intentions regarding taxation, the "bundle of papers carried in his red budget box" and "opened out" to the House on the appointed day. This statement of the estimated receipts and expenditure of the State in respect of every financial year is referred to in the Constitution as the "annual financial statement." It is not however a mere "document containing a preliminary approved plan of public revenues and expenditure" but a report on the administration of the financial affairs of the Government during the last completed year, the condition of the Treasury at the time and the programme of work for the coming year, with proposals as to the financing of such work. On its being approved by the Legislature and assented to by the Governor under the procedure prescribed for the purpose, the Executive is authorized to run the machinery of the State within the financial limits laid down in that Statement.

In the words of a French Legislator,

"The pilot in charge of steering a vessel is the only competent judge of the position and of the spread he has need to give his sails, because he alone is posted in such a way as to know the force and the direction of the winds and currents, which may hinder or delay his movements."

Based upon this principle, the foundation of any sound system of public finance, the responsibility for the preparation of the budget estimates in this State rests with the Executive, viz., the Governor acting on the advice of his Ministers on the analogy of the Sovereign in England.

The Legislative Councils established by the Indian Councils Act of 1861 had no voice in the financial administration of the country nor had they any opportunity to make any observations on the financial proposals of the Government except when a new tax was imposed. In the absence of new taxation, the Budget was merely published in the form of a pamphlet and no discussion took place on it. Lord Dufferin recommended in his Minute dated 6th November 1888 that an opportunity should be given to the Legislative Council for a full, free and thorough criticism and examination of the financial policy of the Government. The Indian Councils Act, 1892, accordingly gave the Councils the right to discuss the Budget but not to vote on it item by item. The general discussion of the Budget obtaining now as a stage in the Voting of Grants is a relic of those days. The Acts of 1919 and 1935 conceded the right to vote but fettered the powers of the Legislature over the purse in other respects and reserved to the Governor the power to authorize expenditure without legislative sanction to the extent and in the special circumstances stated therein.

Limitations

Our present system of control by the State Legislature over finance is in its essential features similar to the British system which is briefly as follows :—

"The Crown demands money, the Commons grant it, and the Lords assent to the grant; but the Commons do not vote money unless it be required by the Crown ; nor do they impose oraugment taxes, unless such taxation be necessary for the public service as declared by the Crown through its constitutional advisers."

The initiation of policy and the management of details remain with the Governor acting through his Ministers in the House and through the Treasury outside. No Demand for Grant is made except on the recommendation of the Governor. The Legislative Assembly cannot also vote money for any purpose except on the demand and upon the responsibility of the Ministers on the recommendation of the Governor. The Executive Government cannot also raise money by taxation, borrowing or otherwise without the authority of the Legislature. This power to grant money in the Legislature which includes both the raising of money and authorizing of expenditure belongs to the Legislative Assembly. The Legislative Council cannot initiate or alter a grant.

The revenues are derived under the various financial enactments made by the Legislature from time to time and are in force without a specific annual authorization. A separate financial Bill is introduced in respect of each new proposal for taxation and the discussion and voting on the Bill do not form part of the Budget proceedings. All revenues received by the Government, all loans raised by it by the issue of treasury bills, loans or ways and means advances and all moneys received in repayment of loans form one consolidated fund entitled "the Consolidated Fund of the State." Out of this fund are paid the moneys charged on the Consolidated Fund and the supplies granted by the Legislative Assembly for the current year. All other public moneys received by or on behalf of the State is credited to the public account of the State.

In order to meet unforeseen expenditure in the service of the State, a contingency Fund in the nature of an imprest called the "Contingency Fund of the

State of Madras" has been esbtablished under the Madras Contingency Fund Act, 1950, consisting of a sum of one crore of rupees withdrawn from the Reserve Fund of the State and placed at the disposal of the Governor of Madras with authority to make advances therefrom for any unforeseen expenditure pending regularization by a law passed by the Legislature. As often as any such expenditure is regularized by law as stated above, the amount of the advance is recouped to the Fund.

A distinction is made in the estimates of expenditure embodied in the annual financial statement between expenditure charged on the revenues and other expenditure. "Charged" expenditure means the expenditure which is the first charge on the Consolidated Fund and does not require the vote of the Assembly, namely, the emoluments and allowances of the Governor, the Speaker and Deputy Speaker of the Legislative Assembly, the Chairman and the Deputy Chairman of the Legislative Council, Judges of the High Court and Members of the Public Service Commission, debt charges and other such expenditure declared by the Constitution or by the Legislature of the State by law as charged upon the Consolidated Fund of the State. The figures and details representing them in the estimates are printed in italics. Other items of expenditure are submitted to the vote of the Legislative Assembly in the form of demands for grants (corresponding to the Vote of Civil Estimates in the House of Commons). Each Demand contains a statement of the total sum required and the details by which the grant will be accounted for by the departments concerned.

Under the former system there was no provision for Votes on Account as in the United Kingdom by which grants are voted in advance for a part of the financial year pending the completion of the ordinary procedure prescribed for the voting of such grants. The whole budget debate was so arranged that the voting on Demands for Grants can be completed before the next financial year. Now that Votes on Account have been introduced by the Constitution, there is not the same urgency to finish the budget debate before the next financial year begins. But this new procedure was resorted to so far only twice, viz., before the Constitution of the new and enlarged Legislature under the Constitution and on the eve of the separation of the Andhra State.

Budget Day

"Budget Day" is one of the big occasions of the year in the Legislative Assembly and is awaited with intense interest throughout the State inasmuch as close secrecy is imposed upon the contents of the Budget Speech and there is much speculation as to what the Budget proposals would be and whether there would be a deficit or surplus. The disclosure of the Budget proposals in the Press in advance of its delivery to the House gave rise to a question of privilege in the Legislative Assembly on the 30th June 1952 but the Speaker held that the Member had not made out a *prima facie* case.

The Budget is laid before both the Houses of the Legislature, by the Finance Minister in the Assembly and by the Leader of the House in the Council, though there were occasions when it was presented by the Finance Minister in both the Houses. (In England the presentation of the Budget is made only to the House of Commons and not to the House of Lords.) The practice is to present it to the Assembly before it is laid before the Council. On one occasion, the Budget was presented to the Council after it was voted upon by the Assembly and the Government justified the departure from the usual practice by the special circumstances of the case.

On a day appointed by the Governor for the purpose, after question time, the Finance Minister rises in his place in the Assembly amidst crowded galleries and an animated House and says :

"I rise to present to the House the Revised Estimates for the current year . . . and the Budget Estimates for the nex year . . ."

He then deals in detail with the revised estimates of revenue and expenditure of the year about to close, the estimates for the coming year, variations in the ways and means estimate of the year about to close from the plan expounded at the previous budget session and the ways and means of the coming year and commends the Budget to the acceptance of the House. In so doing, he draws special attention to the implementation of the policies and programmes of the Government already made and gives a rough indication of what the Ministry hopes to do in the coming year. There is no discussion of the Budget on the day on which it is presented to the Legislature.

In England the charge on the public revenues (any proposal involving expenditure or tax) is first considered in a Committee of the whole House (all the members of the House of Commons converting themselves into a Committee without the Speaker in the Chair and presided over by the Chairman of Ways and Means). The Chancellor, in fact, "opens" his Budget in the Committee of Ways and Means and not in the full House. The proposals for raising money are considered in the Committee of Ways and Means (Committee dealing with the ways and means of raising money for the public services) and the estimates of expenditure in the Committee of Supply (Committee on supply of money needed for the public services) and their resolutions reported to the House. On its agreeing with the Committees in the said Resolutions, they are incorporated in Bills which, after passing through all the stages in both the Houses and assented to by the Crown, constitute the law by which the charge is authorized—the Finance Act (authorizing the levy of taxes), the Consolidated Fund Act (empowering the Treasury to issue the money required out of the Consolidated Fund) and the Appropriation Act (authorizing the appropriation of money from the Consolidated Fund as set out in the schedule thereto).

Procedure in this State

The Budget in this State is dealt with by the Assembly in two stages namely: (1) General Discussion and (2) Voting on Demands for Grants. There is only a general discussion in the Council. The Speaker in consultation with the Leader of the House and the Business Advisory Committee fixes and appoints sufficient number of days for each of these stages subject to a maximum of eight days for the general discussion and twenty days for the voting of demands for grants in the Assembly. The Chairman in consultation with the Leader of the House allots the number of days not exceeding five for the discussion of the Budget in the Council.

On the days appointed for the general discussion, the Assembly and the Council discuss the budget as a

whole or any question of principle involved therein and the attack by the Opposition is mainly directed against policy rather than against expenditure. This is the occasion on which the revenue estimates of the Government are criticised. The discussion covers the whole field of administration but no motion is moved at this stage nor does the discussion go into many details. The debate is however important, for it furnishes the Legislature with the only opportunity of criticising the estimates charged upon the Consolidated Fund of the State, limited no doubt to bringing home to the Government their responsibility in the matter. This marks an improvement on the procedure in England where there is no opportunity every year of criticising or reviewing the administration of the charged services. The speeches at this stage also enable the Government "to feel the pulse of the House" in regard to the Budget proposals. The discussion concludes with the reply by the Finance Minister at the end.

Discussion on Demands

At the next stage the demands of the Government for supply are presented to the Assembly in the form of a series of motions. The Speaker in consultation with the Leader of the House and the Business Advisory Committee fixes the time to be allotted for the discussion of each demand and also determines the order in which the demands are to be taken up, subject to change of course under the rules on a motion accepted by the House. On these days, no other business except the asking and answering of questions is taken up before 5 p.m. except with the consent of the Speaker.

Each Demand is introduced by the Minister in charge of the subject or by any one authorized by him in the following form:

"On the recommendation of His Excellency the Governor I move that the Government be granted a sum not exceeding Rs. . . . under (Demand VIII—IRRIGATION)."

In case it is a Vote on Account, he says—

"On the recommendation of His Excellency the Governor, I move that the Government be granted a sum not exceeding Rs. . . . in advance in respect of the essential expenditure for a part of the financial year . . . under the head (Demand VIII—Irrigation)."

The Minister who moves a demand for grant normally makes a statement explaining the policy underlying the demand. Any member then moves a motion standing in his name to reduce the demand by a specified sum.

"Mr. Speaker, Sir, I move" he says, "That the allotment of Rs. . . . for under (Demand VIII—Irrigation) be reduced by Rs. . . . ."

They are usually token motions for a uniform sum of Rs. 100 and for Re. 1 in case the allotment under the Demand is only Rs. 100.

Motions to increase or alter the estimate or the demand or for raising a question on that portion which is not subject to actual reduction by the Assembly are not admissible. In giving notice of these motions members are asked to state also the objects for which the motions are tabled, so as to facilitate their arrangement in the list of cut motions and also enable the Ministers to be prepared with their replies. The motions are taken up for discussion in the House in the order in which they appear in the Order paper but the Chair is not bound to call every member who had given notice of cut motions or in the order in which their names appear in the list. When all of them are token motions, the practice is that only one motion is moved in respect of each Demand and other members speak on it, though in exceptional cases a member desiring to press a specific grievance is allowed to move a separate cut motion. Motions are to be moved only by the Member who has given notice of the same. There is also no right of reply but the Speaker can allow the mover or any member in his discretion to ask the Minister for clarification of points in his reply.

Opportunity for Discussion

The debates on the estimates and the Governor's Address are the two occasions when the private member is given sufficient opportunities for discussing the policy and activities of the Ministers and the departments of the Government. The subjects discussed range from lack of irrigation facilities in a district and water-supply in a municipality or complaint against some aspect of the public service to major questions of policy as for instance, Education, Prohibition, Five-Year Plan, etc. It is at this stage that the visitor feels the truth of the maxim, "Redress of grievances must precede supply." Motions for the reduction of demands with the specific purpose of expressing want of confidence in the Ministry were also moved in the old Legislative Council on 18th March 1929 and 19th March 1936. The debate however must be confined to the administrative actions of the Departments of the Government for which Ministers are responsible and be relevant to the subject of the Demand under discussion. Matters involving legislation cannot be raised on an estimate nor could legislation be urged. The discussion on statutory bodies over which the Ministry has a limited control (e.g.) the Madras University, should not extend beyond the policy of the Government in administering the Act. Remarks on the conduct of persons in public service must be restricted to their official conduct. Criticism of the conduct of Judges or the decisions of a judicial Court and personal reflections on the conduct of the Governor are not also allowed.

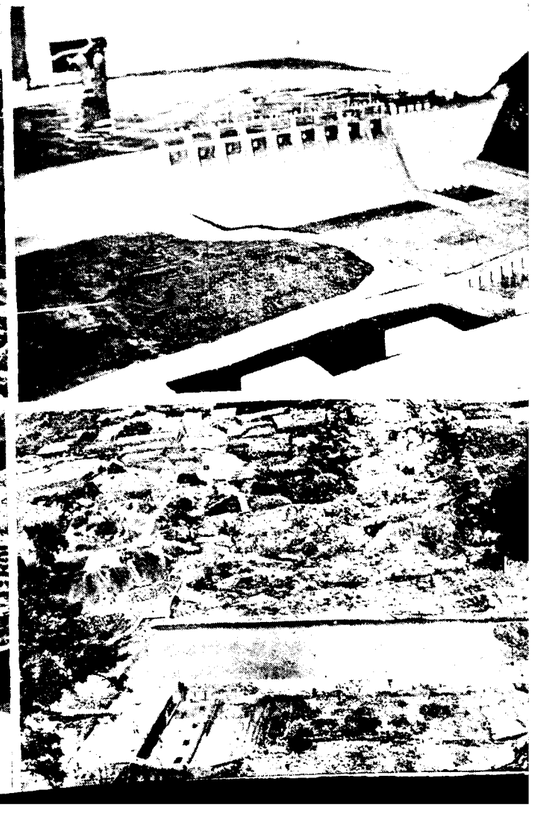
Voting of Demands

"The most important factor in the process is" as stated by May, "that Government responsibility for the estimates has long been taken to cover eve y detail of every vote so that the reduction of an estimate would be regarded as a major defeat probably involving the resignation of the Cabinet." In replying to the debate on a demand, therefore, the Minister refers to the points raised by the Members and assures them of further consideration by the Government where necessary and thereby tries "to win a majority for his proposal." The motion for reduction is usually withdrawn with the leave of the House on the assurances given by the Minister. But members not satisfied with the Minister's reply press it to a voté and at times to a division. After it is disposed of, the question regarding the demand for grant, or the demand for grant as reduced in case a cut motion is accepted by the House, is put to the vote of the House. On the last of the days allotted for the voting of demands, all the outstanding demands are put to vote including the motion for reduction of the grant, if any, under discussion.

In the years prior to the commencement of the Constitution a resolution of the Legislature approving the

SATHANUR PROJECT

The Sathanur Project in North Arcot district is progressing according to schedule. The pictures show the progress of work in the various sectors of the project. The project when completed will irrigate 16,700 acres of new land, and also assure supplies to the existing wet land. (*Below*) A model of the dam.



He
Gave
us
Light!

Development of Highways in Ramanathapuram District

Development of Highways is an important item in the overall development of any area. The district of Ramanathapuram, as any other district in the State, is growing and developing. In the second week of September these events took place in that district : (1) opening of the bridge at M. 66/6 of Madurai—Ramanathapuram Road, (2) opening of the Ramanathapuram-Mandapam road, (3) laying of the foundation stone for the bridge at M. 7/1 of Ramanathapuram-Kilakkarai Road and (4) laying of the foundation stones for Vaipar, Uppodai and Arjuna bridges at M. 345/7, 343/7 and 339/4 of N.H. 7 Banares-Cape Comorin road. Shri Shanmuga Rajeswara Sethupathi, Minister for Public Works participated in all the functions. In these pages you read the extracts from the speeches delivered by Sri K. K. Nambiar, Chief Engineer (Highways) on the various occasions.

Roads in Our State

Our State has the largest mileage of surfaced road per square mile of area in our country. The total mileage of all the roads per square mile of area is nearly twice the average of the whole of India.

In our State we have 1,065 miles of National Highways, 1,651 miles of State Highways, 9,117 miles of Major District roads, 5,171 miles of Other District Roads, 9,055 miles of Village Roads, 638 miles of Public Works Department roads and 2,829 miles of Municipal Roads. The total under all these heads is 29,517 miles. Out of this 29,517 miles, 381 miles have been cement concreted, 4,081 miles have been black-topped, 14,254 miles have been metalled and remaining 10,801 miles are unmetalled. These figures indicate various mileages of roads in our State as on 31st March 1954.

The Post-War Road Development Scheme drawn up for this State, will increase the total mileage to 30,154. It is planned to provide a feeder road to every village with a population of over 500. In the First Five-Year phase of the above programme, 75 miles of road have been cement concreted, 66 miles provided with black-top surface, 1,003 miles metalled and 1,043 miles of new roads formed. Besides these a number of bridges both major and minor costing nearly a crore of rupees have been completed.

When the National Five-Year Plan was inaugurated, that part of the first five-year phase of the Post-War Road Development Programme which had not been executed, was included in the National Plan which provides for a well-balanced programme of road and bridge construction. We are now in the last year of the First Five-Year Plan and I am glad to say that our achievements have been satisfactory. Such of the works which could not be executed under this programmee have been included in the Second Five-Year Plan.

Coming in particular to the bridge which is to be thrown open for traffic to-day, I may tell you that this work being on a National Highway is fully financed by Government of India. It will be appropriate in this connexion if I refer to the various works of the Government of India for the improvement and maintenance of National Highways and also for the construction, reconstruction and maintenance of bridges thereon.

1. *National Highway First Five-Year Programme.*—The programme drawn up and approved by Government of India provides for the development of National Highways of the State at a cost of Rs. 393 lakhs. Of these 49 are road works and 33 are bridge works. Most of the works are under various stages of execution.

The balance of the First Five-Year Plan estimated to cost nearly Rs. 170 lakhs has been included in the Second Five-Year Plan. The Second Five-Year Plan which is more ambitious than the First is estimated to cost about Rs. 620 lakhs including the above works. It is worth mentioning here that the Second Plan contemplates to construct a bridge costing about Rs. 1 crore over the Pamban crossing.

2. *West Coast Road (Bombay-Cape Comorin Road) Development.*—This is under implementation. Revised programme for the work amounting to Rs. 282 lakhs has been submitted to Government. This consists of (i) 30 bridge works costing Rs. 79·9 lakhs; (ii) 73 improvement works including culverts costing Rs. 194·5 lakhs; and (iii) 4 formation works costing Rs. 7·6 lakhs. Out of these about 30 works costing about Rs. 136 lakhs have been sanctioned and are under execution. It will not be out of place, if I mention here that the Government of India have assumed full financial responsibility for the development of this road with effect from 1st April 1955.

3. *Additional development works sanctioned by Government of India.*—Under this scheme Rs. 145 lakhs have been allotted for various bridge and road works. Of these 5 are bridge works costing Rs. 64·55 lakhs, 6 are improvement works, costing Rs. 18·80 lakhs, 16 are formation and improvement works, costing Rs. 61·30 lakhs. These are of Inter-State importance and for opening up of new areas where rail communication is scarce. Under this scheme, 12 works costing about Rs. 84 lakhs have already been sanctioned.

4. *Central Road Funds State allocation.*—Under this scheme 43 works costing roughly Rs. 66 lakhs were approved. Of these 31 are bridge works costing Rs. 48 lakhs, 12 are road works

costing Rs. 18 lakhs. Out of these, 11 works costing Rs. 16·01 lakhs are already under implementation. Recently the work of constructing a bridge at mile 7/1 of Ramanathapuram-Kilakkarai road has been sanctioned for Rs. 3·76 lakhs.

Second Five-Year Plan

Now I shall give you a brief account of the various development programmes for the State Highways and other roads as envisaged in the Second Five-Year Plan.

The targets proposed are as follows :—

1. Cement concreting 190 miles at a cost of Rs.1·60 crores.

2. Black-topping 1,530 miles at a cost of Rs. 2·60 crores.

3. Upgrading and new metalling 1,400 miles at a cost of Rs. 2·12 crores

4. Improvement to geometric features at a cost of Rs. 0·40 crore.

5. New formation 5,000 miles at a cost of Rs. 4 crores.

6. Minor and major bridges at a cost of Rs. 5·28 crores.

Speaking of this district there was hardly any good roads as late as the early part of the 18th century, From that time onwards the position seems to have improved gradually. After the formation of Highways Deaprtment, steps have been taken to provide adequate facilities of communication and now there is fair net-work of roads in Srivilliputtur and Sattur taluks and in what is knowns as the " Chettinad Area " in Tiruppattur taluk. However, facilities in other taluks are inadequate. The district has now 1,748 miles of road of all categories of which 34 miles are provided with cement concrete pavement, 235 miles with black-top surface, 736 miles with metalled surfaces and 743 miles are earthen roads. The total length of the roads in charge of Government is 486 miles while 1,046 miles and 216 miles are maintained by the District Board and Municipalities respectively. This district has 0·36 miles of road per square mile of area against the State average of 0·42.

Programme for the District

Now I shall briefly sketch the various road development programmes of this district as envisaged in the different plans formulated.

Under the Post-war Road Development Programmes inaugurated in 1947–48 it was contemplated to cement concrete 192 miles, to provide black-top surface for 129 miles, to metal 1,462 miles, to construct 1,139 miles of road and to construct 43 major bridges and some minor bridges costing in all Rs. 325·26 lakhs. However, the whole programme could not be carried out due to lack of finance and when the National Five-Year Plan was inaugurated in 1951–52, the balance of the Post-War Road Development Programme was carried over.

The important works sanctioned under the First Five-Year Plan are constructing bridges across Uppodai, Arjuna, Vaippar, including the bridge being opened now for traffic. In this, forming a road from Ramanathapuram to Pamban and extending Ramanathapuram-Mandapam road up to Mandapam Dry Dock were also sanctioned. There are other works such as widening the culverts and constructing minor bridges. The total cost of the above works amount to Rs. 42 lakhs.

Works under Central Road Fund Scheme.—Under this head, Rs. 4 lakhs has been allotted by the Government for the construction of a bridge at miles 7/1 of Ramanathapuram Kilakkarai road. Proposals also have been sent for constructing a submersible bridge across Vaippar, Arjuna mettalling Ramanathapuram-Nayanarkoil road and forming road from Ramanathapuram-Mandapam road to District limits.

The Second Five-Year Plan provides for an expenditure of about Rs. 112 lakhs for this district—

1. Cement concreting 16 miles at a cost of Rs. 13·56 lakhs.

2. Black-topping 102 miles at a cost of Rs. 12·27 lakhs.

3. Upgrading and new metalling 158 miles at a cost of Rs. 24·92 lakhs.

4. New formation 336 miles at a cost of Rs. 19·47 lakhs.

5. Constructing major and minor bridges including culverts at a cost of Rs. 41·53 lakhs.

Now I shall give you an account of the various schemes on hand to improve this road on which the bridge is located. It is needless to emphasise the importance of this road which connects the eastern part of the district with its headquarters and the famous pilgrim centres, viz., Madurai and Rameswaram. The portion of Madurai-Ramanathapuram road from mile 0/1 to mile 70/5 is an existing part of Madurai-Dhanushkodi road (NH 49). In the last three years, considerable stretch of this road has been provided with improved surface (black-top) out of the maintenance allotment. By the end of this year, the whole stretch will be black topped.

In the Second Five-Year Plan, the following works are included for improving this road :—

1. Improving the bad curves at a cost of Rs. 1·50 lakhs.

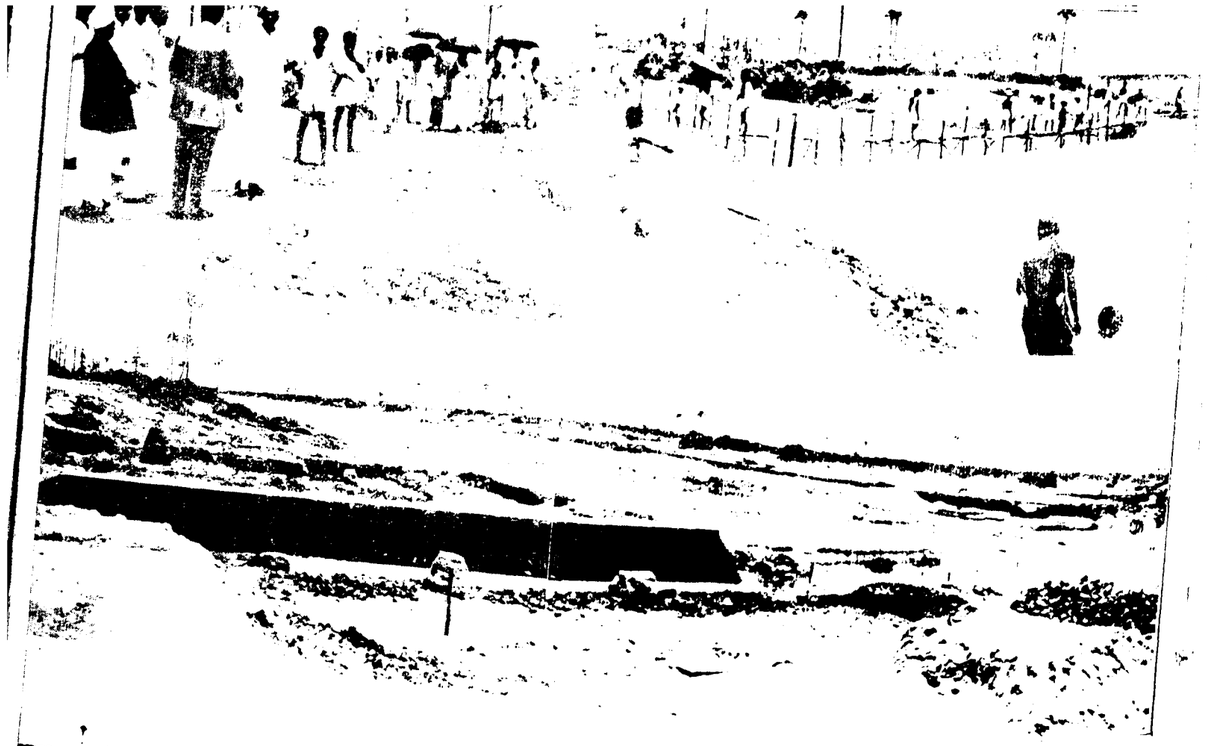
2. Widening the narrow culverts at a cost of Rs. 0·28 lakhs.

3. And widening the regulator at miles 62/7 at a cost of Rs. 0·50 lakhs.

To relieve the congestion traffic at Manamadura and Partibanur, bye-pass roads are proposed at these places at a cost of Rs. 0·8 lakhs. When all these works are completed the road from Madurai to Ramanathapuram will be a well-aligned and well-formed Highway.

Bridge at M. 66/6 of Madurai-Ramanathapuram road

Before requesting the Minister to declare the bridge open, I shall give a few details of the bridge. If you turn a while towards south you can see the old collapsed bridge with its narrow roadway of 9 feet. The bridge was declared unsafe for traffic in December 1946, as one of its piers sank due to the scour. Therefore, it became an urgent necessity to reconstruct the bridge. After careful consideration the bridge was located at the present site, about 500 feet downstream of the surplus sluice of Ramanathapuram big tank. To give a straight alignment to the road, the bridge is sited skew to the flow of the stream. The bridge has 4 spans of 35 feet clear each and it carries a carriageway of 24 feet between kerbs. The superstructure has been designed as per latest specifications of the Indian Roads Congress. Open foundations have been adopted since good hard clay was available at shallow depths and the foundations have been taken down to about 10 feet below the bed to rest on hard clay. The superstructure is of reinforced cement concrete of the conventional T. beam and slab type and it is simply supported over piers and abutments. The deck slab is 8 inches thick and is carried over by four beams 15 inches by 40



MAHARAJASAMUDRAM ANICUT AT PATTUKKOTTAI

Sri K. Kamaraj, Chief Minister, recently opened the Maharajasamudram Anicut at Pattukkottai in Tanjore district. He also inspected the Maharajasamudram bed dam under construction.

Demand was sufficient legal warrant for the appropriation. But at present, following the practice in the Mother of Parliaments, the money required to meet the grants voted by the Assembly and the expenditure charged on the Consolidated Fund are incorporated in a Bill called the Appropriation Bill which after going through the regular stages of a Bill is sent to the Governor for Assent. The procedure relating to Bills applies to Appropriation Bills except that no amendments can be proposed to any such Bill which will have the effect of varying the amount or altering the destination of any grant so made or of varying the amount of any expenditure charged on the Consolidated Fund of the State. The Appropriation Act assented to by the Governor authorizes the appropriation out of the Consolidated Fund of the State for the year within the limits set out in the Schedule thereto.

Supplementary Demands

Where the sums originally voted are not sufficient to meet the expenditure, or when a need had arisen during the current financial year for expenditure upon some new service not contemplated in the annual financial statement for that year, resort is had to supplementary or additional demands for grants. A demand for excess grant is made to make good any money spent on any service during a financial year in excess of the amount granted for that service and for that year. The procedure relating to demands for grants applies to these demands also except that the discussion is confined to the specific objects for which the demands are presented. The Constitution also provides for:

(1) Vote of Credit, viz., a grant for meeting an unexpected demand upon the resources of the State when on account of the magnitude or the indefinite character of the service the demand cannot be stated with the details ordinarily given in an annual financial statement; and (2) an exceptional grant (i.e.) demand made to meet an expenditure which forms no part of the current service of any financial year.

"It would not be fair to the people" as T. G. B. Cocks says "if their representatives made over a great sum of money for which the people have worked so hard without seeing that it has been properly spent." There is therefore "an inquest before the money is granted and then another after it has been spent." The accounts of expenditure are maintained in the same form as the estimates. The finance accounts (based on payments into and issues out of the treasury) and the Appropriation Accounts (a more detailed record of final payments by the departments) are audited by the House's "expert critic," the Comptroller and Auditor-General, and his report to the Governor is placed on the table of the Legislature. These documents are scrutinized by a Committee of the Legislative Assembly known as the Committee on Public Accounts. The function of this Committee may be broadly stated to be that of "generally reviewing the financial operations of the Government for the purpose of determining the fidelity and efficiency with which administrative officers have performed their duties", to see that the funds voted by the Legislature are spent by the executive in the manner intended by the Legislature. The recommendations of the Committee are embodied in a report and presented to the House. The estimates are also examined by a Committee of the House called the Estimates Committee with a view mainly to effect economies, improvements in organisation, efficiency or administrative reform consistent with the policy underlying the estimates and to suggest the form in which the estimates might be presented.

Checks and Balances

To sum up, the financial procedure is a system of checks and balances. The voting of grants by the Legislature, the audit of accounts by the Comptroller and Auditor-General and their review by the Public Accounts Committee and the examination of estimates by the estimates Committee secure the responsibility of the Government to the Legislature, and "the anticipation of criticism exercises a wholesome check on the actions of the Government and tends to maintain honest and pure administration and expenditure by the Departments."

"All undertakings depend upon finance. Hence foremost attention shall be paid to the Treasury" said the Great King-maker Kautilya, better known as Chanakya in his *Arthasastra*. These words are as true today as in the third century before Christ. The State with an unbalanced budget meets the fate of "a family whose outgoings are perpetually bigger than their income" and eventually "sinks into uncomfortable poverty." In administering the finances of a State therefore it is necessary "to strive, to seek, to find" though we may "grow weak by time and fate" and say "all is clear." The keynote to the success in this "national housekeeping", that which makes or mars one's reputation as the Chamberlain to the Government, "the pilot in charge of the vessel," is the

"BUDGET"

Our Central Inset—

The Mahatma taught us the way of attaining Grama Swaraj. It was not a mere economic programme. It was a way of life, a new civilisation. It was a programme for saving society from certain of the evils of industrial revolution. Mahatmaji's ideas, as far as possible, are being put into practice through various programmes that are being sponsored by the Governments, both Union and States. In this page you see a photographic record of the work in our State—Khadi, Harijan Welfare, Cottage Industries, Basic Education, Rural Sanitation and so on. If we succeed, that would indeed be the greatest memorial for the Mahatma who died for us.

inches spaced at 6 feet 6 inches centres. The wearing surface over the deck consists of 3 inches thick of cement concrete 1 : 1½ : 3 mix. R.C.C. approach slabs of 6 inches thick are provided at either ends of the bridge. The kerbs and hand rails are of reinforced cement concrete construction. As a protective work for this bridge, a paved road dam has been constructed in mile 66/3 to discharge the flood waters, if any breach is to occur in Ramanathapuram big tank. To train the stream, cross bunds are formed from the road embankment to the tank bund. Forty-one tons of steel and 242 tons of cement, have been used on this work.

The Ramanathapuram-Mandapam road

The Ramanathapuram-Mandapam road connecting Ramanathapuram with Mandapam, an important and strategic place on the seashore with a Railway Workshop, Central Marine Research Station, etc., forms part of the Madurai-Dhanushkodi road, classified as National Highway 49, which as the name implies, should rightly connect Madurai with the extreme end of the Indian Union at Dhanushkodi.

A Bridge Across Pamban

But Dhanushkodi is at the farther end of the Rameswaram Island which is cut off from the main land by the Pamban passage. You all know that Rameswaram is an all-India pilgrim centre. Pilgrimage to Rameswaram will not be complete without a bath and worship at Dhanushkodi. Hence proposals for a road bridge across this Pamban passage with the extension of the road to Dhanushkodi has been included in the Second Five-Year Plan for National Highways at a cost of rupees one crore. This road bridge a'so will require a central lift or swing span as in the case of the Railway bridge to allow large size boats to go across the strait. When the bridge becomes an accomplished fact the existing District Board road from Pamban to Rameswaram via Thangachimadam could be taken over for National Highways and the same extended to Dhanushkodi Ghat by formation of a new road for about 10 miles thus taking the Madurai-Dhanushkodi road to its proper terminus.

A road, if it could be called so, was in existance some centuries back between Ramanathapuram and Mandapam, but this had deteriorated into a cart-track. This road was known as Mangamma Salai and in olden times it was classified as "Raja Pathai" equivalent in importance to the present-day National Highways. This old alignment has been followed for the present National Highway except in some portions where deviations have been effected in order to conform to the National Highway standards.

In this area no metal quarries are available within economic leads and metal has to be transported over long stretches by rail and is therefore every costly. As such, to provide a road with a tolerable metalled riding surface is a costly proposition. No useful purpose will be served by having only an unmetalled road in these days of fast traffic.

Soil stabilization

In order to devise means of reducing the cost an examination of the terrain was conducted. It was found that the soil throughout is sandy and that at an average depth of 4 to 8 feet good clay is available. Taking advantage of this it was proposed to resort to the techniques of soil stabilization for forming the sub-base instead of the usual sub-base of metal soilng as it would result in considerable economy. Laboratory tests on samples of soils all along the alignment showed that the available sandy soil and clay below can be scientifically combined to give a hard, safe and durable sub-base.

The work was of a nature requiring technical skill and control at every stage. This was the first time such a long stretch was taken up for soil stabliization. In view of the valuable experience that could be gained in this modern technique of soil stabilization it was considered necessary to carry out this work on controlled lines which could be ensured only if the work was done departmentally. Hence this work was carried out departmentally by a combination of manual and mechanical labour using a Pulvimixer, imported from the United States of America. This is the first time a machine of this type has been imported and used in India. Major portion of formation was done with bulldozers and stabilization work was done with Seaman Pulvimixer, sheepfoot rol er and Tandem power roller. A film was also produced showing the construction of the road at various stages, the techniques, materials and the machinery employed on the work. The film has been a remarkable success though shot by amateurs and serves as a good record of this pioneering work.

It may be of interest to the laymen present here to know that soil mechanics and its application to Highway Engineering were totally unknown to the Engineers twenty years ago. It is true that by sheer instinct and experience we resorted to some crude methods of mechanical stabilization of soils in those early days. For example if the terrain of the rural road or cart-track happened to be predominantly sandy, the workmen sought out sticky clay or clayey gravel from neighbouring fields and mixed in intimately with the natural sandy soil to make a compact surface. If the cart-track to be repaired was in black cotton soil or clayey loam, sand or gritty gravel was carted from available spots or quarries nearby and was admixed with the natural soil to give an unyielding surface. But no one knew the science behind it. To-day we analyse the soils, their grain sizes, moisture content, plasticity,etc., and decide by laboratory tests the correct proportions of natural and imported soils to be admixed and the optimum moisture content to be added to give the maximum density and compaction of the road surface. This, in brief, is the technique of what is known as mechanical stabilization of soils.

Stabilization of soils can also be done with addition of bitumen, cement and other chemical agents. For the base course of this road cement stabilization has been resorted, to, using the sandy soil available at the spot.

As this is a National Highway the formation width of the road is kept at 32 feet with 2 : 1 side slopes and the height of formation is kept at an average of 1 foot above highest water level. The stabilized soil sub-base is 21 feet by 6 inches and soil cement base is 12 feet by 3 inches with 12 feet by 1½ inches asphaltic concrete as wearing coat. Three feet metalled berms have been provided on either side of carriage-way to protect the edges of the wearing coat.

Comparative cost of 6 inches o kanker sub-base even for 14 feet width comes to Rs. 25,000 per mile while a 6 inch thick stabilized soil 21 feet wide

works out to Rs. 4,500 per mile. For the same reason the base course to be provided was decided to be of soil cement. The comparative cost of 3 inches granite base is Rs. 19,000 per mile while the cost of soil cement works out to only Rs. 8,800 and as such considerable savings are effected.

The total length of this road is 21 miles 2 furlongs. The work was commenced in 1950 and completed in March 1954. In this project about 1,200 tons of cement and about 550 tons of bitumen have been used. The whole project was executed departmentally employing daily labour.

This work was executed during the worst period of scarcity in this area and from October 1952 to March 1954 about 111,000 men mazdoors and 89,000 women mazdoors were employed giving a daily employment for about 250 men mazdoors and 160 women mazdoors and it went a long way in relieving distress in this area. The road could not be formally opened to traffic all these days as the level-crossing at Uchipulli which was to be constructed by the railway authorities could not be completed earlier.

The total cost for the formation of the road, providing stabilized soil sub-base, constructing culverts, etc., have come to about Rs. 4·07 lakhs and for providing soil cement base and asphaltic concrete wearing surface it has come to Rs. 9·78 lakhs. Extension of this National Highway to connect Mandapam village, Mandapm Railway station and Marine Dry Docks for a length of 1 mile 6 furlongs has also been sanctioned at a cost of Rs. 1·275 lakhs and the work is under execution. This portion of road extension is also expected to be completed by January 1956.

Bridge at M. 7/1 of Ramanathapuram -Kilakkarai Road.—This bridge was proposed to be included in the Post-War Road Development, Part II Scheme, as early as 1948, and administrative approval was also accorded for Rs. 1·75 lakhs. However, this proposal was dropped due to financial stringency. Later, there was a proposal to convert the existing road dam at a high level causeway at an approximate cost of Rs. 1·2 lakhs. However, the desirability of constructing a pucca bridge from the point of utility was further examined and finally the present proposal was sanctioned.

As you may know, Kilakkarai is an important town with a population of over 10,000 and is noted for its chank industry and was some time back an important port for coastal trade. Near by and all along the shore there are a number of important villages noted for fishing. There is a famous shrine at Ervadi. For all these coastal villages, the only communication with Ramanathapuram, the division and taluk headquarters and a railway station is through this Ramanathapuram -Kilakkarai road. The main source of livelihood of the local people is fish trade and all the chanks as well as the fishes have to be transported to the nearby marketing places only through this road. Even the essential foodstuff has to be transported from Ramanathapuram along the route only. With the development of minor port at Kilakkarai and with the advent of the Second Five Year Plan, heavy traffic may be anticipated on this road. Hence it is thought proper to construct a bridge to the heaviest live loading of the I.R.C. Specifications.

The source of the river at this crossing is the surplus from Kalari Kanmai. It is also fed by the local drainage and the discharge due to frequent breaches in Sakkarakottai tank. At present, there is only a causeway about 460 feet long. During monsoon, there is frequent overflow over this causeway and the traffic is interrupted as the flow is fast. At times, such interruptions last even for about a week. During heavy floods, due to the insufficiency of the waterway, the road embankment gets breached, holding up traffic for a considerable period even after the subsidence of the river till the breaches are closed and road surfaces made up. Hence it is decided to take the bridge work and proceed with its execution immediately.

The new bridge is proposed to be constructed about 75 feet downstream of the existing road dam as this crossing offers the best site in this reach of the river.

The type of bridge proposed here is to be necessarily of slabs since other types of constructions will raise the road level and thus the bridge will give a grotesque appearance. Further, the soil available for the formation of approaches is of a treacherous nature and high approach embankments are considered undesirable.

The bridge proposed consists of 18 slab spans of 25 feet clear each with a carriageway of 22 feet. The R.C.C. slabs forming the superstructure will be 24·5 inches thick. R.C.C. kerbs and hand rails have been provided on either side of the carriageway.

The foundations for the piers and abutments will be of cement concrete and are proposed to be left at clay strata 6 feet to 10 feet below the bed of the river. The entire substructure is proposed to be of cement concrete masonry.

The total length of the proposed bridge is about 500 feet. The length of the approaches is about 1,300 feet. About 600 tons of cement and 78 tons of steel are expected to be consumed by this work. The total cost of the work as estimated amounts to Rs. 3·76 lakhs.

We hope that this bridge will relieve the undue hardships experienced by the people in the coastal area and will promote the steady growth of commerce and industry.

Vaippar, Uppodai and Arjuna bridges

Now, coming to the construction of these three bridges, the commencement of which is marked by to-day's function, I would like to give you an idea of the necessity for the construction of these bridges. The roadway carried by the existing bridges over Vaippar and Uppodai is very narrow for the present conditions of traffic. The existing bridges are situated in the bends of the alignment of the road and they are also considered weak and unsuitable for modern type of vehicles and standards of loading. The existing causeway across Arjuna Nadhi becomes unfordable often during floods which occur repeatedly and the interruptions last, even for a week. As such, the traffic is put to great inconvenience and hence the utility of the road as a National Highway is greatly jeopardised. Hence, in view of safety and economy, it is proposed to replace these old bridges by constructing new pucca ones designed to Indian Roads Congress specifications.

I shall now refer briefly to the chief technical features of these three bridges.

The National Highway No. 7 from Benares to Cape Comorin is an important highway. The portion of the road from mile 324/6 to 356/1 lies in

this district and connects Virudhunagar, Sattur and Koilpatti towns. As these are important commercial centres, traffic intensity is heavy in this reach.

The bridge at mile 345/7-8 across Vaippar is only 15 feet 3 inches wide and it is not fit to take up the present day heavy vehicles. The existing structure is an arch bridge having 16 spans of varying lengths giving a total linear waterway of 682 feet. It is believed that the age of this bridge is over 120 years. The central 5 spans were washed away during the floods of 1869 and rebuilt in 1874. Since the bridge is narrow, the bullock bandies and livestock get frightened and attempt to jump over on approach of the fast moving vehicles. To remedy this on representation from Sri S. Ramaswami Naidu, President, District Board, the parapet has been raised, But a wider carriageway is necessary and it is economical to put up a new bridge instead of widening or redecking this bridge.

The proposed bridge will be about 2,000 feet upstream of the existing one. It is sited here so that the traffic will byepass Sattur town relieving the congestion and the dust of traffic there.

A linear waterway of 720 feet is proposed by providing 12 spans of 60 feet each. The foundations of the bridge will consist of two circular wells of 12 feet external diameter and 2 feet to 2 feet 6 inches thick steining in cement concrete and nominally reinforced. Two such wells will be placed under each pier and four under each abutment. The wells will be taken down to rock which is 20 feet to 50 feet below bed level. The piers and abutments will be of coursed rubble masonry in cement mortar. The superstructure consists of reinforced concrete 'T' beams and slab simply supported. The clear roadway now provided is 22 feet. New approach roads will be formed for a length of about 6 furlongs on Koilpatti side and about a mile on the Virudhunagar side. The estimated cost of the bridge is Rs. 9·75 lakhs.

Uppodai Bridge.—The present bridge across Uppodai at mile 343/7 just about 2 miles from Sattur is also an old arch bridge constructed over 100 years ago. It has 7 spans of 32 feet each and the width between parapets is only 15 feet 6 inches. The existing bridge apart from being very narrow and weak is situated on a bend in the alignment of the road. In order to avoid the road passing through Venkatachalapuram village, it is proposed to construct the new bridge at a distance of 200 feet on the downstream side where the width of the river is narrow. A waterway of 240 feet has been proposed by providing 6 spans of 40 feet each. Since hard rock is available within 3 feet to 5 feet from bed level, open foundations are proposed. The substructure will be in cement concrete with plums. The superstructure will consist of reinforced concrete 'T' beams and slab simply supported. Alternatively a bridge of the arched type is also under consideration. Final decision will be taken on comparing the tenders received for both types. The bridge is now so located as to give a minimum straight approach of 50 feet on either side. The approaches will be formed to National Highway Standards and will be metalled. High embankments will be revetted with rough stone dry packing. The estimated cost of the bridge is Rs. 1·83 lakhs.

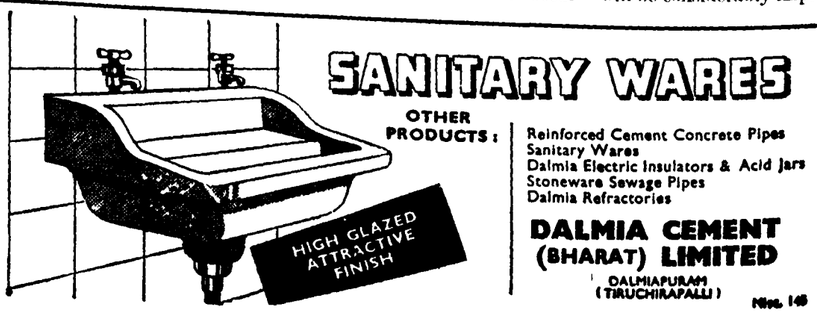
Arjuna Bridge.—There is an existing causeway 330 feet long which is passable for traffic during very low floods. Even during ordinary floods which occur several times a year, the interruption may last even for a week. Originally an arch bridge seems to have existed here, but its year of construction is not known. This was destroyed by floods in November 1869 and the present road dam was constructed about 50 years later. There has been a number of accidents to bullock bandies, lorries and cars across this crossing and traffic is interrupted frequently by floods and as such the present proposal to construct a high level bridge is essential and urgent. It is proposed to locate the bridge 50 feet upstream of the existing causeway so as to ease the curve on the right approach.

A linear waterway of 490 feet with 14 spans of 35 feet each is provided. Since rock is available within 7 feet to 24 feet, open foundations are proposed. The substructure will be in cement concrete with plums. The superstructure will be of reinforced concrete beams and slab simply supported. The clear roadway is 22 feet. The estimated cost of the bridge is Rs. 4·08 lakhs.

The quantities of steel and cement required for these bridges are as below :—

	Cement. TONS.	Steel. TONS.
1 Vaippar Bridge (Mile 345/7 B.C.C. Road).	1,158	279
2 Uppodai Bridge (Mile 343/7 B.C.C. Road).	227	71
3 Arjuna Bridge (Mile 339/4 B.C.C. Road).	685	115

With the completion of these three bridges as well as other bridges envisaged in the Five-Year Plans, the road communications in this district will be considerably improved.



Cinchona Industry in Madras State

By Sri A. Y. SWAMY, M.A., M.Sc. (Tech.) (Manchester), Director, Cinchona Department, Ootacamund

Cinchona has rightly been called a "gift from the Gods". It was originally growing in the wilds of the Andes in South America and was known as Peruvian bark. The medicinal value of the bark of the tree appears to have been known as early as 1600 A.D. to the aborigines of South America, viz., the Incas. Quinine, the most important constituent of the bark, was isolated in 1820 by French Chemists and almost since then has held the field as a sure and safe remedy for malaria. Legend has it that a decoction of this bark given to the Countess of Chinchon, wife of the Spanish Viceroy of Peru, cured her of an attack of fever about the year 1638. A hundred years later Linnaeus, the great Botanist, perpetuated the memory of this noble lady by giving the genus, the name of Cinchona. No real effort appears to have been made to cultivate Cinchona trees in South American forests and still less to maintain supplies by replanting uprooted areas even though a substantial revenue was obtained by taxing the exports of bark. Regular supplies of the South American Cinchona bark were being sent to Europe and the bark soon became quite famous for its fever-curing qualities. Soon after the isolation of Quinine in 1820, this alkaloid replaced the crude forms of administration by the use of the bark powders, decoctions and tinctures which had established the reputation of the bark.

Earlier Efforts

Malaria was one of the greatest scourges in this country during the 19th century. As long ago as 1835, Dr. Forbes Royle, the Superintendent of Botanical Gardens at Saharanpur, suggesed to the East India Company that efforts should be made to introduce Cinchona into India and he selected the Nilgiri Hills in South India and the Khasia Hills in Assam as likely localities for plantations. But nothing happened until his death in 1857. Eventually in 1859, the East India Company decided to accept the recommendations of Dr. Forbes Royle and introduce the Cinchona plant from South America into this country. Mr. Clements Markham was selected for the work of scouring the forests of South America for seed and plants of Cinchona and a happier choice could not have been made, owing to his knowledge of the Andes and his ability to speak the language of the natives of that region. Mr. Clements Markham returned to India in 1860 with the seeds and plants of Cinchona. Doddabetta with an elevation of 8,000 feet above mean sea level, a place four miles from Ootacamund and just above the Raj Bhavan and the Government Botanic Gardens, was selected as the most promising place for raising the Cinchona seedlings and to make cuttings from the plants brought out by Mr. Markham. Mr. W. G. McIvor, who was then Superintendent of the Botanic Gardens at Ootacamund, took charge of this experiment and with the approval of Mr. Markham started the first Cinchona Plantation at Doddabetta.

A second experimental station was later selected at Naduvattam, 21 miles from Ootacamund and having an elevation of about 5,800 feet above mean sea level. The Madras Government Cinchona department has emerged from these experimental stations started in 1860. McIvor sent a small number of plants to Calcutta with a view to establish plantations at Sikkim and a small quantity of seeds was also obtained from the Kew Gardens for raising seedlings at the Royal Botanic Gardens at Sibpur, Calcutta. About the same year, McIvor exchanged with the Dutch Government at Java some of their plants with those raised at Doddabetta. He also sent a small quantity of seed to Ceylon to start the Cinchona industry in that island. In 1863, Dr. Anderson who was then Superintendent of the Royal Botanic Gardens, Sibpur, Calcutta, also obtained some seed and plants from McIvor in exchange for some of his Java-bred seeds and plants and opened up the plantations on the Mungpoo ridge on the Himalayas in Bengal from which have grown the present Bengal Cinchona Plantations. Thus it will be seen that the Madras Government Cinchona Plantations came into being first, and only three years later the Bengal Cinchona Plantations were started.

The First Species

By 1864, the Madras Government Cinchona Plantations had over 165,000 plants while the Bengal Government Cinchona Plantations had only 523 plants. The species of Cinchona which were first introduced into this country were Cinchona succirubra, Cinchona officinalis and Cinchona calisaya. Cinchona officinalis which has a good Quinine content did very well in Doddabetta on the Nilgiris while it was a thorough failure at Mungpoo in Bengal, where Cinchona calisaya showed better promise, but being rather exacting in its requirements of soil and situation it was cultivated only on a limited scale, the preference to the bulk of the plants being given to Cinchona succirubra variety which was easier to cultivate but is poor in Quinine content. The Mungpoo plantations are unique in affording areas at an elevation of as low as 800 feet and as high as 6,000 feet.

Government Plantations Expand

It was not the intention of the Government at any time that these experimental stations should in any way be competitive plantations to those which they actively encouraged private enterprise to embark upon. The Government Plantations were only to render technical advice and to distribute at low cost, seed and seedlings of suitable varieties to private enterprise. But two years after Cinchona planting had been in progress in South India there was, in the official view, an absence of that expected enthusiasm on the part of private enterprise to take

to anything but very small plantings. Consequently the Government had no alternative but to enlarge the area of their own plantations in the Nlgiris. Thus by about 1866, the expansion of Madras Government Cinchona Plantations had gone apace and as much as 507 acres were under Cinchona, 152 at Doddabetta, 284 at Naduvattam and 71 at Wood Estate near Naduvattam.

It however did not take long for the position to change, as the very successful performance of Cinchona in markets now became an incentive to private interests, and numerous Plantations of Cinchona sprang up on the hills. Under orders of Government seeds and plants were freely given by McIvor, and Balmades Estate was opened in 1868 with 60 acres. Colonel Dennison planted 400 acres at Ossington and a large number of other interests who purchased lands in the Nilgiris under the Waste Land Rules of 1863 also undertook cultivation. Similarly small plantations came up in Coorg, Shevroys, Palnis, South Kanara, Tirunelveli and Mysore mainly from the material obtained from the Government Plantations. The Government Plantations also kept pace in expansion and by 1880 there were 847 acres.

In 1870 Broughton was appointed as Chemist for analysing the bark and for manufacture of the alkaloids from the bark. He started a small factory at Naduvattam and this formed the nucleus of the present Quinine Factory there.

Ruin of the Cinchona Industry

So far all was well with the industry. The Indian Plantations looked very encouraging and they held out promise of being the main source of supply of bark to the world. But unfortunately this was not to be. For, the large profits made by the earliest Cinchona planters led soon afterwards to indiscriminate rush by private enterprise especially in South India and Ceylon into the new industry. An enormous area very much in excess of the demands of the time or of the foreseeable future, was planted, chiefly with low Quinine-yielding species. Much planting was also done on land unsuitable for the crop. The result was a very large over production of bark of rather low grade, and when this was placed on the market the entire industry in India and Ceylon suffered a great crash. No fewer than 5,000 acres in India and perhaps about 30,000 in Ceylon belonging to private enterprise went out of cultivation. Java however survived the wreck. This she was able to do mainly because of the close scientific control which had been exercised from the very early stages of the industry and the immeasurably superior conditions for growth existing in that country. The formation of the Kina Bureau in Java in 1913 further strengthened the Java industry and by 1938 she had come to occupy a position as the premier Quinine producing country in the world.

Resuscitation

When rumours of the possible retirement of Java from the field reached this country in the first decade of this century the necessity for the resuscitation of the industry to keep up the supplies of the much needed Quinine in India came to be realised. But it no longer held any but meagre attraction to private enterprise. The crash suffered by Cinchona in the eighties had discouraged them greatly and was still fresh in their memories. Secondly the Government could give them no guarantee of a minimum price for bark which they asked for. There was also the attraction of other plantation crops like tea and coffee which were paying high dividends. It therefore necessarily devolved on the Government to take up the expansion of the Cinchona Plantations. In 1916, forest lands in the vicinity of the Government Cinchona Plantations at Doddabetta and Naduvattam were examined and rejected in favour of a large block of Reserve forest land in the Anamalais. In 1916 a scheme for planting 22,000 acres of virgin forest land in these hills was approved by the Government but a start was made there only in 1925.

Development of the Industry

The Cinchona department of Madras Government, needless to say, was born out of the experiments done in the Nilgiris. From the time of the introduction of Cinchona in the Nilgiris till 1896, Cinchona work formed part of the activities of the Agricultural department. Thereafter the Cinchona Plantation and Factory were constituted into a separate unit.

The West Bengal Government have to-day large areas under Cinchona cultivation and they are producing quinine in their own factory at Mungpoo. Assam too has Cinchona Plantations but on a small scale having only about 700 acres and they have recently proposed to construct their own factory to process the bark from their plantations. The area in Assam was developed only in recent years and Assam's contribution so far of manufactured quinine has been little.

The Madras Government Cinchona department is treated as a Government commercial concern and has a capital outlay of about 240 lakhs of rupees.

Plantations

The total area under Cinchona cultivation in the Departmental Plantations to-day is 9,637·3 acres comprising of 2,381·8 acres in the Nilgiris and 7,255·5 acres in the Anamalais. Of this, an area of 5,734·3 acres is planted solely on Government of Madras account; an area of 200 acres solely on Government of India account and the balance area of 3,503·0 acres as a joint venture of the Governments of Madras and India.

The plantations at Doddabetta and Naduvattam which were the first to be started in this country continue to exist and have been expanded considerably and replanted a number of times since then. The Anamalais plantations were, as stated above, opened in 1925. At the end of 1939–40 the acreages at Naduvattam and Anamalais were respectively 1,339 and 939.

With the outbreak of war in Europe in 1939 the demand for quinine increased enormously while the supplies of the drug from Java diminished gradually and were finally cut off by the outbreak of war in the Far East and the occupation of the Netherlands by the Japanese in 1942. Enormous quantities of quinine were needed then to meet the requirements of the army as well as the civilian population. The internal production at that time was scarcely sufficient to meet the emergent and growing demands. Quinine distribution was therefore immediately put under control and a large expansion of the Government plantations was ordered by Government. Between 1940–41 and 1942–43, Madras alone planted 1,018 acres in the Nilgiris and Anamalais. At this juncture the Government of India came with a proposal for close planting of Cinchona under the so-called short-term Russian Method and between 1943–44 and 1946–47, 801 acres in Nilgiris and 2,702 in the Anamalais were planted as a joint venture of the two Governments. The Government of India also offered financial assistance to private planters but the response was rather poor. The State Government continued their expansion programme beyond 1946–47 and from 1947–48 to 1949–50 an area of 247 acres was planted in the Nilgiris and 2,835 in the Anamallais. The acute financial stringency at this stage cut short further expansion activities and no new planting was undertaken from 1950 onwards. Replacing of casualties on the field and consolidation of old plantation areas is however being continued.

Research

A research unit for improving the quality and increasing the yield of bark was constituted towards the end of 1942 and was expanded in 1945. The Government of India is contributing a share of the expenditure of this unit.

A successful technique of large scale vegetative propagation of Cinchona has been evolved and over 20 clones with high quinine content, including a world-record-yielder containing 17 per cent Quinine Sulphate and possessing other desirable qualities have been isolated. These are being propagated on a mass scale vegetatively. Careful studies have shown that by such propagation the quinine content of the bark has been vastly increased. This unit is also engaged on studies on espacement, cultural practices, thinning, manuring, soil conservation and soil improvement.

Factory

It has been stated already that the factory for manufacture of alkaloids was opened in 1870 at Naduvattam. This old factory got burnt down in 1920 or so and the present factory at Naduvattam was constructed soon afterwards. The normal production of this factory is 20,000 lb. of Quinine Sulphate and 10,000 lb. of other alkaloids a year, but the factory has produced as much as 60,000 lb. of Quinine Sulphate and 30,000 lb. of Cinchona Febrifuge during war years. The bark from the Government plantations and private estates in the Madras State is processed in this factory. When Government ordered the large-scale expansion of the Government Cinchona plantations during war years, they simultaneously ordered the construction of a new Quinine Factory on modern lines on the Anamallais to cope up with the newly raised plantations there. This factory will go into production on the 14th May 1955, and has a rated capacity of 60,000 lb. of Quinine Sulphate and 30,000 lb. of other alkaloids per annum.

Quinine from Cinchona.

The bark of the mature cinchona tree is the starting material for the extraction of cinchona alkaloids. The bark occurs in quilled pieces of variable thickness and length. The rough outer surface is grey or brownish grey, showing both transverse and longitudinal fissures and often bearing lichens; the inner surface is striated and varies in colour from yellowish brown to deep red brown. The bark possesses a bitter astringent taste.

Constituents of Cinchona bark.

The crystallisable alkaloids in Cinchona bark are Quinine, Cinchonine, Cinchonidine and Quinidine of which Quinine is the most important. In addition, twenty-five other amorphous alkaloids have been isolated and these occur in small proportion and have no special application in commerce. All the alkaloids are present in the bark as salts of the organic acids, Quinic acid and cinchotannic acid. Besides the alkaloids, the other important constituents of the cinchona bark are the dyestuff called cinchona red and the bitter glycosides, Alpha-Quinovin and Beta-Quinovin.

Extraction of cinchona bark

The dried cinchona bark is ground into fine powder and mixed with lime and caustic soda in suitable proportions. The alkalis act on the bark and liberate the alkaloids from their natural state of combination. The bark alkali mixture is then extracted with solvent oil which in turn is agitated with dilute sulphuric acid when we get all the alkaloids transferred into the sulphuric acid liquor.

When this acid liquor is neutralised with caustic soda, Quinine sulphate is precipitated in crude form, leaving the other alkaloidal sulphates in solution. The crude quinine Sulphate is separated from the liquor and refined using activated carbon while the mother liquor is treated with excess of caustic soda to precipitate the other alkaloids which are collected, purified, dried and marketted as Cinchona Febrifuge which is a cheap substitute for Quinine.

The refined quinine sulphate is also the starting material for manufacturing special salts of Quinine like Quinine Hydrochloride, Quinine Bihydrochloride, Quinine Bisulphate, Quinine Hydro-bromide, etc.

The Quinine Sulphate produced by the Madras Government Cinchona Department in the past used to be coloured pink for distinquishing it from other makes of Quinine. The entire production was also reserved for supplies to only Government, Municipal and Local Fund Medical Institutions and private organisations and public were not supplied with Government Quinine. Quinine sales were however thrown open to the public after decontrolling it from June 1950. While the policy in the old days appears to have been that there was not sufficient production in the Naduvattam Factory to meet the demands of the public and hence supply was restricted only to the Government Medical Institutions; the present policy is to serve the country by serving the public in all sectors and adjust production to the demand. India is divided into three zones for the distribution of Quinine products. One zone being supplied with Quinine products by the Madras Cinchona Department, another by the West Bengal Cinchona Department and the third by the Government of India. The Madras zone comprises of the States of Madras, Andhra, Mysore, Coorg, Tranvancore-Cochin, Bombay, Hyderabad, Madhya Bharat, Madhya Pradesh, Vindhya Pradesh, Sourashtra, Kutch and Bhopal.

Quality of products

The Quinine products manufactured by this department have been kept up to the British Pharmacopœia Standards from the year 1944 but for the pink colour which was deliberately added to the Quinine Sulphate. From the year 1950 however the pink colouring was discontinued when British or Indian Pharmacopœia Standards became official and compulsory in the country. The products manufactured in the Quinine Factory at Naduvattam are Quinine Sulphate, Bi-Sulphate Hydrochloride, Bi-hydrochloride, Hydro-Bromide, Bi-Hydro Bromide and Salicylate, Totaquina and Cinchona Febrifuge.

Till recently the distribution of the bulk of the quinine and other cinchona products was being done by the Superintendent, Central Jail, Coimbatore. This work has since been

taken over by the Cinchona Department and supplies to Medical Institutions and the public are now made direct from the factory. Powders are available in four packings, i.e., 1 oz. 1 lb. 5 lb. and 10 lb. and tablets in three packings, i.e. 10 numbers, 100 numbers 1,000 numbers.

Of late experiments are being conducted with various medicinal and essential oil plants, both on the cultivation side on the field and extraction side in the laboratory. These trials are purely in an experimental stage and it will take some time before the Department can launch out schemes on a commercial scale. The one article already being obtained on a commercial scale and available for sale to the public and manufacturing concerns is Eucalyptus Oil distilled from the leaves of the Eucalyptus trees growing in the Government Cinchona Plantations, Nilgiris.

Importance of Quinine to humanity

Malaria has been described as one of the greatest scourges of mankind and it is believed that if adequate curative treatment is given for this single disease, India can be converted in a single generation to one of the most prosperous and healthy countries in the world.

The value of Quinine as a curative to Malaria has been known since time immemorial. The special feature of this drug is that it is a natural product and has stood the test of time over a period of centuries. And to us it is of special interest because Malaria is one of four greatest problems in this country.

Facts and Figures

During the first quarter of 1955, the total production of cloth by the mill industry increased by 11 million yards (to 1,262 million yards) as compared with the previous quarter.

During the same period the production of sugar amounted to 9,58,300 tons as compared with 7,10,100 tons for the corresponding quarter of 1954.

Indian aircraft flew nearly 13·2 million miles during the period July—December 1954 as against 12 million miles flown in the previous half-year.

The number of aircraft holding current certificates of registration at the end of December 1954 was 623, of which 199 held current certificates of airworthiness.

"LEPROSY IS CURABLE"—In connection with the membership and publicity campaign of the Hind Kusht Nivaran Sangh, a press conference was held in the Secretariat recently. Sri A. B. Shetty, Minister for Health, and Medical Experts on leprosy were present

Our Literary Heritage:

Modern Bengali Literature

By PROFESSOR PRIYA RANJAN SEN

The last of the Medievals

Like the two-faced god Janus who faces both the immediate past and the immediate future, Bharat Chandra, the last of the medievals and the first of the moderns in Bengali literature, while continuing or concluding the "Mangal Kavyas", changed the tenor of literature and made it more concerned with ordinary human life and emotions than with the other world. For, folk literature apart, it will not be wrong to say that the difference between old and medieval and modern literatures largely amounts to the difference in interest in the other world and this. Bharat Chandra is interested in the Chandi cult, but at the same time his treatment of the love affair of Vidya and Sunder is essentially carnal. And Bharat Chandra was not alone in this; if we survey eighteenth century Indian literature, we shall see everywhere the same romantic, rather erotic, trend, the same polished style revelling in rhetorical excellences, the same command over poetic measures, and conclude that it was an all-India change gradually assuming a distinct shape. Bharat Chandra's immediate influence is seen in the effusions of the Kabiwallas in early 19th century who did so much to keep alive the soul of potery and who produced lyrics nominally dealing with the amours of Radha Krishna but really turning out love poems, pure and simple.

But the battle of Plassey during the lifetime of Bharat Chandra, changed the political, ecnomic and social aspects of the country. The East India Company found by experience that it was necessary for its officers to know the language of the country they were going to administer. The young officers coming to India had therefore to be trained in the laws, languages and social codes of the country. This led in time to the foundation of the College of Fort William in 1800, for which Dr. Gilchrist, its first Principal, had prepared the ground by his knowledge of Hindi for which he had given up his job as a ship's surgeon. The College of Fort William was an institution where the grammars,and word-books of Bengali, Hindi, Hindustani, Punjabi, Oriya and other languages were studied and written by English scholars with the help of Indian scholars, Pandits and Munshis, who also prepared reading lessons, primers and readers and thus paved the way for prose compositions in the different languages. It was here that Dr. Carey, a great linguist who rose from humble beginnings and who was first and foremost a missionary, came out to India to translate the Bible in different languages, wrote his grammar, dictionary, readers in Bengali, designed to help the young administrators no doubt, but at the same time useful to all young learners.

The New Awakening

Meanwhile, Rammohan Roy appeared on the literary field with his treatises in Bengali on philosophical subjects. He is admittedly the maker of modern India by virtue of his zeal for investigation into truth, for his universal religion, for demolition of orthodoxy and superstition and for introduction of the spirit of enquiry. He made Bengali prose a fit vehicle for philosophical investigation, and also joined issues with English Missionaries, so that with him we find the rise of controversial literature. And for successful controversy he started periodicals.

The pace for journalism had been already set in the second decade of the nineteenth century with the Missionaries at Serampore. The East India Company did not want to take or encourage any steps which might disturb their administration and they did not at first like Christian Missionaries to preach the Gospel if there was any risk involved in their own administration and commercial pursuits. That was the reason why the missionaries concentrated at Serampore still under Danish protection, and started with some hesitation from Serampore the Bengali periodical "Dig Darshana" and the newspaper *Samachar Darpan*. Bengali journalism, thus born, made quick progress.

We now come to the thirties when Ishwar Gupta came to the forefront. He was clever with his puns and alliterations used in his poems and prose writings. He introduced the custom of poets' gathering on the Bengali New Year's Day, and to him goes the credit or first starting literary organisations in Bengal. He liked English poems to be translated into Bengali in metre corresponding to the English original, and he encouraged such works both by publishing them in his paper and by awarding cash prizes for them. Towards the end of the third decade we find Maharshi Devendra Nath Tagore establishing a society named Tattwa Bodhini Sabha with its organ "Tattwa Bodhini Patrika." Akshoy Kumar Datta and Ishwar Chandra Vidyasagar were both associated with this paper. Bengali prose received a great impetus through Tattwa Bodhini and while Akshoy Kumar was Indianising European science and rationalism, Vidyasagar enriched Bengali with his adaptations—"Betal Panchavinsati" from Hindi, "Bhranthi Bilash" from Shakespear, "Shakuntala" and "Sitar Banbas" from Sanskrti—each with its distinctive treatment and style. Urgent social reform and spread of education took up much of this time, still he attempted an autobiography, and left a prose elegy which proves the originality of his mind.

Assimilation of western forms

Translation work indeed was in the air during the fifties and the Vernacular Literature Society did much to encourage the writing and publication of small books of different kinds, both original and translation, all sold at a very moderate prices. It was in the middle of the fifties, however, that the creative spirit for which preparations had been afoot, emerged through Michael Madhusudan Dutta who successfully introduced blank verse in Bengali, wrote an epic in European style on the death of Meghnad, successfully imitated Ovid in his "Virangana", put himself in tune with the traditional Radha-Krishna poetry in his "Vrajangana," and wrote dramas with a fine disregard for the author of "Sahiya Darpan" and his codified rules and regulations. It was he again who introduced the sonnet to Bengali. Historical drama, tragedy, farce and romantic comedy—he set a pattern for all these, and with equal success. For one individual to have done all these and more—all innovations in their own line—was something unique But his greatest and most serious work was still to come; good or marvellous as we pronounce his works tobe, he considered them as more or less experiments. The change had no doubt begun earlier with Rangalal and his "Padminir Upakhyan", and naturally poets who tried to evoke patriotism resorted to Todd's Annals of Rahjasthan, for the history of the Rajputs and their glorious defence against invading hordes supplied a fertile ground for heroic themes. But Hemchandra and Nabin Chandra and many others travelled in the wake of Michael and the vein of epic poetry has not yet run dry.

Madhusudan had before him predecessors like Ram Narayan of the old school against whom he revolted and one of his contemporaries, Dinabhandu, became the spear-head for agitation against the indigo planters. But it was Madhusudan's form which was adopted by amateur theatricals. It was a great departure from the Sanskrit style. After Madusudhan's death theatricals were greatly handicapped for want of new plays, but Girish Chandra Ghosh stepped into the breach and, from 1872 to the year of his death 1912, continued to produce plays, organise dramatic centres and train actors and actresses and in this way was an institution by himself. Naturally his dramas varied in character. It is not possible to sum up his dramas. The difference, however, between the old and the new—between the old Jatras and the new plays—may be described as consisting in the reduction of songs and taking help of stagecraft, painted scenes and wings, orchestra, etc. In drama, there were other experiments; Jyotirindra Naths' plays conforming to the Greek unities and Kshirode Prasad's powerful plays and also Dwijendra Lal Roy's historical plays, sometimes looked askance for their bold and outspoken patriotic songs and expressions.

But let us go back to 1860. Bankin Chandra Chatterjee was coming into his own. His "Durgesh Nandini" at once put a stop to the hesitation with which attempts at writing novels were being made. Bankim Chandra wrote a number of novels, some historical, many social, three philosophical "Anandamath", "Devi Choudhurani" and "Sitaram". He did not mince matters when he ridiculed the social or the political reformer, but in his own way he also was a reformer and a radical reformer at that. In his philosophical novels he tried to show how only selfless work paid, and how, as soon as we are attached to our work and its results, the rot begins. If Prafullamayee could be a success, both as Devi Choudhurani and at home, it was possible only because she was completely unattached in the philosophical sense of the word. Translated into many of the modern Indian languages, his novels have inspired authors outside Bengal. Through his magazine "Banga Darsan," he also ruled over the reading public just as Dr. Johnson did in his time. His serious prose writings contained food for thought for the reader who had received English education. As a matter of fact he wanted such readers specially to turn to Indian culture. For them he wrote his "Anushilana", and as an example of Anushilan he held up Sri Krishna as the perfect embodiment of culture.

Rabindranath Tagore

Influenced by Bihari Lal in his early days, Rabindranath Tagore had developed a subjectivity in perfect accord with his own lyric genius. The influence of "Kamala Kanter Daftar" may be traced in earlier prose and that of the historical novels has left its shadow in his earlier novels. But it was the outer mechanism only. Rabindra Nath turned the novel into a new channel—more concerned with the changes of the mind. He has experimented with metres and presented our language with new measures even utilising the rythms of prose as the vehicle of poetry. He has written a number of beautiful short stories where humour is blended with pathos and tears with laughter. He has produced volumes of prose unrivalled in style and suggestiveness. He has produced fundamental books in prosody, criticism, education, and the master's touch is always there. A wonderful genius; accustomed to hard work, responsive to national movements, Rabindranath filled the whole of our literary arena with his personality during his lifetime.

Sarat Chandra Chatterjee, the spokesman of those who were neglected by society turned his life on them discovering in them the beauty and dignity of the human soul. He questioned the current social values and tried to rouse the leaders to probe fundamental social questions. There was also Pramatha Choudhury whose scholarly knowledge of Sanskrit and French literature bore fruit in short stories and critical essays. We may mention also Bibhuti Bhushan, the author of "Pather Panchali", whose story has a lasting place in the annals of our literature.

Bengali like other modern Indian languages has come into more and more prominence in recent years. Bhudeb, Dwijendranath, and Ramendra Sundar have endowed Bengali prose with lasting vigour and suppleness. There is moreover no dearth of talents atpresent. In short story, in serious literature, in the weaving out of varieties of beautiful prose, we can still point to authors who command respect. Moreover, now that political independence is an accomplished fact, we have more confidence in the future of Bengali literature. It will take something from other literature and give something of its own and that way lies the line of a normal and healthy national development, combining new realism with its innate remanticism.

Ayurvedic Practitioners

There are at present 89,118 registered Ayurvedic practitioners in India.

Up to June 1955, 7,785 acres of land had been brought under cultivation in the Central Mechanised Fa[illegible] at Jammu

A Census Analysis

According to the 1951 Census, 857 lakhs (or 82·1 per cent) of the 1,044 lakhs self-supporting persons live in the villages in India, as against 187 lakhs (or 17·9 per cent) in the urban areas. Of the total population of 3,566 lakhs (figures for which are available) 1,044 lakhs (or 29·3 per cent) are described as self-supporting persons, 379 lakhs (or 10·6 per cent) as earning dependents, and 2,143 lakhs (or 60·1 per cent) as non-earning dependents.

Further breakdown of the figures for self-supporting persons shows that there are 151 lakhs (or 14·5 per cent) of such females in the rural areas; the corresponding figures for females in the urban areas is only 21 lakhs (or 2 per cent).

These figures have been given in "The Appendices to the Census Report, 1951", recently published by the Deputy Registrar General of India.

Growth of Population and Cultivation Analysed

An analysis of the growth of population related to cultivation indicates that after 1921 the growth of population had become rapid and uninterrupted while the increase in cultivation was "small and proportionately much less than the increase in population." This suggests that during the sixty-year period from 1891 to 1951 the balance in the growth of population and cultivation in certain parts of India, selected for this survey, had been achieved in 1921. Thus, in the first thirty years the population rose from 815 lakhs in 1891 to 833 lakhs in 1921, while the area under cultivation proportionately increased from 890 lakhs acres in 1891 to 927 lakhs acres in 1921. Between 1921–1951, however, the population increased to 1,179 lakhs, whereas the area under cultivation has increased to 991 lakh acres.

Detailed Appendices give other data

The volume contains seven detailed appendices dealing with birth rates and death rates, review of the census economic data, famine and pestilence, shortages of foodgrains, irrigative projects and irrigation development

(Continued on the next page)

Rural Electrification

The number of villages electrified during the month of July in the various systems was as follows :—

Pykara System	31
Mettur System	5
Papanasam System	5
Madras System	1
Total	42

The names of villages together with the details of taluks and districts are given below :—

Name of village.	*Taluk.*	*District.*
	Pykara System.	
Semmandampalayam	Palladam	Coimbatore.
Kamayagoundenpatty	Periakulam	Madurai.
Kethanur	Palladam	Coimbatore.
Chavadipalayam	Do.	Do.
Mettupalayam	Do.	Do.
Thottipalayam	Do.	Do.
Ellamanaickenpalayam	Do.	Do.
Kethanur—Manthiripalayam	Do.	Do.
Chinnakanur	Avanashi	Do.
Kanoorpudur	Do.	Do.
Thottapalayam	Do.	Do.
Konampalayam	Do.	Do.
Yellanhelli	Coonoor	Nilgiris.
Chundale	Wynaad	Malabar.
Thummanampatty	Ootacamund	Nilgiris.
Dharumathampatti	Dindigul	Madurai.
Karasalpatty	Do.	Do.
Palaniyur	Do.	Do.
Pondampatti	....	....
Basavapalayam	Gobi	Coimbatore.
Varadampalayam	Do.	Do.
Kottuveerampalayam	Do.	Do.
Chinnakuilai	Palladam	Do.
Thambakavandampalayam	Coimbatore	Do.
Keelavadakarai	Periakulam	Madurai.
Naipally	Udipi	South Kanara.
Kattacherry	Ootacamund	Nilgiris.
Kundachappai	Do.	Do.
Kuppache	Do.	Do.
Morgal	Do.	Do.
Berlatti	Do.	Do.
	Mettur System.	
Pandunali	....	North Arcot.
Panangadu	....	Salem.
Thayagadurgam	Kallakurichi	South Arcot.
Kallakurichi	Do.	Do.
Govindavadi	Kancheepuram	Chingleput.
	Papanasam System.	
Periaperali	Sathur	Ramanathapuram.
Annaikuttam	Do.	Do.
Ellupaiyurani	Koilpatti	Tirunelveli.
Uthupatti	Do.	Do.
Thiravianagar	Tenkasi	Do.
	Madras Electricity System (Distribution).	
Perumalagaram	....	....

Work on large number of rural extension schemes spread over the entire state was progressing. The following are the particulars of lengths of new lines constructed and energised during the month in the various systems :—

	Length of lines in miles.	
	H.T.	*L.T.*
Pykara System	23·31	44·65
Mettur System	7·76	36·70
Papanasam System	6·78	19·80
Madras System	4·53	7·68
Total ..	42·38	108·83

In the Madras System a total number of 179 D.C. Services with an approximate connected load of 148 K.W. were changed over to A.C. supply on a voluntary basis.

During the month 23 extension were sanctioned by the Chief Engineer for Electricity and Chief Operation Engineers at an estimated cost of Rs. 11·17 lakhs.

Do You Know ?

1. That Travancore-Cochin is by far the largest producer of raw rubber in the country, accounting for about 85 per cent of the area under rubber plantations.

2. And that the State of Madras comes next with about 12·5 per cent of the area, while Mysore and Coorg together contribute nearly 2·5 per cent.

3. That the Standing Committee for the metric system of weights and measures has decided that all new plants and equipment to be used in Government undertakings should be based on metric system.

4. And that it has also been decided to suggest to the Chambers of Commerce and Industry to follow the same principle in regard to new plants and equipments.

5. That the All-India Khadi and Village Industries Board has taken a decision to revive the production of the famous Dacca Muslin.

6. That the Government of India will award during 1955–56 a limited number of post-school scholarships of the value of Rs. 100 p.m. to blind students for post-matriculation education and for professional training.

(*Continued from previous page*)

projects, and maternity data and birth control, respectively.

The statistics relating to population and land use bring out the relationship between population and natural resources in general, and cultivation in particular. In tables on birth rate and death rates all available data about the registration of births and deaths have been correlated with the census data and scrutinized critically. The final review of the census account fixes the birth rate in India at 40 and death rate at 27 during the decade 1941–50.

The economic data relates to the household economic status of people, viz., self-supporting persons, earning dependents and non-earning dependents.

Famines in 1769–1880 *and Relief and Remedial Measures*

In setting forth figures for famine and pestilence between 1769–1880, it is pointed out that out of the 21 famines and scarcities, 8 were "intense famines" 9 "famines", and 4 "scarcities." Five of the 8 "intense famines", covering a total period of 11 years, it is added, affected 202 million people.

The unhealthy effects of such famines and scarcities are, however, the report says, gradually diminishing, "partly by the more efficient character of the relief given, partly by the extension of the means of communications and development of internal trade, and partly by the greater preparedness of the people to meet them which grows from the increase of thrift and resourcefulness and accumulation of capital due to a settled and civilized Government."

The last appendix gives maternity data and birth control figures in certain part of India and some notable comments on these subjects.

(*Continued from page* 13)

Such a meeting is profitable to the urbanised students, as well as to the rural masses. On the basis of personal experience gained, the writer ventures to make the following suggestions :—

(1) Since the camps are useful in instilling the spirit of social service and community outlook, conducting of Camps on an All-India basis would certainly go a long way in releasing a tremendous reservoir of voluntary labour and energy of youths which could be harnessed in the implementation of the Second Five-Year Plan. Such national camps would be purposive in so far as they would arrest parochial tendencies and develop a national outlook among those who are the leaders of tomorrow. The members of the camps can be drawn from different States, so that apart from learning the dignity of manual labour, there can be useful cultural contacts.

(2) A long term programme for summer camps may be formulated in the Second Five-Year Plan. The programme should include the construction of permanent buildings in rural areas, so that social service campers may be stationed in neat and healthy surroundings. Further the camp-sites must be provided with facilities for different types of sports. Community theatres may also be constructed within the camp-sites, so that the campers may conduct dramas, music concerts and dancing recitals. Permanent camp-sites (to begin with they can be about 100) may be distributed all over the country. We have many lakes and forests in this country in whose environs the camp-sites may be constructed. Such camp-sites would be particularly useful in giving city-bred school children and college students an opportunity to live in country side and come into closer touch with nature. Group excursions at concession rates may be organized in these camp-sites for industrial workers during such periods when there are no camps.

Rural Broadcasts for October 1955

Saturday, 1st October 1955—
Talk in Tamil arranged by the Department of Harijan Welfare, Government of Madras.
Uzhaippinale : Song ;
The Adult Literacy Class : Tirukural : Adakkamudaimai (Kural Nos. 129 and 130).
Weekly Review of Market Rates : Water-level Readings : Topical Discussion and Weather Report.

Sunday, 2nd October 1955—
Vazha Vaittavar ; Musical Feature ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Monday, 3rd October 1955—
Care of Sick Goats : Discussion ;
Folk Songs ;
The Village Women's Forum ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Tuesday, 4th October 1955—
Farm Forum : Discussion ;
Folk Arts ; Burrakatha ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Wednesday, 5th October 1955—
Public Health Discussion ;
Pon : Vilaiyum : Song ;
Social Education under Five-Year Plan : Talk ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Thursday, 6th October 1955—
Farm Forum : Discussion ;
Have you heard this song ?
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

riday, 7th October 1955—
Lavani ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Saturday, 8th October 1955—
Cottage Industry : Natural Silk : Discussion ;
Chittirattil : Song ;
The Adult Literacy Class : Tirukural : Ozhukkamudaimai (Kural Nos. 131 and 132).
Weekly Review of Market Rates : Water-level Readings ;
Topical Discussion ; Weather Report.

Sunday, 9th October 1955—
Fertilizers and Manures: Discusssion ;
Anthi Tiruvilakku : Song ;
The Pial School of Political Science ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Monday, 10th October 1955—
Housing Our Poultry : Discussion ;
Sathya Jothiyai : Song ;
Irulil. Oli : Feature ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Tuesday, 11th October 1955—
Farm Forum : Discussion ;
Grama Patasalaiyil : Asu Kaviroyar ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Wednesday, 12th October 1955—
Prevention of Infectious Diseases : Discussion ;
Kunrin Midu : Song ;
Listeners' letters ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Thursday, 13th October 1955—
Farm Forum : Discussion ;
Musical Bouquet ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Friday, 14th October 1955—
Katha Kalakshepam : Prahlada Charitram ;
Market Rates and Water-level Readings ;
Topical Discussion : Weather Report.

Saturday, 15th October 1955—
Talk in Tamil arranged by the Department of Forests, Government of Madras ;
Pudiador Ulagu : Song ;
The Adult Literacy Class : Tirukural : Ozhukkamudaimai (Kural Nos. 133 and 134).
Weekly Review of Market Rates : Water-level Readings ;
Topical Discussion ; Weather Report.

Sunday, 16th October 1955—
Agricultural Chemistry : Discussion ;
Thangam Vilaiya : Song ;
Minor Matters (1) Serial Feature ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Monday, 17th October 1955—
Blackquarter : Discussion ;
Ilamaikkanavu : Song ;
Nilavalam : Play ;
Market Rates and Water-level Readings ;
Topical Discussion; Weather Report.

Tuesday, 18th October 1955—
Farm Forum : Discussion ;
Folk Songs ;
Maganwadi Choola : Discussion ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Wednesday, 19th October 1955—
Puerperal Pepsis : Discussion ;
Bharata Jothi : Song ;
Kuppaiyil Kundrumani : (1) Play ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Thursday, 20th October 1955—
Farm Forum : Discussion ;
Pattaikkelungal ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Friday, 21st October 1955—
Karaha Attam : Folk Dance ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Saturday, 22nd October 1955—

Kashmir : House Boat : Discussion ;
Tedi Unnai : Song ;
The Adult Literacy Class : Tirukural : Ozhukkamudaimai (Kural Nos. 135 and 136).
Weekly Review of Market Rates ; Water-level Readings ;
Topical Discussion ; Weather Report.

Sunday, 23rd October 1955—

Pusa's tomatoes and Brinjals : Discussion ;
Parukkulle : Song ;
The Village Welfare Association ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Monday, 24th October 1955—

Samadhana Kalanjiam : Feature ;
Sathya Jothiyai : Song ;
Irulil Oli : Feature ;
Market Rates and Water-level Readings ;
Weather Report.

Tuesday, 25th October 1955—

Farm Forum : Discussion ;
Tachhuppattarai Tanigaivel : Play ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Wednesday, 26th October 1955—

Family Planning : Discussion ;
Ettanai Kodi Inbam : Song ;
Listeners' letters ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Thursday, 27th October 1955—

Farm Forum : Discussion ;
Vasanaikkalanjiyam : Kadambapodi Musical Feature ;
Market Rates and Water-level Readings ;
Topical Discussion : Weather Report.

Friday, 28th October 1955—

Samudaya Tittam : Musical Feature ;
Market Rates and Water-level Readings ;
Topical Discussion : Weather Report.

Saturday, 29th October 1955—

Vazhikattum Jothi : Feature ;
Baktipadalgal : Song ;
The Adult Literacy Class ; Tirukural : Ozhukkamudaimai (Kural Nos. 137 and 138).
Weekly Review of Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Sunday, 30th October 1955—

Jap Method of Rice Cultivation : Discussion ;
Ottada, Ottada : Song ;
Onre Kulam : Feature ;
Market Rates and Water-level Readings ;
Topical Discussion ; Weather Report.

Monday, 31st October 1955—

Milk Fever : Discussion ;
Yamarinda Mozhi : Song ;
Urumi Melam ;
Market Rates and Water-level Readings ;
Topical Discussion : Weather Report.

SRI K. HANUMANTHAIYA, Chief Minister of Mysore, had discussions at the Secretariat with Sri K. Kamaraj, Chief Minister, and other Ministers on the sharing of the Moyar river water between Mysore and Madras States.

(*Top*) Sri K. Kamaraj Chief Minister, inspecting some of the Hawaian Citron fruit at the Agricultural farm at Pattukkottai, during his recent tour. (*Right*) Photo taken when Sri K. Ramunni Menon, I.C.S., Chief Secretary, retired and Sri W. R. S. Sathianadhan, I.C.S., assumed charge as Chief Secretary. (*Below*) Sri K. Ramunni Menon, I.C.S., speaking at the farewell function.

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Drink Neera for Health

Composition of Palm and Cane Juices.

Kind of Juice.	*Moisture.*	*Proteins.*	*Fats.*	*Sucrose.*	*Red Sugar.*	*Minerals.*	*Gums.*
Palmyra Juice	85·89	0·31	0·02	12·2	0·30	0·31	..
Date Palm Juice	87·63	0·35	..	11·07	0·96	0·54	0·26 (pectins).
Coconut Juice	83·88	0·22	0·04	14·6	0·77	0·26	0·56
Sago Palm Juice	88·43	..	..	9·68	0·075	0·280	0·023 (pectins).
Cane Juice	85·66	0·17	0·16 (waxes).	12·34	1·08	0·21	..

[Central Palm Gur Training School Laboratory,
All-India Khadi and Village Industries Board, Bombay-1.]

Eat Palm Sugar for Health

Analysis of Date Palm Sugar.

Moisture per cent	Nil.	Calcium per cent	0·08
Protein per cent	0·24	Phosphorus	0·064
Fat (ether extractives) per cent	0·37	Iron (Fe) Mgs. per cent	30·0
Mineral Matter per cent	0·50	Nicotinic acid mgs./100 g.	4·02
Carbohydrate per cent by difference	98·89	Vitamin BI (Microgrammes./100 g.)	Nil.
Carbohydrate per cent (Direct Polarimetry).	98·4	Riboflavin (Microgrammes/100 g.)	229
		Calorific value/100 g.	398

[Nutrition Research Laboratories, Indian Council of Medical Research, Coonoor (South India.)]

Eat Palm Gur for Health

Composition of Palm and Cane Gurs.

Kind of Gur.	*Moisture.*	*Sucrose.*	*Reducing Sugars.*	*Fats.*	*Proteins.*	*Total Minerals.*	*Calcium as CaO.*	*Phosphoru as P205.*
	PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT.
Palmyra Gur ..	8·61	76·86	1·66	0·19	1·04	3·15	0·861	0·052
Date Palm Gur ..	9·16	72·01	1·48	0·26	1·46	2·60	0·363	0·52
Coconut Palm Gur.	10·32	71·89	3·70	0·15	0·96	5·04	1·638	0·062
Sago Palm Gur ..	9·16	84·31	0·53	0·11	2·28	3·66	1·352	1·372
Cane Gur	6·94	69·43	21·18	0·05	0·25	1·00	0·4	0·045

[Central Palm Gur Training School Laboratory,
All-India Khadi and Village Industries Board, Bombay-1.]

"At the Feet of Mahatma Gandhi"

Broadcast Talk by SHRI SRI PRAKASA, Governor of Madras, on President Rajendra Prasad's Book

To the "making of books", it has been said, "there is no end"; and they also add that "too much reading is weariness to the flesh". Still, it is a fact that there are some books which if they are not written, humanity would be the poorer for the loss; and while one reads a book like this, instead of feeling fatigued and bored, one feels invigorated and inspired. Such indeed is the book that our President Shri Rajendra Prasadji has written, offering a pleasing picture of Mahatma Gandhi's personal life with its many strange idiosyncrasies and startling characteristics, as he went about fulfilling his daily tasks as a man and as a leader of men. The author has given us a vivid inside story of Gandhiji's tremendous work in and for India after his return from South Africa early in 1915, as the hero of the great struggle he waged there for the vindication of the rights of our people in distant lands, beginning with his fight for justice and fairplay to the depressed and suppressed peasants of the district of Champaran in Bihar, and going right up to the achievement of complete Independence by us, accompanied though it was by the unfortunate partition of the land, and followed not long after by the Master's tragic end.

No one could perhaps have written with greater force and authority about the events that have changed the face of the country and the central figures round whom they were weaved, as Shri Rajendra Prasadji has done, for he, if anyone, was always close to Mahatmaji, in heart, in mind and in body, from the beginning to the end. It is in the fitness of things that he named his book: "Bapu ke kadamon men", when first he wrote it in 1950. An English translation of this work has recently been published with the title: "At the Feet of Mahatma Gandhi." It would have, to my mind, conveyed the meaning and the fervour of the original writing which is in Hindi, better if the caption had been: "In the Footsteps of the Master," for it is not really a devotional offering at the Master's feet—and that was scarcely necessary when the President's life itself had been so offered—but it depicts in simple and moving language, the efforts—earnest, sincere and determined—on the part of the writer himself to follow in the footsteps of the Master in his own life, and to be with him absolutely and unquestioningly—body and soul, in all the facets of private aspirations and public activities to which the Master was dedicated. The cover of the Hindi edition rightly shows the foot-prints that Gandhiji is leaving behind as he marches forwards to his goal unconcerned, beckoning others to follow if they like and if they dare, through the sheer force of his example.

The author in his preface, compares Mahatmaji's life to the unrestricted flow of the sacred Ganga; and says that just as different individuals in accordance with their capacity, their ability and their temperament, avail themselves of the life-giving waters, so can they do with Gandhiji's life as well; and unhappy must have been the man who even though a contemporary of Gandhiji, knew not what he was losing by not availing himself of his presence, just as that unfortunate one who though living on the banks of the sacred stream, does not give himself even a bath therein. Shri Rajendra Prasadji's personal devotion to Mahatmaji was absolute; and he never wavered in it, despite all the storms of controversy that blew throughout the thirty years or so, round the baffling personality of Gandhiji, as he played his remarkable part on the stage of India's destiny.

Prime Minister purchasing Khadi hundi from Sri M. Bhaktavatsalam, Minister for Agriculture.

We have all heard of the peasants of Champaran and the sufferings caused to them by the unabashed tyranny of the European planters of indigo, and how Mahatmaji was induced to go on the scene and to bring relief to the harassed people. Few, however, know what exactly the trouble was; what, the nature of their sufferings; and how the same was ultimately relieved at the intervention of Gandhiji. The book under review tells the whole story of how lands were fradulently annexed and men forced to produce indigo instead of their own crops; how blood being thicker than water, the planters received the support of the British authorities; and how the most terrible of wrongs perpetrated on the humble and the helpless, by the high and the mighty, went unpunished, and even unknown. Though the problem no more exists, still the chapters of the book that speak of the same, are worth reading even to-day, in order to know the facts of the situation, and understand the background of the beginnings of Mahatmaji's work for the liberation of the people of his land. To-day as we celebrate the 86th anniversary of the birth of Gandhiji in this world of ours, it is particularly appropriate that we should do so.

Shri Rajendra Prasadji first came in touch with Mahatmaji in connexion with this work in 1917, and he tells in his own simple inimitable way, without any flourish of language that might hide the meaning of words, or mental reservations that might conceal the real truth, the manner in which Mahatmaji lived; the utter simplicity and purity of his personal life; his capacity to fulfil all his creature needs himself, without the help of others; his tremendous industry in collecting all possible facts before making up his mind; his unparalleled integrity which would not allow him to move even a hair's breadth from the strict path of truth and righteousness; his personal courtesy and goodwill even towards the worst of his opponents; his tolerance and consideration for his followers who could not go as far as himself; his scrupulous care of public money; his strict adherence to punctuality in the fulfilment of all his engagements; his refusal to change a programme once made, merely for the sake of physical convenience; his unwavering insistence on doing difficult tasks himself before asking anyone else to do likewise; and his constant readiness to make compromises on what to him were non-essentials, despite almost the certainty of mis-understanding, but standing unmoved like a rock where fundamentals were concerned, regardless of consequences, and possibilities of the most serious mis-apprehensions and

The Prime Minister with the Madras Cabinet.

differences among the nearest and dearest of friends and colleagues.

All these great features of the Master, the faithful disciple chronicles, giving many examples from the doings of those days. It was then that Mahatmaji introduced a new method of facing criminal trials and standing on legal defence. This method he followed to the last, bewildering the trying magistrates and judges as much as lawyers and laymen. After once joining Mahatma Gandhi in the Champaran Campaign of 1917, there was no going back for Shri Rajendra Prasadji either; and he was by the Master's side throughout the thirty years from that time to the close of the hero's life.

In the book under review, the many famous men and women that played such important parts in the nation's recent story, are lovingly referred to; and we are able to get pleasing insight into their thoughts and activities, as they flit in and out of the story. They had all joined the great struggle under Mahatmaji's inspiration, and toiled incessantly under his lead for the liberty of the land and the welfare of their kind. We have also the very welcome record of many others who worked so devotedly in trying and testing times—with all the attendant difficulties and dangers—but who were not fated to come to the fore, as others might have done. It is good to remember them too, with special gratitude and admiration, for it is verily they who made the tasks of the leaders possible by their own devoted labours behind the scenes.

Mahatmaji's success in his Champaran campaign brought a new hope to the land, and taught its people a new method of working. Let it not be forgotten that those were the days of the first Great War; and while Gandhiji was developing the Satyagraha technique for the liberation of the land, he was also prepared to help the British who, he felt, were fighting for a righteous cause. He went to the extent of recruiting soldiers, and very seriously jeopardised his own health at the time, in pursuit of his very difficult and unpopular work. Events, however, followed all too quickly; and after the blood bath in the Punjab in 1919, there was a steady and determined advance towards all those endeavours that would give us complete Freedom. "Inside the Empire if possible; outside it if necessary—was long the slogan, giving the only alternatives in clear and unambiguous language. After ten years, however, of going to and fro, from 1919 to 1929, with boycotts, jailings and meetings of all sorts, it was finally decided in December 1929 at Lahore, that complete Independence and that alone was to be our goal. The story of these ten years of preparation, and the story of yet another ten years of striving—civil disobedience in many forms and imprisonment in consequence—as well as Round Table Conferences in London, and many pour-parlers in India from 1929 to 1939, followed by five years of intense suffering, with further negotiations and missions, must be read in the author's own words, to be truly understood and appreciated. Then there comes a triumph, fulfilling only partially the Master's work, as it was accompanied by a grim tragedy, for Swaraj was not attained without the partition of the fair land, and the upsetting of many of the ideals so dear to the heart of Gandhiji and all who followed him. Gandhiji himself told me at my last meeting with him early in January 1948—three weeks before his sad passing—that all his labours of a lifetime had gone down the drain; and the agony of Mahatmaji's heart—that one could clearly see at the time—at the fearful tragedy of communal discord and violence, despite the triumph of the attainment of complete freedom is also told by the author in moving terms. No wonder that the hero of the great drama is entitled the "Father of the Nation" for all time.

Let us for a moment look at another facet of Gandhiji's many-sided life and work. He was keen on the upliftment of the poor and the depressed; and the people in the countryside gripped his attention and ruled his heart far more than those who lived in towns or in affluent circumstances. He made a very careful study of the needs and the means of the humblest of men and women, and always came out with practical suggestions as to how their lot could be improved. The detailed and accurate information he had about the people in general, was indeed marvellous. His great work in the popularization of the *charkha*, and his life-long efforts to introduce village industries so that the humble villager and his wife may be able to lead better lives than they were doing, are standing monuments to his intense practicalism.

Then there were those unfortunates in Hindu society whom the so-called caste people disdained and kept at a distance, regarding them as untouchables; indeed as those whose, shadow itself was pollution. Gandhiji protested against this scheme of things in a voice of thunder; and within the short space of one generation, he revolutionized the thought and activity of a whole nation in this behalf. Hindu-Muslim unity or, in other words, communal harmony for the nation's spiritual well being; *charkha* or, in other words, development of cottage industries for the nation's material well-being; and removal, of untouchability or, in other words, the recognition of the common humanity of the high and low, of the rich and poor; and the forging of bonds of brotherhood among all the peoples of the land for the nation's social well-being—were the three ideals that formed the foundations of his faith, and the platform of his great struggle for human emancipation albeit in the apparent form of a fight for political freedom from foreign domination.

He staked his life again and again in the fiulfilment of his aims by undertaking dangerous fasts. He did that, to take only two examples, for Hindu-Muslim unity in 1924 when terrible things happened on the Frontier, and a Conference of all religions was hurriedly called at Delhi; and he did that for Harijans as he named the so-called untouchables, in 1932 when the British wanted to divide the Harijans from the Hindus, as they had divided the Muslims from the general body of Indians, while he himself lay in his prison. He did this in fulfilment of his pledge—regarded at the time as empty boast or, at best, a vain threat, when at the second Round Table Conference of 1931, he warned the British Government that if an attempt were ever made to divide the Harijans from the so-called caste Hindus, he would risk his life to fight against it. The story of how step by step, Mahatma Gandhi built up his great Organization and collected a band of earnest high-minded men and women around himself; influenced the greatest in the land with his views and his methods; spread his message in the remotest corners of the country; and metamorphosed society in the course of a single generation by his soul-enhancing methods of

(*Continued on page* 8)

Social Change and National Extension Service

By SRI V. T. KRISHNAMACHARI, Deputy Chairman, Planning Commission

"Rural India is seeking to build up a new life for itself, to create a new pattern of society. The National Extension Service and Community Projects assist the efforts of the people in this great endeavour." Thus said Sri V. T. Krishnamachari, Deputy Chairman of the Planning Commission, in a talk entitled "Social Change and the National Extension Service", broadcast from the Delhi Station of All-India Radio.

"All experience," he added, "has shown that rural problems cannot be solved unless we bring about a change in the mental outlook of the millions of families in the countryside, instil in them an ambition for higher standards of life and the determination to work for such standards. I am most anxious to emphasise this. At heart, it is a human problem."

Following is the full text of the broadcast by Sri Krishnamachari :—

The subject of my talk is "Social Change and the National Extension Service."

All of you are no doubt aware of the important place assigned to the National Extension movement in the Five-Year Plans. This movement has two stages—

Firstly, every area comes under the National Extension Service. This is a permanent movement which is assisted by the Central Government on a permanent basis.

Secondly, blocks which have shown good results, in the way of people's response to programmes, are selected for intensive development as Community Project blocks for a period of five years. This period is ordinarily three years. In these intensive development blocks, workers—official and non-official—try out new methods and acquire experience of the best techniques of approach to rural problems so that all National Extension Service blocks may derive guidance from them. After this intensive stage, the areas revert to the permanent form, viz., the National Extension Service.

These two stages are interlinked. They are parts of a single movement. A decision has been taken recently that, within the Second Five-Year Plan period, the entire country will be brought under the National Extension movement and that at least 40 per cent of the blocks will be taken up for intensive development on the Community Projects pattern.

Objective of Movement

What is the fundamental objective of the movement? I shall explain this in a few words. Rural India is seeking to build up a new life for itself, to create a new pattern of society. The National Extension Service and Community Projects assist the efforts of the people in this great endeavour. All experience has shown that rural problems cannot be solved unless we bring about a change in the mental outlook of the millions of families in the countryside, instil in them an ambition for higher standards of life and the determination to work for such standards. I am most anxious to emphasise this. At heart, it is a human problem. I repeat what I said in a paper I wrote some time ago—

"The improvement of rural life is essentially a human problem—how to change the outlook of the sixty million families living in the countryside, arouse enthusiasm in them for new knowledge and new ways of life, and fill them with the ambition and the will to live a better life."

Sri M. Bhaktavatsalam, Minister for Agriculture, presenting the Certificate of Merit to one of the village elders.

To express the same idea in a different way: We want to bring about social change in order to put an end to poverty and stagnation and to initiate a process of growth in which every family will be enabled to take its share. Let me remind you here that the movement is not an official one. It is a people's movement. It is based on self-help. The function of the officials is to assist by organising technical advice, supplies and services and finance. The initiative in every way should be with the people, assisted by the best non-official leadership at all stages. Also, to be successful the movement should recognise that all aspects of rural life are inter-related and none can be dealt with in isolation.

Social Change

In what directions should efforts be made to bring about social change? What should be the major programmes of work undertaken with this end in view?

The first is increased employment and production. As you all know, the basic fact in rural life is the long period of unemployment or under-employment—of enforced inactivity—due to the dependance of agriculture on seasonal conditions. There is also the fact that subsistence agriculture is practised over almost the entire country. We should therefore assist the people in the removal of the evils of under-employment and under-production. We should work for the adoption of scientific agriculture and the evolution of a diversified economy with supplementray occupations in the form of cottage and small-scale industries.

The second direction in which we should work is to teach the need for community effort and co-operation. The people must realise that it is only by self-help that improvement on the scale needed can be brought about and that it is only in the application of the co-operative principle that solutions can be found for all problems facing the countryside. I should like to lay stress on one point in the spread of the co-operative movement. Though we have had co-operative societies in India for nearly 40 years, we find that even in areas where co-operation is best developed, only 30 to 40 per cent of the families are found eligible for obtaining credit on terms on which alone societies can offer credit. The question is how can the rest, namely, the 70 per cent now left out of the movement be made credit-worthy and fit to become members of the societies in their own right. The only way is for the well-to-do families in a village to be convinced that, in the larger interests, they should assist the others in improving their economic condition in such a way that they can become members of the co-operative societies. The village council should advance loans in kind to them, watch the use of such loans for the purposes for which they are given, recover the loans with interest and also a portion of the share capital for membership of a society and in other ways enable these people to build up assets for themselves.

Community Effort

The third direction is the need for community effort for work of benefit to the community as a whole. Every family should devote a portion of its time to work for the benefit of the community as a whole.

Lastly, there must be an active women and youth movement in the village. It is most important that the women and young persons should be brought into the movement actively.

From what I have said above, it is clear that if the movement is to bring about a social change, it should be able to give satisfactory answers to the following questions :—

(i) Have we given a plan of improvement to every family in the countryside and are we assisting these families to implement the plans?

(ii) Is every family made fit to be represented on at least one co-operative society in its own right?

(iii) Does every family utilise a specific portion of its time for voluntary work for the benefit of the community?

(iv) Are women and young persons in the village actively associated with the movement?

In other words, the success of the movement will be judged entirely by its success in ensuring that practically all the families in the village are benefited by it. If only a small portion of the families, namely, the fairly well-to-do landholders and tenants come under its influence and the large numbers of small landholders and tenants and agricultural labourers do not come under it, the movement will lose its justification. The fundamental aim is to have a strong and united village community in which there is continuous effort to reduce inequalities by raising the level of living of the under-privileged classes.

The village leaders with the Prime Minister. These village leaders represent villages in the State which have done meritorious work in the development areas.

Consolidation of Holdings

What I have said above should be regarded as a common programme for all National Extension Service and Community Projects blocks. In addition, all projects should undertake programmes of permanent utility like consolidation of holdings. We all know how widespread the evil of fragmentation of holdings is. Consolidation is essential for successful agriculture. Without it the every-day programmes, which I have outlined above, will not be effective. A programme of consolidation of holdings should, therefore, be carefully drawn up and carried out in all National Extension Service areas in a systematic manner. The National Extension and Community Projects blocks should also assist in other useful programmes in their areas. If, for example, there is a large or medium irrigation project in a National Extension Service or Community Project area, the main function of the project staff will be to see that the people benefiting by it understand their obligations and carry them out effectively. The beneficiaries should undertake responsibility for payment of betterment contribution, should have the canals excavated according to the scheduled programme by their own labour without the intervention of contractors and should take all steps needed to bring the lands under irrigation as soon as water becomes available. In other words, the project staff should see that the best results are obtained from the project within the shortest possible time.

In the same way, the movement should assist in the implementation of land reform legislation. It is obvious that land reform measures—regulation of rents, conditions of tenancy, minimum wages, etc.—cannot become effective unless the smaller landholders and tenants are actively assisted by long-term loans and in other ways to take advantage of them by adopting scientific methods of cultivation and improving their lands permanently.

What is essential is that the movement should retain its dynamism. It should not have any rigid programmes. These should be such as to meet the essential needs of the people and their main aim should be to work for social change—to assist the people in the building up a new life for themselves. The village community should feel that the interests of all the people composing it are inter-linked and that no progress is possible unless the raising of the standards of living of all the families is felt to be the joint responsibility of the community as a whole. It is the primary function of the movement to bring about this sense of joint responsibility and identity of interests.

(*Continued from page* 5)

Peace and Love and Truth—is still worth reading, and is best told in the words of Shri Rajendra Prasad in the work under review.

The story as Shri Rajendra Prasadji tells it, also shows how Mahatmaji's impress was felt far and wide in directions in which he was not apparently working. The manner of carrying on his daily duties in connection with the Champaran struggle, for instance, influenced the orthodox Hindu gentlemen who had joined him, and who had their own traditional methods of life, to give up all those complexes that prevent one from eating food touched by others or differentiating between one type of food and another, though that was no part of his campaign. He has perhaps been the greatest social reformer among the Hindus in recent times, without ever claiming to be one. He taught his colleagues to do their own cleaning and washing and sweeping, and not to be too dependent upon servants. In the wake of his Salt Satyagraha of 1930, curiously enough—as I might perhaps mention here, as another example—the Purdah system that was yet strong in North India, miraculously disappeared as women could not be prevented, despite all efforts of elders from joining the public processions that were spontaneously formed at the time—here, there and everywhere—for preaching the violation of the Salt laws, in which they found their brothers, their sons and their husbands going into danger by defying the authority of a mighty and apparently unshakable Empire.

Though Shri Rajendra Prasad to-day holds the highest office that Free India can offer to any of her children, he is not satisfied with the condition of things as they are; and in the closing pages of his book, he expresses the sorrow of his soul as he puts questions, the answers to which are obviously contained therein. "Are we prepared", he asks, "to weigh our lives in the scales prescribed by Gandhiji? Are we ready to do openly before the world all that we actually do in life?" As he ends his story, he solemnly soliloquises: "We can make our lives truly worthwhile only if we can sincerely assure ourselves that no such secret evil lingers within us that goes counter to the teachings of Gandhiji"; and commands: "Let us search our hearts and answer."

[*Broadcast on October 2, 1955—By courtesy, A.I.R.*]

Mr. John Sherman Cooper, the American Ambassador called on the Chief Minister Sri K. Kamaraj at the Secretariat on 17th October 1955. He had tea with the Ministers.

Community Development Programme: Figures at a Glance

On October 2, 1955, the Community Development Programme will complete its three years of operation. The figures below indicate the present coverage, people's contribution and the physical results obtained by the operation of the programme:—

Target of coverage set for the First Five-year Plan—

1,200 Blocks covering ¼th of rural India.

Target achieved—

Total number of blocks started (as on October 2, 1955).	946
Number of villages covered.	105,557
Population covered ..	68·3 million.

The blocks are of two different type: the more intensive types are called Community Development Blocks and others, National Extension Service Blocks. These latter are converted into the intensive Community Development Blocks after some time. The position on October 2, 1955, is as follows:—

Community Development Blocks—

Number started ..	372
Villages covered ..	48,157
Population covered .	30·4 million.

National Extension Service Blocks—

Number started ..	574
Villages covered ..	57,400
Population covered.	37·9 million.

The blocks were started on different dates. On October 2, 1952, work began on a pilot scale in 55 project areas. In 1953–54, some more Community Development Blocks were allotted. Extension Service Blocks began from October 1953 and since then periodically new allotments have been made. Some National Extension Service Blocks have also been converted into Community Development Blocks.

Details of expenditure and physical results necessarily vary as some projects were started recently while others have functioned for some time. Below are figures regarding expenditure and physical results:

Expenditure (This relates to 726 Blocks)—

	RS. IN CRORES.
Total Government expenditure (estimated) incurred.	25
People's contribution.	14·1

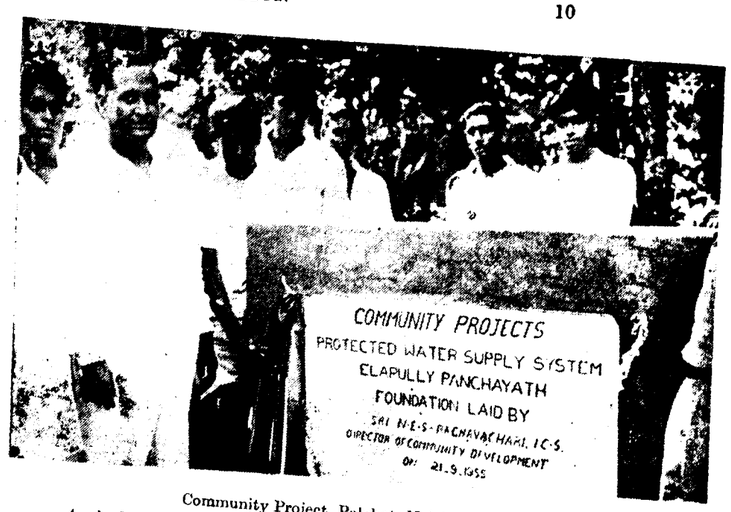
People's contribution is mainly in forms of cash, kind and labour; and thus represents more than 50 per cent of total Government expenditure. All-India average of people's contribution per 1,000 persons works out at Rs. 4,423.

Physical Results.—People's enthusiasm for voluntary self-help which is the basic objective of Community Development Programme has manifested itself in progressive activities in all spheres concerning rural development. Figures below relate to only 546 blocks from which reports have been received.

Agricultural and Animal Husbandry—

Fertilisers distributed ('000 mds.).	4,602
Seeds distributed ('000 mds.).	2,148

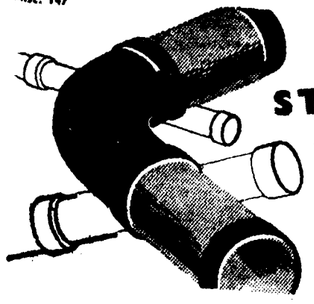
The Prime Minister received a copy of "Gramanalam", the new Tamil Journal, published by the Director of Community Projects. Bapu smiling on the cover seems to have pleased the Prime Minister.



Community Project, Palghat, Malabar District.

Agricultural and Animal Husbandry—cont.	
Area brought under fruits ('000 acres).	56
Area brought under vegetables ('000 acres).	163
Breeding and Artificial Insemination Centres started (Nos.)	1,127
Reclamation—	
Area reclaimed ('000 acres).	406
Irrigation—	
Additional area brought under irrigation ('000 acres).	1,137
Health and Rural Sanitation—	
Soakage pits constructed ('000 Nos.)	192
Health and Rural Sanitation—cont.	
Rural latrines constructed ('000 Nos.)	46
Drains constructed (Lakh yards).	23
Over 1,300 miles in length).	
Wells constructed ('000 Nos.)	17
Wells renovated ('000 Nos.)	82
Education—	
New Schools started ('000 Nos.)	8
Ordinary Schools converted into basic type (No.)	2,335
Social Education—	
A.E. Centres started ('000 Nos.)	20
Adults trained ('000 Nos.)	400
Community Centres started ('000 Nos.)	43
Community entertainments organised ('000 Nos.)	114
Units of people's organisations developed ('000 Nos.)	34
Communication—	
Pucca roads constructed (miles).	2,234
Kacha roads constructed ('00 miles).	19
Arts and Crafts—	
Production-cum-training centres started (No.)	441
Co-operation—	
New co-operative societies started ('000 Nos.)	19
New members enrolled in co-operative societies ('000 Nos.)	384
Project Workers trained—	
Village Level Workers trained.	10,720
Social Education Organisers.	1,058
Block Development Officers.	532
Health Personnel.	366

Misc. 147



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Our Legislature

The Making of Laws

By SRI A. J. SABESAN, M.A., Secretary to the Council

"The making of laws, if it is not necessarily the most important function of Parliament, yet gives Parliament its distinctive role as the Legislature and must command a big share of the attention of those who are concerned to encourage interest in its proceedings, even of such of them as may be more diverted by a debate on food policy or by a clash of personalities at Question Time."

(*One of the Parliamentary Counsel to the Treasury*)

"Legislature" literally means "the power that makeslaws", "a body of persons invested with the power of making laws of a country or State" (Latin *Legislatio*—Proposing of a law). Besides, today an Act of the Legislature touches the life of the citizen at every point from the cradle to the grave so much so that the lives, liberty and fortunes of the nation depend on it. Law-making is therefore an important function of the Legislature, its "Chief function" as Aristotle said of Parliament, and in a system of Government with the consent of the governed, it is of the greatest importance to the ordinary citizen to know how the laws by which he is governed are made.

Early Indian Concept

In ancient India the conception of law was only a body of precepts accepted as suitable for the guidance of human action, not a man-made thing but a Divinely declared one, a law of status derived in the case of the Hindus from the Shastras and in the case of the Muslims from the Quran, besides a body of customary law varying with the locality. It was not as at present an Act passed by the Legislature of the State in the shape of representative assemblies. We have the beginning of legislative power as such in Elizabeth's Charter which authorized the East India Company to make reasonable "laws, constitutions, orders and ordinances," not repugnant to English law for the good government of the Company and its affairs. Similar powers were afforded by subsequent Charters and Acts. Legislation was for the first time treated as a special function of the Government requiring special machinery and special processes in 1853, as will be evident from the following extract from Lord Dalhousie's Diary, October 22, 1854.

"The Legislative Council transacts the business before it on much the same system as is observed in our own Parliament but more approaching to the manner of the House of Lords than of the Commons."

But law-making was in the hands of those who had the responsibility of administration. The Act of 1919 marked the end of this system of law-making by the Executive Council and legislative power was for the first time recognized as residing in the Legislature as distinct from the Government.

The Legislature of a State may now make laws for the whole or any part of the State. Matters on which the Parliament and the Legislatures of the States have exclusive power,and matters on which they have concurrent power, to make laws are enumerated in the Schedule to the Constitution. The Speaker/Chairman decides any question that may be raised as to whether a particular measure is *ultra vires* or can be considered in the State Assembly/Council, and the fact that courts have jurisdiction in the matter does not oust the jurisdiction of the Speaker/Chairman in that regard. But at the same time it has been pointed out that

Children's Rally—Shri Sri Prakasa, Governor, happily receiving a garland from a child.

the Court was a better place to decide the question and it was better to raise such questions in the courts though in some Dominions they are decided by the whole House.

The process of legislation is the business of the Legislature as a whole which consists of the Governor and the two Houses where they exist. Any proposal for legislation is first introduced in the form of a Bill, or in other words, a draft of a legislative proposal. After it passes through the usual stages in both the Houses and is assented to by the Governor and also the President in cases where it is reserved for his consideration by the Governor, it becomes an act and acquires the force of law.

These Bills "do not spring like Athene of old", as R.A. Butler said "fully fashioned from the head of some ministerial Zeus" but each has a history of its own. A necessity for legislation arises by reason of either the provisions in the Constitution or changes in the political situtation or sudden economic changes. The Appropriation Bill is an annual affair as the grants, the appropriation of which is authorized by it are to be voted by the Assembly every year. The Prohibition Act had its origin in the declared policy of the political party then in power. The Tanjore Tenants and Pannaiyal Protection Act was necessitated by the serious situations in the district gravely affecting the maintenance of law and order owing to strained relations between the mirasdars and the tenants and between the mirasdars and the pannaiyals. A Land Reform Bill is now on the anvil. Occasionally Bills have to be passed for specific purposes [e.g.,The Tanjore Chatram Endowments (Utilization) Amendment Bill]. Sometimes it is necessary to repeal enactments or particular provisions which are either spent or which made purely tetual amendments to other enactments and to make formal and consequential amendments to existing enactments.

Process of Legislation

In his address to the Legislature at the commencement of the session, the Governor informs the Legislature of the legislative programme of the Government in board outlines. Where a change in the customary law or economic structure is contemplated, a Committee is usually appointed to go into the question and make recommendations before determining the lines on which legislation is to be undertaken (e.g., The Malabar Tenancy Committee, the Estates Land Act Enquiry Committee). The Land Revenue Reforms Committee Report is now under consideration for a like purpose. A Conference of the parties affected is also held when a major change is contemplated in the existing system. A conference of merchants and representatives of Chambers of Commerce and Associations is proposed to be convened by the Government to discuss the possibility of amending the Sales Tax Law for converting the levy into a single point tax.

The proposals for legislation as finally determined by the Government, are put in the shape of a Bill by the 'Government Draftsman' who in doing so takes care to see that it clearly and accurately expresses the intentions of its authors and does not contradict any existing enactment. Every Bill contains—

(1) a *Short Title* (e.g., The Madras Cultivating Tenants' Protection Act, 1955) given for convenience of citation ;

(2) a *Long Title* (e.g., A Bill for the protection from eviction of cultivating tenants in certain areas in the State of Madras) setting out in general terms the purposes of the Bill ;

(3) the *Preamble* (e.g. Whereas it is necessary to protect cultivating tenants in certain areas in the State of Madras from unjust eviction) setting out the reasons for the proposed legislation and the objects aimed at ; and

(4) an *enacting formula* (e.g. Be it enacted in the Sixth Year of the Republic of India as follows).

Then follow the *Clauses* containing the actual provisions of the legislation contemplated, and the *Schedule* at the end, where necessary, containing matters of detail dependent on the provisions of the Bill. The reasons and intended effects of the Bill are also fully explained in the Statement of Objects and Reasons given at the end. A Bill involving expenditure is accompanied by a financial memorandum giving an estimate of the

The Grand Children's rally on the Corporation Inauguration Day at the Corporation Stadium was a unique event, children in their thousands participating.

expenditure involved in case the Bill is passed. A Bill involving proposals for the delegation of legislative power is further accompanied by a memorandum explaining the scope of such proposals.

Official and Non-official

Bills are divided into official and non-official. The criterion of distinction is the member in charge of the Bill. An official Bill is introduced and piloted through the Houses by a member of the Government and a non-official Bill by a private or non-official member but the procedure is the same in both cases. This division is different from the distinction made between private and public Bills in the United Kingdom. Private Bills in England relate to local or personal interests (to specific matters of limited application and local concern as municipal boundaries, etc.) and Public Bills to matters of public general interest. A private Bill differs from a Public Bill also in the manner of its introduction and other points of procedure and is governed by different rules. Public Bills promoted by Members of Parliament who are not Members of the Government are classed as Private Members' Bills.

Bills which in the opinion of the Speaker contain only provisions dealing with the imposition of taxation, the Consolidated Fund, public money, the raising and repayment of loans by the State and matters incidental thereto are called Money Bills. The decision of the Speaker as to whether a Bill is a Money Bill or not is final and there is endorsed on every Money Bill when it is transmitted to the Council for its recommendations and when it is presented to the Governor for his assent the certificate by the Speaker signed by him that it is a Money Bill. The recommendation of the Governor is necessary for introducing a Bill or moving an amendment making provision for any of the above matters (but not an amendment for the reduction or abolition of any tax) and for the consideration by either House of any Bill involving expenditure from the Consolidated Fund of the State. The previous sanction of the President is required for introducing a Bill in the State Legislature imposing restrictions on trade, commerce and intercourse among States.

Bills may originate either in the Legislative Assembly or in the Legislative Council. But a Money Bill can originate only in the Assembly and shall not be introduced in the Legislative Council. The order in the Agenda of official Bills is determined by the Leader of the House. In the case of non-official Bills the order of Bills to be introduced only is determined by ballot. The order of Bills beyond the stage of introduction is determined by the stage they have reached in the House. Motions relating to Bills are arranged in such order as to give priority to Bills most advanced. As among Bills falling under the same class, precedence is determined according to the priority of their introduction in the Assembly.

Introduction of the Bill

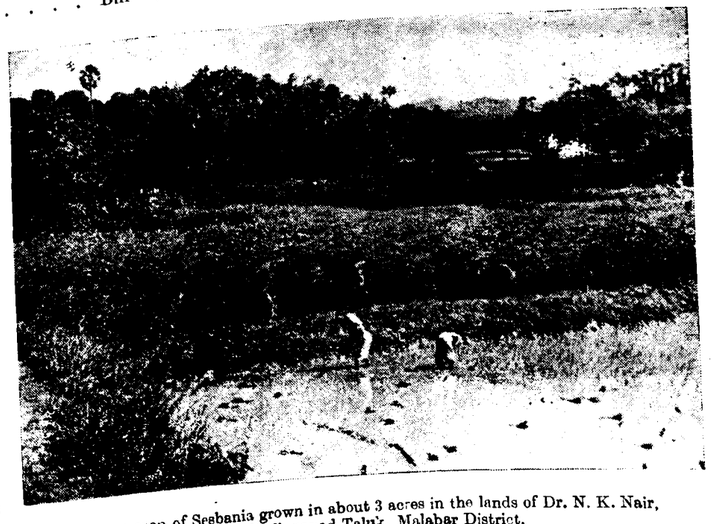
A Bill has to pass through many "main-line stations" in both the Houses before it reaches its journey's end. It is therefore an arduous and tedious task to get a Bill passed into an Act and calls for much ability and judgment on the part of the pilot in case it is a major Bill of a controversial nature. The first is the introduction stage. On the day when, after due notice being given to the Secretary, the Bill comes up before the House, the Member in charge says :

"I move for leave to introduce . . . . Bill".

If the motion is opposed, the Speaker after permitting, if he thinks fit, a brief explanatory statement from the member who moves and from the member who opposes the motion puts the question "that leave be granted for the introduction of . . . Bill." The Government at times opposed the introduction of non-official Bills at this stage previously, e.g., the Annamalai University (Amendment) Bill and the Andhra University (Amendment) Bill in the Assembly on 5th February 1947 and the Madras City Tenants' Protection (Amendment) Bill on 23rd April 1947. But a convention has now been set up as in the Parliament that at this stage there should not be any formal opposition to the introduction of the Bill but that the Government would not thereby be committed to the principles of the Bill. If the motion is agreed to, the member in charge introduces the Bill saying: "I introduce it" and it is then published in the Gazette with the Statement of Objects and Reasons.

Publications

The Governor is given power under the rules to order the publication of a Bill although no motion has been made to introduce the Bill and in such a case it is not necessary to move for leave to introduce the Bill or to publish it again if it is afterwards introduced. The Government, usually resort to this



A pure crop of Sesbania grown in about 3 acres in the lands of Dr. N. K. Nair, Paral, Walluvanad Taluk, Malabar District.

alternative course and have their Bills with the Statement of Objects and Reasons published in the Gazette before introduction and the Minister concerned straightaway introduces it in the House on the appointed day. This has a decided advantage over the other in that the Government save time and also avoid a first reading and a vote of the House at that reading.

In the House of Commons introduction on motion has almost fallen into disuse. At present on the appointed day when the item is reached, the Speaker calls upon the member, he rises and bows, and the Clerk reads out the Short Title of the Bill from a " dummy Bill " which has been laid on the Table and an order is made in the Clerk's Book for the Bill to be printed. The second reading is then fixed for a day named by the member and announced to the House.

On the publication of the Bill in the Gazette either way, the public and the members come to know its provisions and their implications. The Press either supports it or takes the view " that it must be fought to the last gasp in the last ditch." The public hold meetings and send memoranda to the Government in support of or against the Bill, as the case may be, according to its effect on the interests of the parties involved, as was done when the Government came forward with legislation to abolish the Zamindaris and to provincialise the administration of the Hindu Religious and Charitable Endowments. To take a recent case, the Madras General Sales Tax (Third Amendment) Bill, 1955, has been published and the South India Chamber of Commerce have submitted a Memorandum to the Government not to be in a hurry to pass it.

Consideration of the Bill

The next stage begins usually with a motion by a member in charge of the Bill "that the Bill be taken into consideration". This is not objected to in the case of a simple or minor Bill. But important or complex Bills of a far reaching effect, some of which, as for instance, the Madras Estates Abolition and Conversion into Ryotwari Bill, require investigation into the facts of the case and examination of witnesses, are referred for consideration and decision to a Select Committee, a body of persons selected from out of the Members of the House to discharge this special function. Bills are on being read a second time referred automatically, in the House of Commons, to a Standing Committee or on motion made to a Committee of the whole House or Select Committee. In our Legislature a motion for referring the Bill to a Select Committee is made by the member in charge of the Bill himself or by any other member by way of amendment to the motion by the member in charge. Similarly where it is necessary to invite opinion, a motion for circulating the Bill for public opinion is moved by the member in charge of the Bill himself or by any other member by way of amendment to the motion made by the member in charge [e.g., the Madras Hindu Bigamous Marriages (Pohibition and Divorce) Bill and the Madras Hereditary Village Offices (Extension to Pudukkottai) Bill].

Second Reading

The motion moved at this stage in the House of Commons is that " the Bill be now read a second time." The usual amendments for defeating the Bill are either an amendment to leave out the word " now " and to add at the end the words " upon this day six (three) months " or a reasoned amendment to leave out from the word ' that ' and add at the end the words expressing disapproval (setting out the grounds on which the Bill should be refused a second reading or laying down some principles inconsistent with its purpose). A defeat in the second reading is equivalent to a vote of censure on the Government.

On a day on which any of these motions is made, the member in charge moves the motion standing in his name explaining the provisions of the Bill and the necessity or urgency for the legislation. A debate then follows and the Bill is discussed " not in detail ' but ' in the round." The principles of the Bill and its general provisions are " stated, attacked and vindicated " so far as they are relevant to the Bill but the details of the Bill are not discussed further than is necessary to explain its principles. Questions of legislative competence also crop up at this stage. The time taken for discussion depends on the nature of the Bill. A non-official Member whose legislative proposal is not acceptable to the Government usually fails to win the requisite support at this stage, for instance, The Declaration of May Day Holiday Bill, the Madras Shops and Establishments (Amendment) Bill and the Distribution of Waste Land Bill were refused a second reading in the Assembly. The Government also at times meet with opposition for taking a Bill into consideration straightaway and in such cases they accept an amendment for referring the Bill to a Select Committee as a compromise to disarm opposition. They have also withdrawn the Bill from the House when they found the House ill-disposed to it. The Hindu Non-Conforming Marriages (Registration) Bill passed by the Council was not proceeded with further in the Legislative Assembly. The Madras Hereditary Village Offices (Extension to Pudukkottai) Bill was circulated for opinion but was withdrawn as there was some difference of opinion both in the House and also outside in respect of this matter.

Where a motion that the Bill be taken into consideration is carried, no other motion in respect of the Bill is entertained and the Bill enters upon its next stage, viz., consideration clause by clause. In the case of a Bill circulated for opinion on a motion made and carried in the House, the opinions are called for and after their receipt, the Member in charge moves " that the Bill be referred to a Select Committee " unless the Speaker/Chairman permits him by suspending the rule to move " that the Bill be taken into consideration."

Select Committee

In case a motion is made that the Bill be referred to a Select Committee or an amendment to that effect is carried, a Select Committee is appointed by the House consisting of the Member of the Government in charge of the Department to which the Bill relates and the mover of the Bill and other members proposed by the mover (not exceeding 25 members in all in the Assembly/15 members in the Council, and up to a maximum of 40 members in the Assembly/25 members in the Council, with the leave of the House excluding Ministers and the Advocate-General appointed to it under Article 177 of the Constitution) after ascertaining their willingness to serve on the Committee before-hand and so constituted as to reflect as far as possible the strength of the parties in the House. Bills are not

referred to a Committee of the whole House as in the United Kingdom. A motion in the old Council to refer the Co-operative Societies Bill to a Committee of the whole House was ruled out of order and admitted in a different form, viz., as an amendment to the original motion, so as to include all non-official members of the Council but negatived. This is not also possible now as the rules have prescribed a maximum strength for Select Committees even with the leave of the House which is less than the strength of the whole House.

The Chairman is nominated by the Speaker/Chairman and in his absence, one of the members of the Committee elected by the Committee presides. The Select Committee follows the same procedure as the Assembly/Council except that there is no quorum, previous notice of an amendment is not given and a motion or amendment is not seconded. The rules as to the number of speeches are not also strictly observed. Free individual opinions are brought to bear on the subject irrespective of party principles. Strangers are not permitted to be present at the meeting but a Minister who is not a member of the Committee may also address it with the permission of the Chairman.

The Select Committee holds its sittings outside the place of session, where necessary, to have first-hand knowledge of the matter under legislation, and hears expert evidence and the representatives of the special interests affected by the measure before it [e.g., the Madras Sugar Factories Control Bill, the Madras Plantations (Agricultural Income-Tax) Bill]. In some cases they merely invite memoranda from interested parties before examining the provisions of the Bill.

The Select Committee scrutinises the text of the Bill and its implications clause by clause " through a mental microscope " with a view to making the necessary amendments. It is an equally long and laborious task " to steer a big controversial Bill through the always uncertain and turbulent waters of the Committee." The Government occasionally accept amendments or offer compromise solutions or give verbal assurances for consideration when the Bill comes up next before the House. Sometimes they withdraw the Bill. The Select Committee on the Madras Irrigation (Levy of Betterment Contribution) Bill resolved by a majority to report to the Assembly that the Bill as it then stood be not further proceeded with and the Government also did not press for the further progress of the Bill. At other times, a strong opposition to the Bill results in several changes made in the Bill. The amendments made by the Select Committee are however to be relevant to the subject-matter of the Bill. It cannot amend the Bill in a way destructive of the principles affirmed in the second reading, or introduce any provision which is not within the scope of the Bill. A special report is made about provisions put in by the Select Committee which are not within the title of the Bill. In the case of the Madras Motor Vehicles (Taxation of passengers and Goods) Bill, 1952, questions were raised about the competence of the Select Committee to make some of the amendments made in the Bill on the ground that the Bill as introduced by it contained no provision for the levy of a tax on motor vehicles carrying goods. The Bill was therefore re-introduced in the Assembly in the form in which it had emerged from the Select Committee. In the House of Commons however the powers of a Select Committee may be extended by special instructions from the House.

The Select Committee to which a Bill has been referred to by the Legislature at times recommends, in accordance with parliamentary practice, that the Bill may be dropped or withdrawn, for example, owing to a change in the conditions necessitating the Bill (The Madras Land Requisition and Acquisition Bill, 1949) and the policy of the Government (The Madras Construction of Buildings on Wet Lands) (Prohibition Bill) or with reference to the trend of public evidence taken by the Select Committee (The Hindu Mutts Bill, 1935) or on the ground of its prejudicial effect on certain classes of society which might not have been considered at the time of the introduction of the Bill [The Madras

The tenth anniversary of the Food and Argiculture Organization (U.N.O.) was inaugurated by Sri A. B. Shetty, Minister for Health, at Rajaji Hall.

Co-operative Land Mortgage Banks (Amendment) Bill, the Madras Advertisements Tax Bill)]. It is of course open to the House either to change their opinion and agree with the Select Committee or refer the Bill to another Select Committee.

On the conclusion of the consideration of the provisions of the Bill, the Select Committee makes a report thereon to the House with the minutes of dissent, if any, appended to the report, stating therein whether or not in their judgment the Bill has been so altered as to require republication.

The rules do not permit either House to move for referring a Bill received from the other House to a Select Committee if it had already been referred to a Select Committee of the originating House, and the other House has therefore no opportunity of influencing the decisions at the Committee stage. Important measures are therefore referred to a Joint Select Committee as in the United Kingdom composed of members of both the Assembly and the Council in the proportion of 2 : 1 and subject to a maximum of 45 members in all. In connection with the Additional Ryotwari Assessment Bill, it was held to be not in order to refer a Money Bill to a Joint Select Committee of the Assembly and Council. A member desirous of referring a Bill to a Joint Select Committee moves in the Assembly/Council :

> "That under Rule . . . . of the Madras Assembly/Council Rules, the concurrence of the Legislative Council/Assembly be obtained in setting up a Joint Select Committee of both the Houses consisting of . . . members to consider the Bill (. . . members from the Assembly/Council and . . . members from the Council/Assembly) and the following members of this House be selected to serve on such Joint Select Committee."

As soon as it is passed, a message is sent to the Council/Assembly informing it accordingly and desiring its concurrence. At this stage also, the general principles of the Bill are discussed in the other House but only to the extent necessary for the motion before the House and a motion is passed, viz :

> "That this House concurs with the Assembly/Council in setting up a Joint Select Committee of both the Houses consisting of . . . members (. . . mombers of the Assembly/Council and . . . . members of the Council/Assembly) to consider the . . . . . Bill and that the following members of this House be selected to serve on such a Joint Select Committee."

(In the case of a non-official Bills, this and other motions regarding Bills have to be moved by a non-official member of the House where the motion is made and not by the same Minister as in the case of Government Bills.)

The time and place of the first meeting of the Committee is fixed by the Presiding Officer of the House in which the Bill originated. The Joint Select Committee elects its own Chairman and if the votes on a question are equal, the question is deemed to have been decided in the negative. In other respects, the Joint Select Committee follows the same procedure as the Select Committee of the House.

The Report of the Select Committee or Joint Select Committee, as the case may be, is presented to the Assembly/Council by the Member in charge of the Bill. This differs from the practice of the House of Commons where the report is presented by the Chairman of the Committee. After presenting the report, the member in charge moves in case the Select Committee had made any changes in the Bill that the Bill as amended by the Select Committee be taken into consideration and in cases where it has not made any changes that the Bill as introduced be taken into consideration. It is also open to the member in charge of the Bill to move that the Bill as reported by the Select Committee be recommitted or be re-circulated for the purpose of obtaining further opinion thereon but this is not usually done. When the motion that the Bill be taken into consideration has been carried, the House proceeds to the consideration of the Bill as reported by the Committee clause by clause.

Amendments

The procedure that follows is the same whether after introduction of a Bill, a motion has been agreed to by the Assembly/Council that the Bill be taken into consideration of the Bill is referred to a Select Committee and a motion is agreed to upon report that the Bill as reported by the Select Committee be taken into consideration. At this stage members propose amendments to the Bill, some of which are intended to rectify the flaws of the draftsman. This also gives an opportunity for the Government to make alterations in redemption of promises given in the Committee stage. The Bill is taken into consideration clause by clause and the amendments are, unless the Speaker/Chairman otherwise directs, considered in the order of the clauses of the Bill to which they respectively relate. The amendments moved at this stage are however subject to the restrictions summarised below.

They should be within the scope of the Bill as judged from the preamble and the title of a Bill read with the clauses and the schedule, and relate to the clauses proposed to be amended. An amendment to omit the word "Hindu" in the Hindu Religious and Charitable Endowments Bill was ruled out as extending the scope of the Bill. An amendment to define "University centre" in a clause defining "University College" is out of order. Amendments for omission of the whole clause or purporting to destroy the whole scheme of a Bill are out of order. The Chair is also given discretion to rule out of order an amendment which it considers frivolous. The recommendation of the Governor is necessary in regard to amendments to increase the charge on Government.

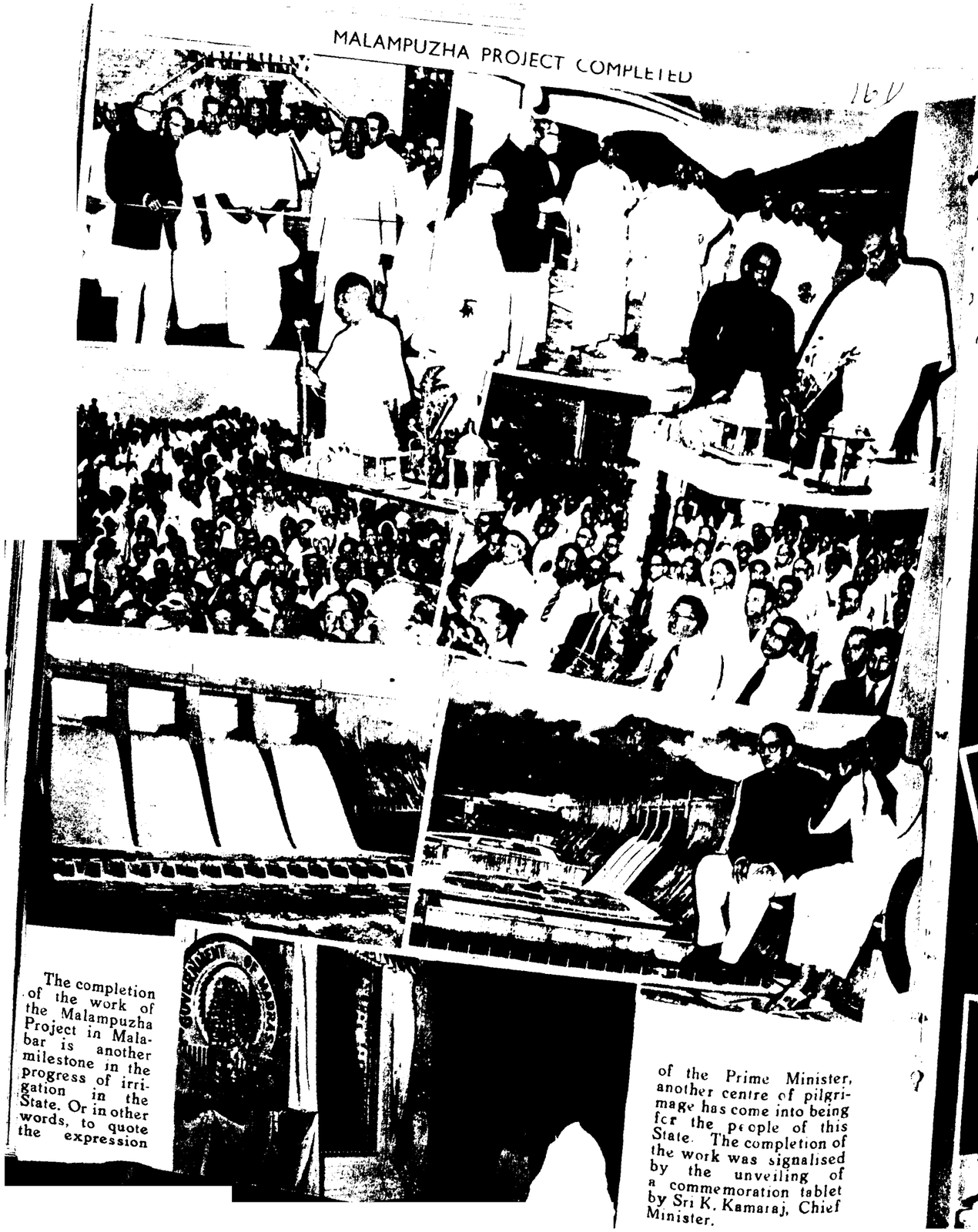
Third Reading

At the conclusion of the consideration of the Bill clause by clause, the member in charge of the Bill moves "that the Bill be passed." This gives an opportunity to the House "to have one more look at the Bill as amended before its gives its final approval" and for the opposition to make their last attack on the disputed parts of the Bill. Only formal or consequential amendments to the amendments already passed and amendments which could not have been made at the consideration stage are moved. House can discuss "only what is in the Bill, not what ought to be and is not." The question, for instance, whether electricity should be taxed at all at the first stage of its development in the State is more appropriate in the second reading stage of the Electricity Supply Bill and not at the third reading stage. Questions of policy also cannot be discussed at this stage.

ER'S VISIT TO THE STATE

ain for a few days. The people in their lakhs came out to ove on them—by smiles and by soulful words. It is indeed in India that all this love and all this adoration makes our e deepest aspirations and hopes of the people.

MALAMPUZHA PROJECT COMPLETED



The completion of the work of the Malampuzha Project in Malabar is another milestone in the progress of irrigation in the State. Or in other words, to quote the expression of the Prime Minister, another centre of pilgrimage has come into being for the people of this State. The completion of the work was signalised by the unveiling of a commemoration tablet by Sri K. Kamaraj, Chief Minister.

HANDICRAFTS WEEK IN THE CITY

The revival of handicrafts is the revival of the very soul of Indian villages. The artisans and craftsmen of India had seen great days. Then for ages they remained dormant. And now they are awakening. The old glories have not come back. But the process has started.

Problems of Co-operative Credit: Future Policy

By SRI A. B. SHETTY, Minister for Health

This is a Welcome opportunity for me to meet co-operators and representatives of co-operatives on the occasion of this function. It is pleasing to see a handsome building put up as a guest house for this bank. A bank like yours having jurisdiction throughout the district has done well in providing suitable facilities for conveniently accommodating its constituents and visitors. The President and directors of the bank deserve to be congratulated on the erection of this guest house. Your central bank has made remarkable progress during the last few years. This bank is one of the four leading and progressive central banks in our State. The steady and systematic development of this bank is in no small measure due to the sustained efforts of its successive directors and officials and in particular to the untiring efforts of Sri T. S. Muthukumaraswami Pillai, who has been a director of the bank for over 21 years and its President for the last 12 years. We have in our State 16 co-operative central banks, which as you all know, form the pivot of the financing structure of the co-operative movement. It is the pride of this State that the co-operative financing banks here have established themselves so fairly well that, today, they are the envy of many other States in India. Nevertheless, there are a few features in their working which demand our close and immediate attention.

First, though the co-operative credit institutions have been in existence for more than 50 years now and have helped in lowering the lending rate in the country-side and afforded the ryots a suitable agency for providing seasonal finance on reasonable terms they have still not been able to touch the fringe of the problem of agricultural credit. As you are aware, the All-India Rural Credit Survey Committee has observed that co-operatives have supplied only 3·1 per cent of the total borrowings of the agriculturists. They have pointed out that the most significant of the various causes of the failure of co-operative credit are (i) the uneconomic size of the village credit societies, (ii) the impropriety and unsuitability of the principle of unlimited liability to the conditions obtaining in a fast-changing rural economy in the country, (iii) the lack of co-ordination between financing banks and primary credit societies, (iv) lack of education and inadequacy of training and ineffectiveness of co-operative marketing.

There are at present 10,295 agricultural credit societies in this State with 9·81 lakhs members on their rolls. These societies cover 49·37 per cent of the villages and serve 21·04 per cent of the rural population in terms of families. While the State and the central co-operative banks and the central and primary land mortgage banks in the State are fairly well-established, the condition of the primary agricultural credit societies in villages requires toning up and improvement so that they can play a vital role in providing agricultural finance in the context of the Rural India of the future. At present, the credit supplied to agriculturists by the co-operatives in this State is only about Rs. 5 crores under short term, medium term and long term. It has been estimated that the total credit requirements of the cultivators in the State are about Rs. 70 crores. With reference to this estimate, the credit now provided by the co-operatives is only 7·1 per cent.

Integrated Scheme of Rural Credit

The All-India Rural Credit Survey Committee has recommended an integrated scheme of rural credit based on the three fundamental principles of (*a*) State partnership at different levels, (*b*) full co-ordination between credit and other economic activities especially marketing and processing

Sri Shanmugha Rajeswara Sethupathi, Minister for Public Works, coming up after inspection of Masonry Dam Work in blocks 4, 5 and 6 of the Sathanur Dam.

d (c) administration through adeuately trained and efficient personnel sponsive to the needs of the rural opulation. In pursuance of these commendations, a scheme for the evelopment of integrated rural credit nd marketing has been formulated by he Registrar of Co-operative Societies or being implemented during the eriod of the Second Five-Year Plan.

Second Five-Year Plan

The salient features of this scheme s finalised are :

(i) the organisation of 375 large-sized primary credit societies and 25 rural co-operative banks on a phased programme during the plan period ;

(ii) the expansion of the activities of the existing village credit societies ;

(iii) the organisation of 30 primary marketing societies and 25 primary land mortgage banks ;

(iv) the reorganisation of the District co-operative wholesale stores into District supply and marketing Societies ;

(v) the large-sized societies to be formed and the existing rural credit societies, will issue loans on the security of anticipated crops and also loans to ryots in economically backward areas ;

(vi) these societies will put up godowns with the help of Government loan and subsidy ;

(vii) the marketing societies will also put up godown and establish processing units wherever necessary with the help of Government loan and subsidy.

As a result of the working of the scheme, it is expected that the co-operatives will supply credit to ryots to the extent of Rs. 15 crores or at least 20 per cent of the total credit requirements of the ryots during the last year of the plan period, viz., rupees 10 crores under short term, rupees 4 crores under medium term and rupees one crore under long term. At least 75 per cent of the villages would have been brought within the co-operative fold and 50 per cent of the rural population in terms of families would be served. With a view to providing substantial-owned capital to the societies, State participation in the share capital of these organizations will be provided as recommended by the All-India Rural Credit Survey Committee. With a view to make available the trained personnel that will be required by the co-operatives, schemes have been drawn up to expand the training facility in the State by opening more training institutions. Already, a training institute has been registered at Kozhikode to serve the districts of Malabar and South Kanara.

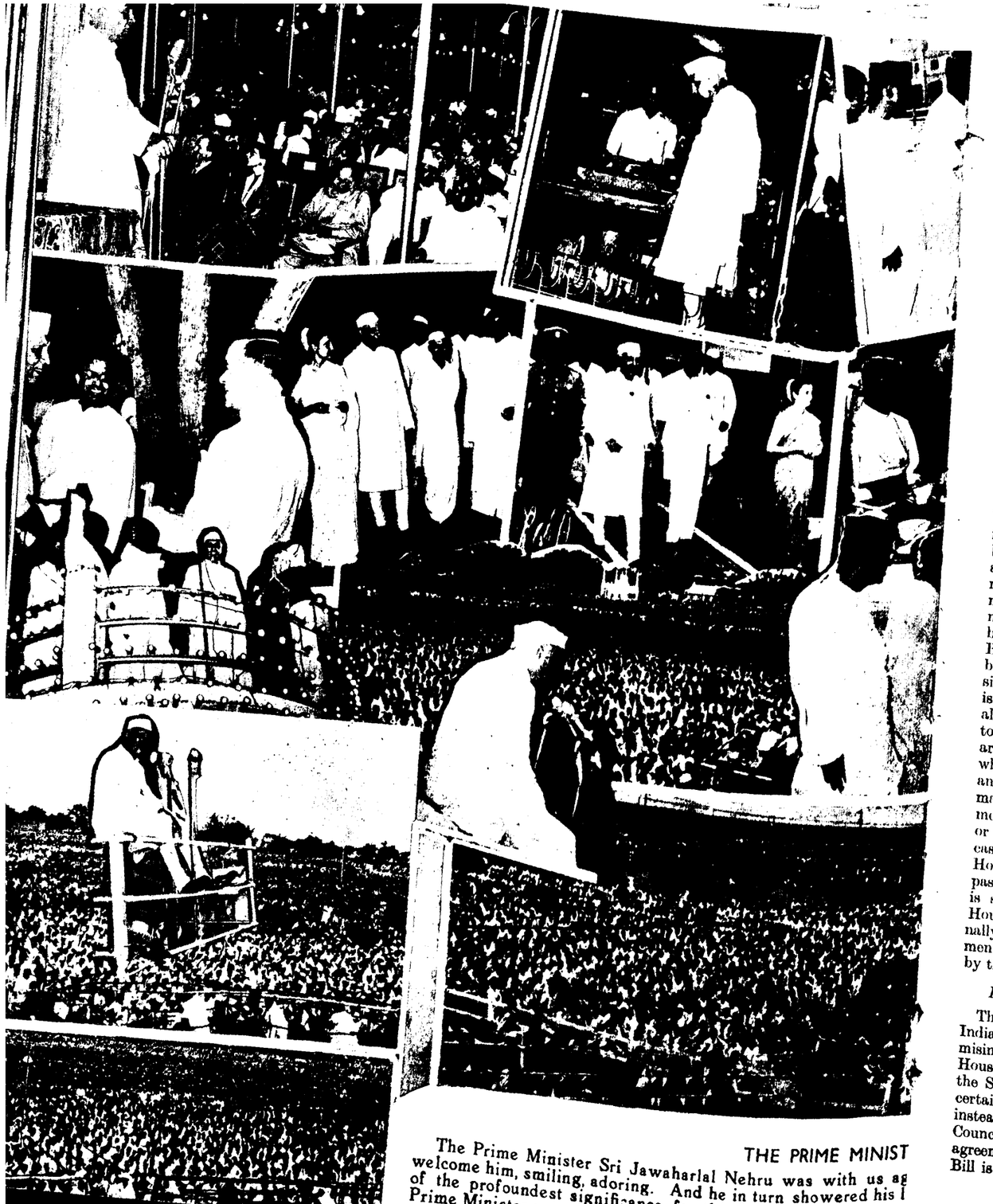
The total expenditure involved in the schemes of integrated rural credit and marketing is about Rs. 3·03 crores. These schemes and a variety of other schemes calculated to promote the activities of the co-operatives and to re-vitalize the co-operative movement, drawn up under the Second Five-Year Plan, involve considerable outlay in terms of finance and the central co-operative banks will have to find a substantial part of the funds required for implementing the schemes from their own resources as well as from the Reserve Bank of India. In the implementation of the schemes, the central banks will be called upon to take up additional responsibilities and I hope that every central bank in the State will rise equal to the task and carry out the schemes successfully. I would also request the central banks to make all preliminary preparations in this regard, from now onwards, so that, when the schemes are launched, they can shoulder the responsibilities entrusted to them, without any difficulty.

Medium Term Credit

Secondly, for a long time past, the co-operatives did not pay sufficient attention to the provision of medium-term agricultural credit. This was chiefly owing to the paucity of medium-term resources with the central co-operative banks and also to the absence of a suitable machinery to undertake the disbursement of such loans at the primary level. The existing rural credit societies on unlimited liability basis, with their characteristic weaknesses and deficiencies could not be expected to play the desired role in providing medium-term agricultural finance promptly and adequately. It was mainly for this reason that the Registrar mooted the idea of a separate agency called rural co-operative bank, and the objective is that these banks should function not only as the distributors of medium-term agricultural finance on the security of immovable properties but also serve as an effective instrument for mobilizing rural savings and canalizing them for productive agricultural purposes. Incidentally, they will help to increase the loan business of the central co-operative banks. As you know, 25 rural banks have already been organised in the State as an experimental measure of which, 19 banks have been started in the year. The Thoraiyur rural bank in your district is one among them.

Thanks to the generous help rendered by the Reserve Bank of India in providing medium-term credit for agricultural purposes at the concessional rate of interest, the Madras State Co-operative Bank is now in a position to lend Rs. 80 lakhs as medium-term advances for financing agricultural credit societies and rural co-operative banks. Out of these Rs. 80 lakhs, Rs. 40 lakhs represent the medium-term loan sanctioned by the Reserve Bank of India and the remaining Rs. 40 lakhs will be issued out of the State co-operative bank's own resources. Of course, these loans are now available only of a period of three years, while the ryots need five-year loans also for some of their agricultural operations. I believe that the Reserve Bank of India will extend, in due course, its medium-term credit for a period of five years so that the agriculturists can reap the full benefit of its concessional finance. Out of Rs. 80 lakhs available with the State co-operative bank, a sum of about Rs. 35 lakhs has been drawn and utilised by the central banks till the end of August. I hope that the central banks will fully utilize the agency of the rural co-operative banks for disbursing medium-term loans and avail themselves of the medium-term resources available with the State co-operative bank, as quickly as possible.

In this context, I would refer to a representation made by your central bank and some of the other central banks in the State, regarding the re-fixation of the limits for short-term and medium-term loans for the purpose of classification of central banks in annual audit. According to the standards now in vogue, a central bank should have issued 65 per cent of the total loans advanced by it during the year, for short-term purposes, if it is to be eligible for being placed in class A But, in view of the difficulties experienced in maintaining this ratio, a a result of the increased demand fo medium-term credit for agricultura purposes, the Registrar has take



THE PRIME MINIST

The Prime Minister Sri Jawaharlal Nehru was with us ag
welcome him, smiling, adoring. And he in turn showered his l
of the profoundest significance for the future of democracy
Prime Minister more humble, and more and more a symbol of t

The speeches at the third reading are "mostly expressive of the congratulations of members to the Minister who had steered the Bill safely through the storms of second reading and Committee." But at times the opposition is not convinced with the changes made in the Bill and express their dis-approval by walking out of the House as during the third reading of the Madras Land Revenue (Levy of Additional Surcharge) Bill, 1955. When the motion is agreed to and the Bill is passed by the Assembly/Council after its eventful journey through the House, a copy thereof is signed by the Speaker/Chairman and transmitted to the Council/Assembly for its recommendations in the case of Money Bills endorsed with a certificate from the Speaker that the Bill is a Money Bill, and for its concurrence in other cases.

The Bill passes through the whole procedure once again in the other House and a message is sent to the originating House as to whether the Bill has been agreed to and with or without amendments. In case the Bill is returned with amendments, the amendments are taken into consideration on a motion "that the amendments made by the Council/Assembly to . . . . Bill, as passed by the Assembly/Council be taken into consideration." discussion is confined to the amendments and is not allowed to traverse the ground already covered and a message is sent to the other House as to decision arrived at. In the case of Money Bills which originates only in the Assembly and in which case, the Council can only make recommendations, the amendments recommended are either accepted or rejected by the Assembly. In the case of other Bills, if the originating House disagrees with the amendments passed by the other House, a message is sent to that effect and the other House either agrees to the Bill as orginally passed or insists upon the amendments passed by it and not agreed to by the originating House.

Restricted Powers of the Council

The provisions in the Government of India Act for a joint sitting for compromising differences between the two Houses has been omitted in the case of the States under the Constitution and certain restrictions have been placed instead on the powers of the Legislative Council. In the case of continued disagreement between the two Houses, a Bill is deemed to have been passed by the Houses of the Legislature of the State in the form in which it was passed by the Legislative Assembly for the second time with such amendments, if any, as have been made or suggested by the Legislative Council and agreed to by the Legislative Assembly. If Money Bill is not returned by the Council with its recommendations within 14 days from the date of its receipt of the Bill from the Assembly, it is deemed to have been passed by both the Houses in the Form in which it was passed by the Assembly.

When the Bill has been passed by both Houses of the Legislature, it is presented to the Governor for his assent and the Governor declares either that he assents to the Bill or that he withholds assent thereform or that he reserves the Bill for the consideration of the President. The Constitution also provides for the return of the Bills other than Money Bills by the Governor or President for reconsideration and they are considered by the House of Houses according to the usual procedure or in such manner as the Speaker/Chairman may consider it convenient. When the assent has been finally given, the Bill is at its journey's end and becomes an Act. There is no ceremony observed as in the United Kingdom when the Royal Assent is given and the Act is merely published in the Gazette and the fact of the assent and the publication is communicated to the Members of the Legislature.

Powers of the Governor

The power given to the Governor under the Government of India Act to issue ordinances in emergencies while the Legislature was not in session has been continued in the Constitution. When an ordinance is promulgated by the Governor, printed copies of such Ordinane are made available to the members of the Assembly and the Council. The Ordinance is in force only for six weeks from the reassembling of the Legislature or from the later date in case the Houses are summoned to reassemble on different dates, unless within that period, a resolution disapproving the Ordinance is passed by the Assembly and agreed to by the Council, in which case, the Ordinance ceases to operate from the date on which the resolution was agreed to by the Council. The Government however take steps on the re-assembling of the Legislature to introduce a Bill rerpoducing the provisions of the Ordinance which after passing through the usual stages in both the Houses and assented to by the appropriate authority becomes a regular Act of the State Legislature and replaces the Ordinance.

Law is but an instrument for good Government and human progress and is liable to repeal or revision according to changing conditions in the State, political, social or economic. But in so far as it is closely connected with the freedom and well-being of the people governed by it, it may be said that in shapping the course of legislation, Members of the Legislature, are as Snell says, "engaged in as solemn an act as the soldier who with all his strength is taking part in a battle for the safety of the nation-in both cases failure means disaster," and to this extent their reputation rests on the quality of their achievements in the legislative field.

The making of laws

Our system of Government while possessing many special characteristics is more or less based on Biritish principles and much has been done to assimilate the practice of our Legislature to the best traditions of the British Parliament so far as they conformed to our needs and conditions and to set up wholesome precedents and conventions in matters lying outside the Constitution and the rules on the maintenance of which unimpaired depends the successful working of representative institutions.

"No political machinery acts by itself. As it is made by men, so it has to be worked by men." (Mill) Much therefore depends upon the good sense and high morality of the chosen representatives of the people who constitute the Mirror of the Nation and to whose judgment and loyalty is entrusted the honour of the Legislature and the welfare of the State.

Satyam Eva Jayate.

Some Facts

Bamboo forms over 60 per cent of the indigenous raw materials used for paper manufacture in the country, and the annual consumption of bamboos in the industry is about 3 lakh tons.

Under the Central Social Welfare Boards' training programme for Gram Sevikas, a batch of 1,000 Sevikas is at present receiving training at centres run by the Kasturba Memorial Trust.

up with the Reserve Bank of India, the question of suitably revising the limit for short-term and medium-term loans for the purpose of classification in Audit, so as to enable the central banks to issue more medium-term loans.

Keeping Down Overdues

Thirdly, while we are soon to launch on a programme of expansion of agricultural credit as I have outlined under the Second Five-Year Plan, I wish to stress the need for adequate arrangements for supervision and recovery of the amounts lent in time, for, in recent years, the overdues from societies in a few central banks have been slightly in the increase. The State average of the percentage of overdues which was 10·94 in 1953–54 has gone up slightly to 11·2 in 1954–55. It is pleasing to find that your central bank had no overdue either under principal or interest on 30th June 1955 and I take this opportunity for congratulating the President Sri T. S. Muthukumaraswami Pillai and other directors and the officials of the bank whose unstinted devotion and incessant efforts have been responsible for this splendid achievement. I find that, besides your bank, the Tirunelveli, Kumbakonam and Nilgiris central banks were also able to realize the entire arrears both under principal and under interest. I am aware, that various factors such as adverse seasonal conditions, unfavourable agricultural prices, etc., have contributed to the overdues in a few central banks; yet, you will agree with me that no co-operator can afford to be complacent with this position of overdues. For, the presence of overdues, irrespective of its size or volume is not a healthy feature in the co-operative credit machinery. It needs no emphasis that if the co-operative central banks are to command the strength required for shouldering the heavy responsibilities they will be required to bear in the implementation of the various co-operative schemes proposed to be undertaken in the Second Five-Year Plan, they will have to guard against the rise in overdues. After all, the percentage of overdues is the main yard-stick with which the public, not to speak of the investors and creditors, measure the soundness and the progress of co-operative credit institutions. It, therefore, behoves all co-operators, particularly the directors and paid officials of the co-operative financing banks, to take vigorous steps not only for keeping down the overdues at as low a level as possible, but also to see that the loans issued to the members of societies, do not fall into, arrears on any account.

Reduction of Rates of Interest

Another matter engaging the attention of co-operators at the present moment is the question of reducing the rate of interest charged to the ultimate borrowers. The societies charge interest at 6¼ per cent to the ultimate borrowers. Although, this is the lowest of the rates at which the agriculturists get the credit needed by them in the whole of the Indian Union, there is a feeling that it should be reduced further. I am aware that the State co-operative bank and central co-operative banks are already examining the question and I am sure they will reach a decision soon. In bringing about any change in the rate of interest, care should also be taken to ensure that the primary societies have sufficient margin. For, the primary agricultural credit societies constitute the base of the credit structure and the societies should have sufficient margine in their business so that they may develop into healthy economic units.

Committee on Co-operation

These are some of the major problems facing the Co-operative movement today. As you are all aware, Government have constituted an eight-man committee to enquire into the working of the co-operative movement with our distinguished President of the function Sri T. M. Narayanaswami Pillai as its Chairman and to make recommendations regarding its future development. The Chairman Sri T. M. Narayanaswami Pillai is an eminent co-operator hailing from your district. I understand that the committee recently toured your district and recorded the views and suggestions of some of the prominent co-operators of this place on the present working of the co-operative movement. I am sure that the committee will give due regard to the valuable suggestions put forth by you when it finalises its conclusions and makes its recommendations to Government.

Need for Public-spirited Workers

The co-operative movement has been acknowledged to be the only effective medium of promoting the socio-economic welfare of the people. It has a great future in this country, particularly in the context of building up a socialist pattern of society. If the co-operative movement should fulfil its lofty objectives and play its legitimate role, there should be no dearth of enthusiastic, well-informed honest and public-spirited men to man its affairs. I have no doubt that this district which has produced such great co-operators like Sri Desa Bhushana R. K. Parasanna Venkatesa Rao, Sir T. Desikachari, Sri T. M. Narayanaswami Pillai, late Sri L. N. Paramasivam Pillai, Sri T. S. Muthukumaraswami Pillai, etc., will produce many more co-operators of the right type so that the co-operative movement in this district may march from strength to strength and attain continued success and prosperity. I once again thank the authorities of the Tiruchirappalli central co-operative bank for having invited me to open the guest house. I have great pleasure in declaring this guest house open.

[*Speech delivered at the opening of the Tiruchirappalli District Co-operative Central Bank Guest House on 25th September* 1955.]

Government of India Publications

(1) *Building New India* (Tamil and Kannada) and (2) *Industrial Policy and Planning* (Kannada)– Published by the Publications Division, Ministry of Information and Broadcasting, Delhi– Price annas eight (each).

These useful, attractively got up publications of the Government of India in regional languages deal mostly with the progress attained under the Five-Year Plan in the spheres of industry, irrigation, power, agriculture, transport, research, community projects, and social services. Well illustrated and written in simple style, these pamphlets would be of considerable use in acquainting the people of the progress of activities sponsored by their own representatives in power. The pamphlet on industrial policy and planning deals primarily with the industrial policy pursued and programmes carried out by the Government.

Handloom Industry

By Sri A. PALANIAPPA MUDALIAR, Registrar of Co-operative Societies

The importance of the Handloom industry in the national economy and the need for fostering it can hardly be over-emphasised. This industry has its roots in history. Millions of our countrymen plied the industry with varying degrees of excellence and the finest fabrics produced by the industry were the pride of Courts of several countries. The simple loom which was none too costly and its accessories which plied in a weaver's home provided work for a family of four or five persons. Next to agriculture, this industry sustains the greatest number of people and it has been estimated that roughly about 14 million people are associated with it. Moreover, being a cottage industry, it has some military and tactical advantages which large industries like weaving mills do not possess.

Weavers

The independent weaver purchases yarn, produces cloth on his loom and markets it at a price which the season or his salesmanship can command. He has no facilities for improving the technique of production and in the context of the present conditions, it is difficult for him to keep his independent existence, earn a substantial income and improve his social and economic condition. A large number of weavers work under master weavers. The master weaver finances production, sets the patterns and designs, and arranges for marketing. The weaver working under him is paid wages at a rate fixed by the master weaver intent on making the best of the bargain. A large number of weavers also work in factories, as in Malabar. In a factory, the workers work in one work-spot. But they will not be able to enjoy the full fruits of their labour. The position of a weaver in a weavers' co-operative society is entirely different. In this organization, he is a self-engaged worker. The co-operative organization consists of weavers and weavers, co-operative society supplies yarn and takes back the finished goods and arranges for their sale.

Co-operative Societies

The profits of the business are divided among the members according to the wages earned by them. A co-operative organization is therefore best suited for improving the lot of the weavers and the handloom industry. To-day more than a lakh and thirty-five thousand weavers are members of weavers' co-operative societies. The societies are affiliated to an apex institution which has an extensive net work of sales emporia and retail depots spread all over the country so that its products could be readily sold. Habits of thrift and self-help are inculcated in the members of a weavers, co-operative society. Besides the initial share capital invested by the members, a thrift deposit of one anna in the rupee is collected out of the wages paid and thereby a handsome amount is accumulated. A common good fund set apart from the net profits will provide educational and medical facilities for the weaver or his family to a limited extent. Some societies have taken up the larger question of providing housing accommodation to their members and thereby ensured sanitary conditions and a suitable work-spot.

The Cess Fund Scheme

The most important measure so far put into operation to solve the problem affecting the industry is the implementation of a series of schemes financed from the cess fund, constituted by the Government of India. The Government of Madras have sanctioned a sum of Rs. 194·43 lakhs for the execution of the various cess fund schemes. The schemes are in force for the past twenty months. As a result of their execution, the weavers get better wages and find a market for their goods. Before the introduction of the scheme, there were 97,642 looms in weavers, co-operative societies. Under the Cess Fund Scheme, more than 37,000 looms have been brought into the co-operative fold. The number of looms brought into the weavers, co-operative societies has increased by 39·2 per cent. The members who join the societies are provided with interest-free advances by way of share capital up to Rs. 25 each. Rs. 7·11 lakhs were thus issued. The Co-operative Central Banks have made available Rs. 85·37 lakhs to weavers' co-operative societies towards working capital up to 30th June 1955 from their own resources and the amount made available to them from the cess fund. A further sum of Rs. 23·98 lakhs has been made available to the Madras State Co-operative Bank for financing the primary weavers' co-operative societies.

The Madras State Handloom Weavers' Co-operative Society has been provided with a working capital of Rs. 34·4 lakhs from the cess fund to assist its marketing activities. With the help of the funds provided for the working capital, the weavers, societies have been given advances and are charged 4 per cent interest. As a result of these steps, production has increased in weavers, co-operative societies, Rs. 18 lakhs a month prior to the introduction of the scheme, to the present production rate of Rs. 32 lakhs a month.

Marketing

Arrangements for the marketing of handloom cloth have been made on a very intensive scale both inside and outside the Madras State. In addition to the 53 depots existing on the date of introduction of the scheme, 154 retail depots were opened in various parts of the State. Four Inter-state depots have been opened in places like Vijayavada, Delhi, etc., in addition to the 11 centres where there were depots

already. In furtherance of its objective of sales promotion, the Madras State Handloom Weavers' Co-operative Society has put on the road three mobile vans for doing intensive campaign and sales. Publicity has been stepped up by spending Rs. 50,000. In order to stimulate the sale of handloom goods, consumers are paid a subsidy at the rate of Re. 0-1-6 per rupee in the case of sales effected by the Emporia of the Madras State Handloom Weavers' Co-operative Society and the weavers' co-operative societies, while the fair price shops and consumers' organizations give a rebate of one anna. The total amount of rebate sanctioned under the various schemes was rupees 42·61 lakhs.

Foreign Trade

The Madras State Handloom Weavers' Co-operative Society is also executing a scheme intended to investigate and expand the scope of foreign trade in Indian handloom cloth. Four handloom cloth marketing officers have been appointed in Aden, Rangoon, Singapore and Ceylon. Depots have been opened in Aden, Colombo and Singapore. The depot in Ceylon has effected sales to the extent of more than 8 lakhs and thereby served to find a good market for the handloom goods produced in India.

Under the scheme of improvement of technique and research' the Madras State Weavers' Co-operative Society has been taking steps to supply weaving accessories to primary weavers' co-operative societies so that the quality of production could be improved.

The promotion of the interests of silk handloom weavers has also been taken up. A weavers' co-operative society for silk handlooms has been started at Kancheepuram. There are 124 members on the rolls with a paid-up share capital of Rs. 9,465. Seventy-five looms are working for the society. A sum of Rs. 60,000 has been sanctioned to the society towards working capital. The value of production and sales effected during the four months ended August 1955 amounted to Rs. 21,429 and Rs. 16,404, respectively.

Industrial Co-operatives

Steps were taken to organize weavers' co-operative industrial societies in Malabar District by taking over closed factories and converting them into co-operatives. Two industrial co-operatives have been started in that district. The Kausalya Industrial Co-operative Society was inaugurated by the Chief Minister in May last. It has 126 members on its rolls with a paid-up share capital of Rs. 2,925. A sum of Rs. 13,200 was issued as working capital. The total production up to the end of August 1955 amounted to Rs. 12,627. The Lokanatha Industrial Society commenced work only at the end of July 1955. As these co-operatives constitute a new form of co-operative activity for the development of handloom industry, their working is being watched with interest by the whole country.

Two schemes for the setting up of housing colonies (of 200 houses each) for the benefit of members of weavers' co-operative societies are under the considreation of the Government of India. They will cost about Rs. 18 lakhs. Schemes for the formation of some more silk weavers' co-operative societies and art silk weavers, co-operative societies, training of employes of State Handloom Weavers' Co-operative Society and primary weavers' co-operative societies in salesmanship, etc., are also under consideration.

A sum of Rs. 152·08 lakhs has been spent in the execution of the several handloom cess fund schemes in the State, representing nearly 78·35 per cent sanctioned by the Madras Government. Schemes for Rs. 90 lakhs have since been sanctioned by the Government of India and these will also be implemented shortly.

Schemes under the Plan

The development of handloom industry has been given due consideration in the State Plan drawn up for execution during the Second Plan period. A sum of Rs. 4 crores has been earmarked for the development of the industry. At the end of the Plan period, more than 50 per cent of the handlooms in the State would have been brought under the co-operative fold. A provision of Rs. 162·68 lakhs for issuing interest-free advances towards share capital to enable weavers to join weavers' co-operative societies and providing working capital to the co-operatives has been made. Fifteen housing colonies of 100 houses each will be established at a cost of Rs. 70·36 lakhs. Model pattern making factories will be set up as adjuncts to 25 weavers' societies at a cost of Rs. 3·91 lakhs. Ten Industrial co-operatives will be formed at a cost of Rs. 6·76 lakhs. Provision for the supply of several kinds of accessories free of cost aimed at improving the technique of production has also been made. Two thousand weavers will be trained in improved methods of weaving. A provision of Rs. 41·25 lakhs has been made for opening 100 new depots. It is hoped that the provision made in the Second Five-Year Plan will further help to stabilize the industry and improve the condition of the handloom weavers.

It will be seen from the facts mentioned that the Government have recognized the role of co-operation in the rehabilitation of the handloom weaver and decided to canalise all their assistance to the industry through the co-operatives. In a Welfare State like India, whose objective is to change the economy of the country from an individualistic to a socially regulated basis, co-operation is the best agency for implementing their plans for the socio-economic uplift of the people. To quote the observations of the Fact Finding Committee, "the handloom has survived and will survive". But if it should survive and grow strong as the basis of a healthy, decentralized modern economy which will maintain in freedom millions of families on a reasonable standard of comfort, the bulk of the handlooms should soon get enlisted into the co-operative fold and share the benefits of co-operative effort.

Some Special Aspects of Urban Milk Supply

In the course of the article "Some Special Aspects of Urban Milk Supply", published in May issue of *Madras Information*, it was stated that "even in larger Municipalities few or no samples are taken for analysis". From this sentence, the words "or no" may be omitted.

In the paragraph "the existing checking system in the State itself has its limitations; for example 'A' class Municipalities with a population of 5 lakhs can send only 4 samples per month of food materials for analyis. Of these 4, the number of milk samples that are sent is not known," *instead of* "4" *read* "12" (as per Manual of Prevention of Adulteration, Madras) in all places.

Roads in Salem District

By Sri K. K. NAMBIAR, Chief Engineer (Highways)

Salem district with its headquarters Salem is one of the centrally situated tricts of the Madras State. Its a is 7,051 square miles with a population of 3,371,769 according to the 51 census. It is bounded on the rth by Bangalore and Kolar dists of Mysore. On the west, it is arated from Coimbatore district by river Cauvery, on the south it ches the districts of Tiruchirapalli on the east those of the North and th Arcot districts.

The district may broadly be divided three natural zones: (i) The Balaat Plateau which is a continuation the Mysore Table land comprising major portion of Hosur and part Krishnagiri taluks, (ii) the Barmahal sin, intermediate between the Table and the plains comprising the her parts of Husur and Krishnagiri luks and the taluks of Dharmapuri, arur and Yercaud and (iii) the Talaat plains comprising the rest of the strict. The table land portion has average elevation of 3,000 feet above level and dips to the south-west. he second zone is of an average evation of 1,300 feet above sea level. he elevation of the plains ranges from bout 1,200 feet to 550 feet.

Population

The district consists of eleven taluks omprised in two Highways divisions detailed below :—

Salem Division—

Salem taluk.
Yercaud taluk.
Tiruchengode taluk.
Rasipuram taluk.
Namakkal taluk.
Attur taluk.

Krishnagiri Division—

Hosur taluk.
Krishnagiri taluk.
Dharmapuri taluk.
Harur taluk.
Omalur taluk.

The population of the district is 3,371,769 as mentioned above as against 2,864,957 according to the 1941 census. The population is the lowest in Yercaud taluk, viz., 19,739 and highest in Salem taluk, viz., 521,220. The talukwar figures of the population, area, etc., are furnished hereunder for easy comparison :—

Taluk.	*Total population as per census 1951.*	*Area of taluk (in square miles.)*
(1)	(2)	(3)
1 Salem ..	521,220	377
2 Yercaud ..	19,739	148
3 Tiruchengode.	475,287	603
4 Rasipuram ..	185,906	316
5 Namakkal ..	423,834	682
6 Attur ..	265,471	651
7 Hosur ..	270,687	1,168
8 Krishnagiri ..	287,359	688
9 Dharmapuri ..	313,113	946
10 Harur ..	221,227	915
11 Omalur ..	387,926	557
	3,371,769	7,051

History of Roads

From the earliest records available, it is found that there were only 1,342·75 miles of regular roads in the whole of the district in the year 1883, i.e., one mile for every 5·25 square miles of area; besides there were 384·5 miles of famine roads, which though useful, were not fit throughout for vehicular traffic. The total allotment for the budgeted mileage in 1878–79 was Rs. 1,03,325, i.e., on Rs. 67–10–0 per mile. With this poor allotment it is said that the roads were the pride of every official, most of them being shaded by splendid lines of avenue, planted mostly by forced labour in the period of Mr. J. Orr, the then District Collector. Mr. Orr assumed charge of the district in 1829 and his term of office was from 1829 to 1838. To Mr. Orr the district is indebted for its Chief roads, grandest avenues, and a number of well-built rest-houses known as "Orr's Choultries". By 1836 Mr. Orr had made 316 miles of high road at an average cost of Rs. 134 per mile, besides 375 miles of cross roads, 20 bridges were built and 196 stone dams were made at an aggregate cost of Rs. 14,026. The initial expenditure was made almost wholly on his own responsibility, and "no better proof could be given of his success than the estimation in which his work was held by the natives, who voluntarily agreed to tax themselves for the maintenance of these roads". This voluntary tax of one rupee was first imposed in 1836 and continued till April 1860. Mr. Orr induced the ryots to plant avenues and topes. Under the system introduced by him, the number of avenue trees planted up to 1842 amounted to 129,414, the number previously existing in the district being only 32,960 and the number of palmyra trees planted amounted to 1,819,161. The ryots were permitted to enjoy the usufruct of the avenues and topes they had thus planted on the understanding that they should keep the road in tact.

After Mr. Orr left the district in 1838, the villagers did not act up to their obligations, Government contributions proved inadequate, and the roads soon fell into disrepair, their upkeep had before long to be taken over by Government. To meet the increasing cost, Government in 1859 imposed a cess of 2 per cent of the land revenue on all lands which enjoyed the benefit of Mr. Brett's "Taram Kammi", the fund so formed to be expended by the Collector and the District Engineer on "District Roads", the trunk roads still being kept up at the cost of Provincial Funds. In 1865, an act was passed legalising the cess at six pies

i.e., 30 of the total number of villages and 24 per cent of the population live in the villages. Villages with a population of 2,000 to 5,000 form 25 per cent of the total number of villages and 41 per cent of the population live in the villages. All these villages will be connected to the main roads when the Post-War Road Development Scheme is completed.

The Post-War Road Development Scheme contemplates the formation of 250 miles of roads, of which 100 miles have been formed or nearing completion. When the balance of 140 miles is completed, all the villages with a population of more than 500 will be served by roads.

On the formation of the Highways Department, out of the total length 1,883-3/8 miles on the Salem South Division, the Government took over 362 miles of roads to their control leaving the balance of 1,521-3/8 miles to be maintained by the district boards.

Forest

The area of reserved forest is about 500 square miles. Sandal and bamboos flourish on almost every hill range roads to the forest area maintained by the Forest department for easy transport of forest products.

Hills

The district is intersected by numerous hill ranges and valleys running parallel to one another.

Soil

The soil in the district is hard gravel and it is good for road formation.

Traffic

Traffic in this district is rather heavy. The period of peak traffic occurs in the month of April in Krishnagiri side when most of tamarind produce is transported to marketing centres while in Salem side it occurs in November during transport of groundnut.

Road Materials

The larger part of the district is made up of rock belonging to metamorphic or gnessic series. Suitable materials of road construction and maintenance are readily available in plenty and are being used according to the intensity of traffic. The average lead for road metal in this district is about 2 miles and for gravel 1 mile.

Labour

There is generally no dearth of labour except in Hosur taluk where the coolies have to be imported. Professional granite metal breakers are mostly in Omalur taluk but they work almost throughout the area in working season.

Working Season

The most suitable period for quarrying is in the months of January to June. The season most favourable for road consolidation is the rainy season extending from July to November. Earthwork can be done during the same period even up to end of December.

Road mileage—	MLS.	FG.	FT.
Government Roads ..	813	4	420
District Board Roads.	1,695	6	405
	2,509	3	165

Government and District Board Roads—

Year.	*Expenditure on maintenance.*
	RS.
1950–51	25,60,513
1951–52	24,84,259
1952–53	27,86,203

Gang-Mazdoor System

This system is well organized and is working satisfactorily, and Salem is one of the earliest district to organize it.

Buildings

There are 19 travellers' bungalows in the district maintained by the district board and 2 travellers' bungalows at Yercaud and Velur in charge of Highways. Besides there are travellers' Bungalows maintained by Public Works Department, Forest department and municipality also. There are 11 chatrams maintained by the District board.

Avenues

This district is rich in avenues which count for the large portion of revenue. Interest has been evinced in the tree-planting even in the past century and it is learnt that there were avenue trees along the roads even in 1840.

A special drive was launched to grow more avenue trees. There is a nursery in each travellers' bungalow to supply the required seedlings. In addition, the Agricultural Department is also supplying seedlings during Vanamahotsava in August. Though the soil is good, there is water scarcity almost throughout the district. The plantation work is carried out by avenue mazdoors who are supplied with equipments for watering the plants.

Recast Five-Year Programme of Post-War Road Development

Serial number and name of work.	*Rupees in lakhs.*
Development in Salem North Division—Group I. Major District Roads.	
Group I, National Highways—	
1 Cement concreting ..	6·21
2 Widening bridges ..	2·80
Group II, Major district roads—	
1 Cement concreting ..	Nil.
2 Black-top surfacing ..	0·99
3 Minor bridges and culverts improvement.	2·60
4 Widening	0·26
5 Formation of new roads.	0·10
6 New metalling ..	0·27
Group III, other district roads and village roads—	
1 New metalling of O.D.R.	2·35
2 Minor bridges and culverts on O.D.R.	0·69
3 Formation of new O.D.R.	3·20
4 New metalling village roads.	0·30
5 Formation of village roads.	6·93
6 Minor bridges and culverts on village roads.	0·25
7 Survey charges for new formation.	0·38
Development in Salem South Division—Provincial Highways and M.D.Rs.—	
1 Cement concrete surfacing.	6·33
2 Black-top surfacing ..	12·40
3 Minor bridges ..	0·40
4 Widening	0·69
5 Formation of new roads.	24·0
6 Major bridges ..	1·88
Other district roads and village roads—	
1 New metalling ..	1·39
2 Minor bridges and culverts.	0·70
3 Formation of old district roads.	0·27
4 Formation of village roads.	7·5
5 Major bridges ..	2·5

Bridges and Culverts

The most important works done by the Highways Department in the district are the construction of bridges. Many unbridged crossings are bridged and some of the narrow weak bridges in important roads are being strengthened and widened to the present day IRC standards.

(*Continued from page 24*)

As regards the future, comprehensive schemes for improvement of livestock all over the State have been included in the Second Five Year Plan. Thus, the Key Village Scheme would be expanded to cover larger areas in the breeding tracts and extended to other areas with the object of grading up non-descrip cattle. One hundred and fifty Key Villages and 20 Artificial Insemination Centres are proposed to be established in addition to those existing now. In the areas not covered by the existing schemes, 53 extension breeding centres are proposed to be established for the utilization of bulls produced in the Key Villages. Among others, schemes for development of feeds and fodder resources, establishment of Artificial Insemination Centres in urban areas, extension of the calf subsidy scheme, establishment of new livestock farms, and improvements to existing farms, establishment of cattle colonies and drystock farms around cities and large towns, improvement of livestock statistics, organization of rural herd and milk recording, pilot plan for cattle insurance, etc., have been proposed for implementation during the Second Five Year Plan Period.

All the new schemes programmed for the future coupled with the intensification of the existing Livestock Improvement Schemes are bound to bring prosperity to the people through higher production both by land and livestock. The development of mixed farming wherein the land supports the cattle on it by way of feed and fodder and the cattle support the land by way of labour and farm yard manure will ultimately benefit the farmer and improve his economic condition. The increased agricultural production and increased production of essential livestock products like milk and butter will greatly improve the nutritional level of the diet of the people. Thus the prosperity of the land and the prosperity of the cattle are interdependant and a proper appreciation of this fact and planned development of both will bring prosperity to the country. (*By courtesy, A.I.R.*)

A—SALEM NORTH DIVISION

Population in each village or town.	Number of villages or towns.	Total population in these villages or towns.	Number served by roads.	Percentage of total population.	Provision in P.W.R.D. Programme. Number.	Length in miles.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Less than 500 ..	278	70,057	15	2·6	..	..
500 to 1,000 ..	203	152,405	26	5·6	16	25
1,001 to 2,000 ..	320	419,931	62	15·4	73	132
2,001 to 5,000 ..	163	351,640	76	12·9	24	41
5,001 and above ..	23	176,471	19	6·5	2	7
	987	1,170,504	198	43·0	115	205

B—SALEM SOUTH DIVISION

Population in each village or town.	Number of villages or towns.	Total population in these villages or towns.	Number served by roads.	Percentage of total population.	Provision in P.W.R.D. Programme. Number.	Length in miles.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Less than 500 ..	199	48,362	17	1·6	3	5
500 to 1,000 ..	162	110,813	26	4·00	33	43
1,001 to 2,000 ..	261	381,539	90	14·00	50	80
2,001 to 5,000 ..	219	648,835	101	24·00	36	51
5,001 and above ..	132	379,471	31	14·00	Nil.	Nil.
	873	1,569,020	265	57·00	122	179

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in the rupee on all lands in occupation, under whatever tenure held. This act was superseded by the Local Fund Act IV of 1871. Meanwhile the roads had for years been a bone of contention between the Revenue Officers and the Public Works Department, the former affirming that they did the work cheaper and better than the professional department. For some time the work of maintenance was divided between the two departments the tendency being gradually to transfer roads from the department of Public Works to the Collector.

Local Boards assume Control

Finally in 1880, the Local Fund department assumed entire responsibility. At that time there were two local boards in the district, one at Hosur and the other at Salem. The Boards were composed of as follows. The President, who was always the Collector belonged to both the Boards which had each a Vice-President, who was the Sub-Collector. The Hosur Board had 13 Officials and 14 non-Officials as its members. While Salem Board had 13 and 15 respectively. The average revenue of the Boards for the 5 years 1874-75 to 1878-79 were Rs. 61,075 for the Hosur and Rs. 1,68,335 for Salem, each had its own engineering establishments.

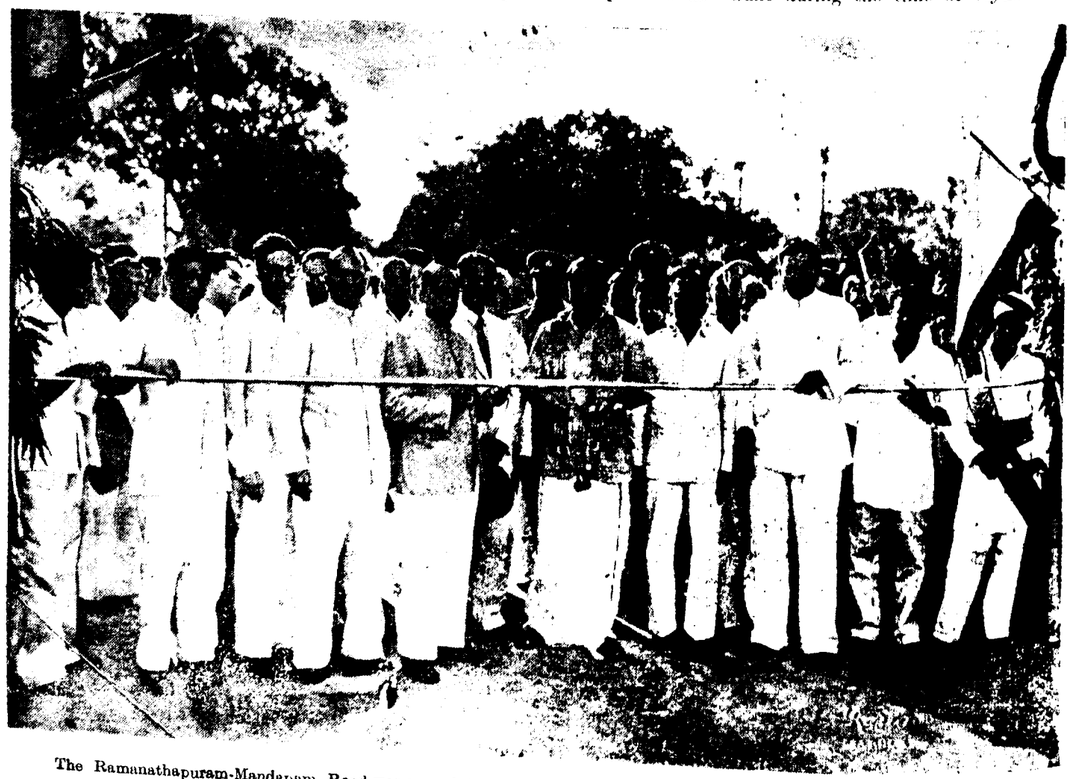
Demands of the Increased Traffic

With the advent of the motor vehicle, bus and private traffic, traffic intensity began to increase. Highway traffic threatened to compete with the Railways which formed the main means of communication formerly for passengers as well as goods traffic. People in villages also began to feel the need for improved roads connecting the villages with the nearest towns in order to transport their produce as soon as they were harvested. Thus the demand for good roads was constantly on the increase and to cope with that, the organisation for road building had to be considerably expanded and improved and that resulted in the formation of the Highways Department.

In general, this district is well provided with roads and the conditions may be considered as satisfactory.

Pilgrim Centres and Places of Historical Interest

Salem is the headquarters of the district with a population of 129,288. There is a first grade college. Weaving in silk and cotton is the chief local cottage industry. Krishnagiri is noted for its Syed Basha Mountain where there is a famous fort on the top of a hill which is believed to have been built during the time of Hydar Ali.



The Ramanathapuram-Mandapam Road was opened by Sri Shanmugha Rajeswara Sethupathi, Minister for Public Works, on 11th September 1955.

There is a sericultural farm, one of the biggest in the State at Hosur. Mathigiri which is 4 miles away from Hosur is noted for Government Cattle farm. Hogainakkal Bathing ghat of the Cauvery is a pilgrim centre where people use to take bath in the river during festival days. Mettur dam, constructed across the river Cauvery, is one of the biggest dams in the world. Tiruchengode town is noted for weaving and is also a pilgrim centre. Namakkal is famous for its temple Namagiri Amman. Yercaud town is the health resort in this district and it is connected to Salem by a good ghat road of 20 miles in length fully black-topped now.

Organisation

Salem district which has a large area and long mileage on roads had to be divided into two Highways divisions, the "South" at Salem and the "North" at Krishnagiri, for proper maintenance and construction of roads and also for the convenience of the administrative control. The Salem North Division comprises Krishnagiri, Hosur, Dharmapuri, Harur and Omalur taluks and the South Division comprises Salem, Attur, Tiruchengode, Rasipuram and Namakkal taluks of the Salem district.

Rural Communications

The Table A on page 29 gives particulars in respect of Salem North Division. It will be seen that though the number of hamlets with less than 500 population forms 28 per cent of the total number of villages, only 6 per cent of the population live in these hamlets. These villages do not come under the purview of the Post-War Road Development Scheme for the provision of road communication. These villages are connected to the next villages as these hamlets are within easy reach of main villages.

Villages with a population between 500 and 1,000 form 20 per cent of the total number of villages. Only 13 per cent of the population live in these hamlets. Of those villages 13 per cent are served by the roads at present and it is proposed to form 25 miles of new roads connecting another 16 villages to the road system.

Villages with a population between 1,001 to 2,000 form 32 per cent of the total number of villages. Only 36 per cent of the population live in these hamlets. Of those villages one-fifth are served by the roads at present and it is proposed to form 132 miles of new roads connecting another 73 villages to the road system.

Villages with a population between 2,001 to 5,000 form 17 per cent of the total number of villages. Only 30 per cent of the population live in these hamlets. Of those villages 47 per cent are served by the roads at present and it is proposed to form 41 miles of new roads connecting another 24 villages to the road system.

Only 15 per cent of the total population live in towns with a population of more than 500. Only two villages, viz., Guttupatti and Thumbipadi have to be connected with main roads. It is proposed to form 7 miles of new roads by connecting 2 villages, namely, Alamarathupatti and Kunjinayakampatti to road system.

On the formation of Highways Department, out of a total length of 1,186 fg. 585 ft., the Government took over 422 m. 3 fg. 180 ft. of roads in Salem North Division direct to their control and the balance of 764 M. 3 fg. 405 ft. of roads were left with the district board.

The particulars given in Table B on page 29 are in respect of Salem South Division. It will be seen that though the number of hamlets with less than 500 population form 23 per cent of the total number of villages, only 3 per cent of the population live in these hamlets. Even these will be benefited when the villages having a population of more than 500 are connected to the next villages as these hamlets are within easy reach of main villages.

Villages with a population between 500 and 1,000 form 19 per cent or roughly one-fifth of the total number of villages and only about 7 per cent of the population live in the villages. Of these 10 per cent of the villages are already served by roads and the remaining 90 per cent of the villages will be benefited when the 43 miles of roads are formed under Post-War Road Development.

Villages with a population of 1,000 to 2,000 form the maximum percentage,

The foundation stone for the bridge across Arjuna in Ramanathapuram district was laid by Sri Shanmugha Rajeswara Sethupathi, Minister for Public Works, on 14th September 1955.

Facts and Figures.

The Indian Railways are at present running 4,684 passenger trains daily.

The total quantity of handloom cloth exported to foreign countries in 1954 was 56·1 million yards as compared to 43·6 million yards in 1951.

During the First Five-Year Plan period, 3,517 tube-wells have so far been drilled in various States. The total sum sanctioned as loan by the Government of India for drilling these tube-wells amounted to Rs. 1,071·45 lakhs.

India's exports to Tibet in 1954–55 were valued at Rs. 2,71,07,000 and her imports from that country at Rupees 1,26,57,000.

A total of 38 health centres has so far been opened under the revised Five-Year Plan in the National Extension Service Development Blocks in the various States.

The Government of India have spent Rs. 7,00,500 for the advancement of Sanskrit during the last five years.

A new record of sugar production in the country has been set up with a total production of 15·86 lakh tons in the current season. This year's production exceeds even the record production of 1951–52 by 87,000 tons.

After decontrol, the consumption demand of white sugar in the country rose from 10 lakh tons towards the end of 1952 to 18·3 lakh tons in 1953–54.

In the course of last seven years, the Rehabilitation Finance Administration has given loans amounting Rs. 275·87 lakhs to refugees from East Pakistan and Rs. 693·75 lakhs to those from West Pakistan.

Nearly 62,000 persons are estimated to be receiving technical training in 999 institutions scattered all over the country.

As part of its health programme, the Community Projects Administration has already set up 375 Primary Health Centres in areas covered by the Community Development Programmes.

Out of the total amount of Rs. 400 crores allotted to the Indian Railways for the First Five-Year Plan, an expenditure of Rs. 306·17 crores has been actually booked up to June 30,

Rural Electrification

The number of villages electrified during the month of August in the various systems was as follows :—

Pykara System	34
Mettur System	16
Papanasam System	6
Madras System	5
Total	61

The names of villages together with the details of taluk and district are given below :—

Name of village.	*Taluk.*	*District.*
	Pykara System.	
Thippampatti	Pollachi	Coimbatore.
Kuppandampalayam	Gobichettipalaiyam	Do.
Kattupudur	Erode	Do.
Ellapalayam	Gobichettipalaiyam	Do.
Ramanaickenur	Do.	Do.
Asanallipalayam	Avanashi	Do.
Moolakuvunbaipalayam.	Do.	Do.
Sengodipalayam	Palladam	Do.
Ponnandampalayam	Do.	Do.
Poomalaikundu	Periyakulam	Do.
Sevugampatty	Nilakottai	Madurai.
Jayamangalam	Periyakulam	Do.
Vellakundapuram	Udumalpet	Coimbatore.
Meppadi	Wynad	Malabar.
Moopanda	Do.	Do.
Mondinathampalaiyam.	Avanashi	Coimbatore.
Bengichengalhatty	Ootacamund	Nilgiris.
Muthorai	Do.	Do.
Coondapoor	Coondapoor	South Kanara.
Tehppacombay	Coonoor	Nilgiris.
Vederhobli	Coondapoor	South Kanara.
Kambatty	Ootacamund	Nilgiris.
Kanakkampalayam	Gobichettipalaiyam	Coimbatore.
Panjampatti	Dindigul	Madurai.
Sanarapalayam	Gobichettipalaiyam	Coimbatore.
Molakavandanpalaiyam.	Do.	Do.
Kallimadaipalaiyam	Do.	Do.
Neelampalaiyam	Do.	Do.
Peddanayakkanpalaiyam	Coimbatore	Do.
Vaiyampalaiyam	Do.	Do.
Sembulingampatty	Avanashi	Do.
Veerakkal	Dindigul	Madurai.
Vennampatti	Do.	Do.
Alagirisettipalaiyam	Pollachi	Coimbatore.
	Mettur System.	
Virinjipuram	Vellore	North Arcot.
Kothamangalam	Gudiyatham	Do.
Pudupalayam	Chengam	Do.
Kilalathur	Gudiyatham	Do.
Pudur	Walajah	Do.
Vadakadappanthangal.	Do.	Do.
Vellambi	Do.	Do.
Velathnr	Gudiyatham	Do.
Sendarampalli	Do.	Do.
Kavanoor	Arkonam	Do.
Kilkuppam	Do.	Do.

(*Continued on page* 32)

Rural Broadcasts for November 1955

Tuesday, 1st November 1955—
- Farm Forum : Discussion.
- Folk songs of Mysore.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Wednesday, 2nd November 1955—
- Cholera : Discussion.
- Ennai Eenra : Song.
- Social Education under Five-Year Plan : Talk.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Thursday, 3rd November 1955—
- Farm Forum : Discussion.
- Musical Bouquet.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Friday, 4th November 1955—
- Chakkai Attam : Folk Art.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Saturday, 5th November 1955—
- Milk supply through co-operatives :
- Talk in Tamil arranged by the Department of Co-operation, Government of Madras.
- Irutkadalai : Song.
- The adult Literacy Class : Tirukkural : Ozhukkamudaimai (Kural 139 and 140).
- Weekly Review of market rates ; water-level readings.
- Topical discussion ; weather report.

Sunday, 6th November 1955—
- An inside look at the soil : Discussion.
- Sikkanamai Iruppom : Song.
- Adutta Veettu Saappadu : Play.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Monday, 7th November 1955—
- Housing of Cows : Discussion.
- Sathya Jothiyai : Song.
- Irulil Oli : Feature.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Tuesday, 8th November 1955—
- Farm Forum : Discussion.
- Grama Patasalaiyil : Asu Kavirayar.
- Market rates and water-level readings.
- Topical Discussion : weather report.

Wednesday, 9th November 1955—
- Fire accidents and Aid : Discussion.
- Sudantira Sooriyan : Song.
- Listeners' letters.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Thursday, 10th November 1955—
- Farm Forum : Discussion.
- Pattaikelungal.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Friday, 11th November 1955—
- Grama Nataka Sabaiyil : Killi Tirumanam : Play.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Saturday, 12th November 1955—
- Cottage Industries : Artificial Silk Discussion.
- Kaniyidai Eria : Song.
- The Adult Literacy Class : Tirukkural : Piranilvizhaiyamai (Kural Nos. 141 and 142).
- Weekly review of market rates ; water-level readings.
- Topical Discussion ; Weather report.

Sunday, 13th November 1955—
- Kodi Vetti ; Play.
- Market rates and water-level readings.
- Topical discussion : weather report.

Monday, 14th November 1955—
- Infectious Disease of Fish : Discussion.
- Folk Songs lesson.
- The Village Women's Forum.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Tuesday, 15th November 1955—
- Farm Forum : Discussion.
- Folk Songs.
- Maganwadi Choolai : Discussion.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Wednesday, 16th November 1955—
- Anti-malarial campaign : Discussion.
- Varungal Tozhargale : Song.
- Kodukkal Vangal : Play.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Thursday, 17th November 1955—
- Farm Forum : Discussion.
- Have you heard this song ?
- Market rates and water-level readings.
- Topical discussion ; weather report.

Friday, 18th November 1955—
- Gandarva Kudirai.
- Market rates and water-level readings.
- Topical discussion ; weather report.

Saturday, 19th November 1955—
- Some diseases of Ear, Nose and Throat :
- Talk in Tamil arranged by the Department of Medical Services, Government of Madras.
- Thondu Seithidu : Song.
- The Adult Literacy Class : Tirukkural : Piranil Vizhaiyamai (Kural Nos. 143 and 144).

Weekly review of Market rates ; Water-level readings.
Topical discussion ; weather report.

Sunday, 20th November 1955—
Rice Growing in U.S.A. Discussion.
Tavazhndu Tavazhndu : Song.
The Pial School of Political Science.
Market rates and water-level readings.
Topical discussion ; weather report.

Monday, 21st November 1955—
Rinderpest : Discussion.
Sathya Jothiyai : Song.
Irulil Oli : Feature.
Market rates and water-level readings.
Topical discussion ; weather report.

Tuesday, 22nd November 1955—
Farm Forum : Discussion.
Bhoodana Lavani : Songs.
Market rates and water-level readings.
Topical discussion ; weather report.

Wednesday, 23rd November 1955—
Pleurisy : Discussion.
Kalamam Vanattil : Song.
Listeners' Letters.
Market rates and water-level readings.
Topical discussion ; weather report.

Thursday, 24th November 1955—
Farm Forum : Discussion.
Vasanai Kalanjiam (5) Santhanam : Feature.
Market rates and water-level readings.
Topical discussion ; weather report.

Friday, 25th November 1955—
Ulavarin Iru-Kangal : Musical Feature.
Market rates and water-level readings.
Topical discussion ; weather report.

Saturday, 26th November 1955—
Fur Industry in Kashmir : Discussion.
Ettanai Kodi Inbam : Song.
The Adult Literacy Class : Tirukkural : Pirani Vizhaiyamai (Kural Nos. 145 and 146).
Weekly review of market rates ; water-level readings.
Topical discussion ; weather report.

Sunday, 27th November 1955—
Chemical Weed Killers : Discussion.
Enniladha Porul : Song.
Minor Matters (2) : Social Feature.
Market rates and water-level readings.
Topical discussion ; weather report.

Monday, 28th November 1955—
Sterility in cows : Discussion.
Kartikai Deepam : Song.
Anaiya Vilakku : Musical Feature.
Market rates and water-level readings.
Topical discussion ; weather report.

Tuesday, 29th November 1955—
Farm Forum : Discussion.
Grama Pattum Katchiyum.
Market rates and water-level readings.
Topical discussion ; weather report.

Wednesday, 30th November 1955—
Hand Pound Rice : Discussion.
Kalai Ilamparuthi : Song.
Onre Kulam.
Market rates and water-level readings.
Topical discussion ; weather report.

(*Continued from page 30*)

Name of village.	*Taluk.*	*District.*
	Mettur System—cont.	
Veerakuppam	Tirupattur	North Arcot.
Narianeri	Do.	Do.
Mettupatti	Salem	Salem.
Perumapalayam ..	Do.	Do.
Erramasamudram ..	Attur	Do.
	Papanasam System.	
Lakshmipuram	Nilakottai	Madurai.
Kelanachikulam ..	Do.	Do.
Pudupatti	Sattur	Ramnathapuram.
Kilathiruchendur ..	Tiruchendur	Tirunelveli.
Chintamani	Madurai	Madurai.
Anuppanadi	Do.	Do.
	Madras Electricity System.	
Andrakuppam Village ..	Saidapet	Chingleput.
Madhavaram	Do.	Do.
Kottapakkam	Do.	Do.
Manapakkam	Do.	Do.
Periyakavanam	Ponneri taluk	Do.

Work on a large number of rural extension schemes spread over the entire State was progressing. The following are the particulars of length of new lines constructed and energised during the month in the various systems. :—

	Length of lines in miles.	
	H.T.	*L.T.*
Pykara System	17·56	52·78
Mettur System	43·04	68·25
Papanasam System	6·86	15·33
Madras System	15·24	9·95
Total ..	82·70	146·31

In the Madras System a total number of 278 services with an approximate connected load of 248 K.W. were changed over to A.C. supply on a voluntary basis.

During the month 69 extensions were sanctioned by Chief Engineer for Electricity and Chief Operation Engineers at an estimated cost of Rs. 37·6 lakhs.

In the September issue of 'Madras Information' (page 24) giving the data relating to H.T. and L.T. lines newly constructed and energised during the month of June, it was stated that in the Madras System 2·76 miles of H.T. lines and 14·73 miles of L.T. lines were constructed and energised. The correct figures are 3·46 miles of H.T. lines and 14·23 miles of L.T. lines. The total length of H.T. and L.T. lines in the same statement will then be 30·02 for H.T. and 85·95 for L.T.

NEW N.E.S. BLOCK AT SRIPERUMBUDUR

The new N.E.S. Block at Sriperumbudur, Chingleput District, was inaugurated by Sri M. Bhaktavatsalam, Minister for Agriculture, on 1st October. The creation of the new life at Sriperumbudur is now primarily the responsibility of the people of Sriperumbudur.

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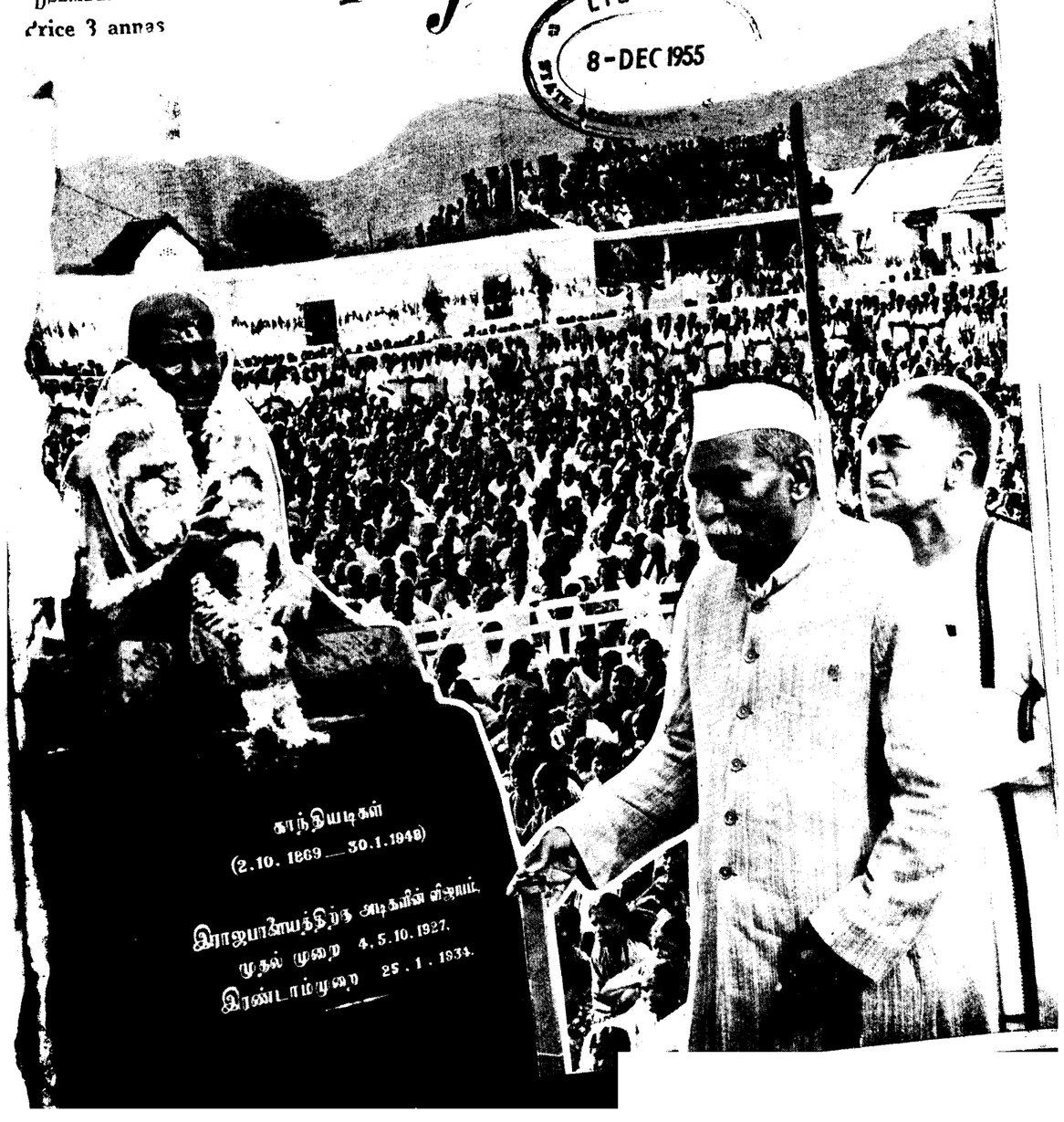

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Vol. IV No. 12 "HAVE SEEK TO SERVE AND NOT TO COMPETE" December 1955

8-DEC 1955
STATE LEGISLATURE

An Announcement to Subscribers and Advertisers!

8-DEC 1955
STATE LEGISLATURE, MADRAS

"MADRAS INFORMATION" ANNUAL NUMBER—JANUARY 1956

The January 1956 issue of *Madras Information* will be a special Annual Number. Printed on real art paper, the publication will have 124 pages and contain authoritative articles by eminent contributors on development plans in the State. The primary aim of the publication is to give the reader as exhaustive an idea as possible of the achievements under the First Five-Year Plan and the proposals under the Second Five-Year Plan. The publication, which will have an attractive cover design in three colours, eight special art insets in double colour and a good number of photographs, will be priced Re. 1.

To Subscribers :

All those who wish to reserve their copies in advance will kindly send Re. 1 by M.O. to this Office by 30th December 1955. This applies also to the regular subscribers of *Madras Information*. As there will be no ordinary issue of *Madras Information* in that month, subscribers of *Madras Information* are informed that their period of subscription will be extended by one month. They are informed that there will be no adjustment of the cost of the Special Number from subscriptions already received for the ordinary issues of *Madras Information*.

To Advertisers :

The advertisement tariff is as follows: Back cover—Rs. 225; Inside cover—Rs. 175; Text Page—Rs. 150. Intending advertisers are requested to address the Director of Information and Publicity early for booking their space.

Director of Information and Publicity,
Government of Madras,
Fort St. George, Madras-9.

10. Rural Broadcasts for December 1955 30

Cover page : A statue of Mahatma Gandhi was unveiled at the Congress Golden Jubilee Memorial Maidan at Rajapalayam by Dr. Rajendra Prasad, President, during his recent visit.

Madras Information

Published every month by the Director of Information and Publicity
Fort St. George

Vol. IX, No. 12 "WE SEEK TO SERVE AND NOT TO COMPETE" December 1955

8-DEC 1955

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8 DEC 1955 STATE LEGISL.

The Second Five-Year Plan

Broadcast talk by SRI V. T. KRISHNAMACHARI, Deputy Chairman, Planning Commission

The Second Fiver-Year Plan is not a mere blue-print for the next five years. No doubt it will contain important projects to be undertaken; but its real purpose is to bring together the efforts and energies of all of us to a common objective, the elimination of unemployment, the raising of standards of living, the reduction of disparities in wealth and income and the largest possible increase in the national income, said Sri V. T. Krishnamachari, Deputy Chairman of the Planning Commission, in a talk on "Some Aspects of the Second Plan" broadcast from All-India Radio.

The following is the text of Sri V. T. Krishnamachari's broadcast talk :—

Nearly five years ago the nation adopted planning as the method for achieving social and economic progress. It was of course realised that we had a long distance to travel before opportunities could be made available to every one in India similar to those available in the more advanced countries. The vicious circle of poverty leading to a low rate of economic progress and a low rate of development further accentuating the state of poverty had to be broken. This was one of the two main tasks which we set before ourselves during the First Plan. Having broken the crust as it were, the second main task was to prepare the foundations for fuller and more rapid economic and social development in the future.

The Background

What were the conditions facing the country when planning began? The Indian economy had been in a state of stagnation for many decades. The development of resources had not kept pace with the growth of population. Such progress as was reflected in the growth of industry and commerce and in the development of towns was counter-balanced by increase of under-employment in villages and of unemployment in towns, especially among the educated, and by the failure of the economy to absorb even the new working force added from year to year. The country's capital base was being built up much too slowly and little was done to turn the vast manpower resources to account for building up the national prosperty. The stimulus which the war provided was in many ways artificial and short-lived. Immediately after attaining freedom, the country had to face the political and economic consequences of partition and the migration of millions of displaced persons.

The solution of these problems was rendered more difficult by the running down during the war of the transport system and of the capital equipment of industry. Further, the inflationary pressures of the post-war years and the shortage of food and raw materials introduced elements of serious instability into the economy.

Achievements

This was the background against which the First Plan was formulated. We can now sum up briefly its achievements. It has inaugurated movements through which the people of India can achieve social change and build up a new life for themselves. In the national Extension Service and Community Projects we have an all-embracing movement for harnessing the energies of the 70 million families in the country side to tasks which bear closely upon their own welfare and upon the welfare of the country and for creating in them a desire for higher standards of living and the determination to work for them. The economic policies associated with planning have also made a significant contribution. The agricultural economy is now appreciably stronger and less exposed to hazards. The transport system is improving steadily. The distortions which had developed in the price structure during and after the war have been eliminated. Industries in the private sector have more than achieved the targets fixed for them. Village and small industries and especially the handloom industry have recovered from the depression of the early post-war years and programmes for their development are now receiving greater support than before.

A New Attitude

The removal of shortages and bottlenecks and the creation of stable economic conditions were essential steps before the effects of new development programmes could be felt. The scale on which these new programmes have been undertaken during the First Plan is not often realised. In irrigation and power alone, the outlay during the First Plan is comparable to the total investment during the preceding hundred years. The addition of 7 million acres of irrigation and of over a million kilowatts of generating capacity are only two of the important achievements of the past few years.

The impact of the First Plan has been felt also in other spheres such as industry, both in the public and in the private sectors, and in the development of social services, especially education, rural health and malaria control, industrial housing, the welfare of scheduled tribes and the extension of workers' welfare services. The index of industrial production has risen from 105 before the plan to 159 in the second quarter of this year. Thus, as a result of the success of our First Plan, we have now a distinctly higher base in agriculture, industry and transport on which it is possible to build further. Above all, the people

have become aware of how much their participation means for national development. In every part of the country, they feel that the Plan is theirs and that they share in its making and in its working. The growth of this attitude towards planning is the best assurance for the success of the Second Five-Year Plan which is now under preparation.

Effects of Second Plan

The effects in the Second Plan will be in three principal directions. In the first place, the tempo of development will be stepped up in all fields. Agriculture, irrigation and power and social services will receive greater attention.

Secondly, industrialisation in which we have much leeway to make up will receive special attention. The First Five-year Plan had provided for the setting up of a steel plant and a heavy electrical plant. Progress in carrying out these schemes was slow for various reasons, so that in the Second Plan the programmes to be undertaken by the public sector provide for new projects as well as for the completion of those which were contemplated in the First Plan. In the private sector also it is hoped to undertake a large amount of expansion as part of the national plan. Programmes for large industries are being integrated as far as possible with programmes for village and small industries, so that we may achieve a well-balanced industrial economy with a high degree of production and a high degree of employment.

Thirdly, this large industrial programme makes it obligatory that there should be adequate expansion of transport facilities, especially railways. Thus the Second Plan will be a plan well-balanced as between different sectors for securing co-ordinated advance on all fronts.

Size of Second Plan

The size of the Second Five-Year Plan is a subject to which much thought has been given by the Planning Commission. It was first contemplated that in the public sector the outlay might be of the order of Rs. 4,300 crores. The level of expenditure on development has risen from a little over Rs. 250 crores in 1951–52 to about Rs. 650 crores during the last year of the present Plan.

This means that our capacity for implementing projects has increased considerably during the past five years. The needs to be met are large and the technical and administrative organisations at the disposal of the Central and State Governments are now capable of executing programmes of larger magnitude than before. The examination of the plans of Central Ministries and States had shown that it might be necessary to increase the aggregate size of the Plan by about Rs. 500 crores. The increase will be due almost entirely to the development of heavy industry and improvement of the railway system.

An Economic Necessity

Besides the progress already made, there are other reasons why a Plan of this order in the public sector, supplemented by an adequate plan in the private sector, should now be regarded as an economic necessity for the country. The volume of rural under-employment and of unemployment in urban areas is among the clearest indicators of economic needs in an under-developed country. These problems have grown with the increase in population and increase in educational opportunities. They cannot be solved except in terms of a high and accelerated rate of development. Recent studies suggest that even if we regard as employed a person who works for one day during a period of one month selected for investigation, there will be about 2 million uenmployed persons, in urban areas. If a larger period of employment is stipulated, the volume of unemployment would be considerably more. The numbers of those who may be almost wholly un-employed in rural areas are not known. Thus, altogether the unemployment situation is both the principal challenge and the main focus for programmes under the Second Five-Year Plan. No plan which fails to make a substantial impression on this problem can be regarded as adequate.

The foundation stone for the Arjuna Bridge, Ramanathapuram district, was laid by Sri K. Kamaraj, Chief Minister

If the Second Five-Year Plan is implemented on the scale contemplated, it is expected that the national income will rise by 5 per cent every year in the next five years and that employment will be made available at least for those that come newly into the labour force in these years.

Use of Manpower

Thus, in our conditions, the size of the plan that we undertake is a matter not so much of choice as of necessity. The effort which the country is called upon to make cannot, therefore, be a matter of choice or convenience. When we make nice calculations of financial resources and of how much we can afford to do, we may sometimes overlook the magnitude of the problems we have to solve and of how much we can afford to leave undone. Equally, we may also overlook the extent of the real resources which we can employ. By far the most important of these is our manpower. To use the manpower of the country in a constructive way and build up productive aspects is an essential aspect of economic development in all countries, more so, in a country like ours where there is an enormous reservoir of unutilised manpower. The key to success in National Extension and Community Projects lies in developing the strength of village organisations and to enable the millions of people to discover how much they can assist in building national assets like irrigation works, roads, forests, plantations, etc., by contributing labour and by how they can add to the amenities of life—education, health, etc., by their own efforts.

The success of democratic development is to be judged as much by the manner in which the values of freedom are brought into harmony with the values of economic progress, as by the rate of increase in national income and national wealth. In a truly democratic plan based on a socialistic pattern of society all of us have to participate not only through the work we undertake in our respective occupations and as citizens, but also in the measure in which we save for national development. If 90 million families were to save on an average one anna more every day, that would add in a year, about Rs. 200 crores to our national savings and 1,000 crores over the period of the Second Plan. This shows how even small efforts widely spread can make an immense contribution to the rate at which our national economy develops.

The Second Plan which will be before the country in draft a few weeks hence is not, therefore, a mere blueprint for the next five years. No doubt it will contain important projects to be undertaken; but its real purpose is to bring together the efforts and energies of all of us to a common objective the elimination of unemployment, the raising of standards of living, the reduction of disparities in wealth and income and the largest possible increase in the national income. We should consider it a high privilage that each one of us, whatever his position, can play a part in this most exciting adventure.

Facts and figures

The Sindri Fertilizer Factory produced 154,121 tons of ammonium sulphate during the first six months of 1955. This was 29,496 tons more than the production during the same period last year.

The production of sewing machines during the first quarter of 1955 was put at 21,519. This recorded an appreciable increase over the production of 19,152 machines in the previous quarter.

India has procured 49 semi-diesel engines from Sweden, costing approximately rupees five lakhs, for the mechanisation of fishing craft.

Thirty-two maternity and child welfare centres were opened in rural areas during 1954.

The estimated annual production of quinine in India is 140,000 lb.

The per capita consumption of sugar, gur and khandsari for the 1954–55 season (November-October) is estimated at 27·58 lb.

During April and May this year, 1,769 goods wagons, 58 passenger coaches and 28 locomotives were manufactured in India.

The total amount realized from exports of Indian tea was Rs. 131·28 crores in 1954 as against Rs. 103 crores in 1953 and Rs. 80·9 crores in 1952.

India's bicycle manufacture has rapidly increased since independence. As against a production of 48,827 bicycles in 1947 the production in 1954 is estimated at 350,000 bicycles.

- DEC 1955 MADRAS

Employees' State Insurance Scheme

SRI M. BHAKTAVATSALAM, Minister for Agriculture and Industries and Labour

The Employees' State Insurance Scheme is now in operation practically in every important industrial town in the country, viz., Delhi, Kanpur, seven places in Punjab, Nagpur, Bombay, Coimbatore, four places in Madhya Bharat, Hyderabad, Calcutta city and Howrah District, and seven places in Andhra State and has so far covered about one million workers. The scheme was brought into force in this State in January last in Coimbatore and some of its suburbs covering 100 factories and 40,000 employees working therein. The working of the Scheme for the last ten months in Coimbatore has encouraged our Government to extend it further to the factories situated in the City of Madras and its suburbs. The success of the Scheme in Coimbatore is due mainly to the co-operation we received from the employees and their trade unions and leaders. The employers too, I am very glad to say, have extended their whole-hearted co-operation. The medical profession have contributed considerably in making the Scheme a success. The Cash Benefit period in Coimbatore has also started last month and the workers have begun receiving the cash, sickness and maternity benefits also.

Medical relief under the Scheme

In implementing the Scheme in Madras City and its suburbs it was our intention to build a hospital with 100 beds and, as far as possible, to have the State Insurance dispensaries situated in our own buildings. But this seemed to involve considerable delay and in view of the pressing demand from both the employers and employees, we could not afford to wait till our own premises were ready. It was, therefore, decided that we might set up a separate hospital for the employees in a rented building with about 60 beds and in addition as a temporary measure, reserve some beds for maternity and T.B. cases in some of the existing hospitals. The dispensaries have also been opened in all the major important localities with large workers' residential concentrations. We have set up full-time dispensaries and arrangements have also been made for utilising the dispensaries maintained by one of the leading employers. Where it is not possible to set up a full-time dispensary, a mobile van will also be provided in order that the medical aid might reach the employees residing in out-lying villages. In places where there are no appreciable concentration of workers, like Tambaram, Ambattur and Red Hills area, arrangements with private doctors have also been made. Every effort has thus been made to see that medical facilities are available near the residence of the workers as far as possible. If, on the basis of actual experience, it is considered necessary to set up any more dispensary in any area, steps will be taken by the Medical Department of this State in that direction. Special lists have been appointed for giving expert treatment to workers whenever required. Facilities for pathological tests and examinations, like X-rays, blood-tests, etc., would also be provided. The medical service will include both in-door and out-door treatments, free supply of all drugs and medicines, home visits by the doctors whenever necessary, free ambulance and laboratory services and free certification. In addition to these, for female employees, ante-natal and post-natal medical care will also be provided.

Cash benefits

For providing cash benefits to employees, the Corporation has opened four local offices at Tiruvottiyur George Town, Perambur and Moun

U.N. DAY—Shri Sri Prakasa, Governor, looking at some of the photographs exhibit on the occasion

Road and one Pay Office at Chromepet. These offices have been set up for receiving the report of employment injuries from the employees in each area in order that the benefits on account of temporary disablement or permanent disablement or dependant's benefit night be paid to the employees and serious cases might be investigated. Payment of sickness and maternity benefits will also be attended to by these Local Offices. The employees, if they are entitled to these benefits, can receive the same from these offices either by presenting their claim personally or through their representatives. Provision also exists for making payments by Money Orders whenever required. The exact locations of the Local Offices, State Insurance dispensaries and the hospital have been indicated in the pamphlets which have been disributed to you all this evening.

The benefits that are available under the Employees' State Insurance Scheme at present are: Free medical aid to the employees, periodical pensions in case of temporary and permenent disablement arising out of employment injuries and, in case of death as a result of employment injury, dependants' benefit in the form of pensions, sickness benefit for 56 days in a year at about half the rate of earnings and then maternity benefit at the rate of half the earnings or 12 annas a day, whichever is higher for women employees for a period of 12 weeks. All these medical aid, disablement and dependants' benefits will be available right from the day of the implementation of the Scheme, while the Sickness benefit and the Maternity benefits are dependant on some contributory conditions and will be available only about 9 months after the first benefit period has started. The Corporation is actively considering the extension of the medical benefits to the families of employees also, and I assure the employees that a decision on this question will be reached very shortly.

Regional Boards

The one special feature of the Employees' State Insurance Scheme is that representatives of the employers and the employees have been actively associated in the administration of the Scheme at all levels, starting right from the Employees' State Insurance Corporation, Standing Committee and Medical Benefit Councils at the Centre, Regional Boards at the regional level, to the Local Committees in the localities where the Scheme is being implemented. Recently the Regional Boards have been delegated with some of the important administrative powers in order to ensure the efficient working of the Scheme. The intention is that all the benefits to employees should be made available to them promptly, whenever required, and adjustments in the various procedures could be made in the light of experience and upon the advice of the representatives of the employers and employees.

It has been the policy of the Government of India and all the State Governments to associate the representatives of employers and employees in all matters relating to industry in order that we might bring in what we may call full industrial democracy out of co-operative effort and venture and not as an individual concern. It is time that we all realised the full implications of this Policy. The workers are now equal partners with the management in the prosperity of any industry and therefore, must have a voice in its actual administration. Workers can no more be treated as tools or hirelings or mere wage-earners. Labour with technical knowledge is an important asset to the country and, therefore, has to find an appropriate place in all our plans and their execution. It is our aim to provide a living wage to each worker. Any industry which fails to provide a living wage to its employees has no right to function. The employers should regard themselves as the trustees of the industry and let them hold this trust well.

A so-called "industrial strife" in this most vital sector of our country's economy must now come to an end and we should all sit together and devise methods to promote our industrial progress to the maximum extent possible, so that we could exploit all our resources and ensure better standard of living to everybody. Through strife we all stand to lose. Through co-operation only we can achieve many things. "Let co-operation conquer" should be our new slogan. If we all co-operate and work with concerted efforts, our Nation will become strong and we will be able to carry the mission of peace, progress, prosperity and goodwill to the whole world. Implementation of the Employees' State Insurance Scheme is one more step in this direction and I hope with more and more Schemes like this our country would make rapid progress towards the attainment of a Socialist Pattern of Society which is our goal.

[From the introductory speech on the occasion of the inauguration of the Employees' State Insurance Scheme on 14th November 1955 at Madras.]

U.N. DAY—Shri Sri Prakasa, Governor, happily giving a cup of milk to a boy. Social Service organizations in the City had been grateful recipients of gifts of milk powder by UNICEF.

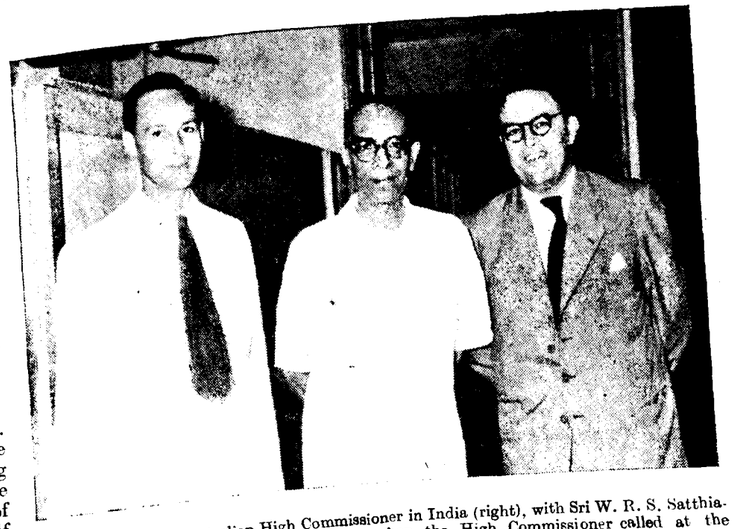
Food and Agriculture Organization

SRI P. G. KARUTHIRUMAN, B.SC., M.L.A., Member, F.A.O.

One of the most baffling problems which humanity has faced and is ven now facing is the problem of food production. And this in spite of the radical transfo mation brought about by the impact of science and technology! The Second World War brought forth in its t ain a multitude of problems which made the problem of feeding hungry millions all over the world even more difficult. The post-war problems in the world combined with political disharmony has effectively demonstrated that warding off the spectre of hunger and starvation cannot be attained by mere human ingenuity, for it involves varied and manifold factors like raising the standard of living of the people and effecting a balance between production and consumption. It is apparent that such a problem complicated in nature and global in its implications cannot be solved in any isolated fashion. The only successful basis on which the war against famine can be waged successfully is international co-operation. It is therefore significant that the Atlantic Charter that formed the basis of the formation of the U.N.O., should have mentioned food self-sufficiency as one of its objectives. With this aim in view, the F.A.O. came into existence as one of the branches of the United Nations on October 16th, 1945. There are about 70 members in this organization which has its headquarters at Rome. The Eastern branch of F.A.O. is located at Bangkok.

F.A.O.s' Service

Ever since its inception, the F.A.O. has been doing yeomen service in the cause of food production and bringing about a thorough reconstruction in the economics of the different nations of the world. The F.A.O. concerns itself not only with increase in food production but also has taken upon itself the task of raising the s andard of living of the nations, increasing the nutritive value of foodstuffs, development of forests, fisheries, sericulture, etc. Apart from devising ways and means for agricultural development it also concerns itself with the task of rural uplift in all its varied forms. Under the leadership of the present Director-General, Dr. K. Cardon, the F.A.O. has now laun hed a three-pronged attack. In the first place, it envisages regional consultation among member nations to ensure a certain measure of co-ordination in their plans, for the expansion of production. Secondly to demonstrate the possibilities of utilizing agricultural surpluses for special welfare distribution programmes, which aim at improving consumption standards, the F.A.O. has undertaken special surveys like those in Egypt and Spain. Thirdly the F.A.O. early this year, carried out a special study in India to demonstrate the possibilities of using agricultural surpluses to finance economic development in underdeveloped countries. The F.A.O. recognizes that the best way of balancing production and consumption is to expand consumption instead of restricting production, which in turn can be done by increasing the purchasing power of the poorer people, through economic development. To the realization of this end, the F.A.O. has now addressed itself. India is a member of the F.A.O. The Government of India has appointed a Committee of 13 members from all over India, who meet twice a year to discuss food problems and to make suggestions and recommendations to the Government. It also sends reports on economic development in India to the F.A.O.



Mr. Peter Heydon, Australian High Commissioner in India (right), with Sri W. R. S. Satthianadhan, Chief Secretary. Photo taken when the High Commissioner called at the Secretariat during his recent visit to the City.

Work in India

The work done by F.A.O. in India has been great and beneficial. The F.A.O. sends its experts to find out the best manure for the different soils and devise means for safeguarding plants from being infected with diseases. The F.A.O. also discusses the ways through which the Indian agricultural industry can be made to run in a profitable manner. The great interest shown by the F.A.O. in India is evident by its sympathetic attitude towards the country's Five-Year Plan, a report appraising which has been sent to the F.A.O. by its branch in India.

It is as much significant as it is heartening to find that F.A.O. is keenly conscious of the numerous economic problems affecting the under-developed countries of the world. It is here that the problems of tackling food production and raising the standard of living become acute and urgent. It is not strange that the economists and Statesmen of the under-developed countries are constantly bedevilled by the problem of increasing food production and at the same time raise the standard of living. The Eastern branch of F.A.O. located at Bangkok has contributed in a good measure towards the solution of these problems in these regions, through its expert committee. It has done great service in the fields of cattle welfare, milk supply, providing veterinary facilities and effecting improvements in deep-sea fishing. The F.A.O., by issuing pamphlets on the various aspects of the problems, has helped the people to keep themselves abreast with the current developments in the different fields. It has also done a good deal in popularizing the Japanese method of rice cultivation and it is now being successfully adopted in the different parts of India.

Fight Against Poverty

To point out the significant contribution that the F.A.O. has made in fighting world poverty is not to belittle the problems that it faces today. The effort that it has made has indeed been magnificent. But there can be no settled and categorical solution for a problem which involves factors of such a complex nature that challenge human ingenuity at every stage of the process. It is an international problem and has to be dealt with only in that way. To find an effective solution for the riddle of poverty amidst plenty would indeed puzzle the best of minds and hence nobody can say that even the F.A.O. with its brilliant part would give an effective solution for this problem. But this much can be said —thanks to the work done by F.A.O. food production has gone up by a fifth all over the world.

s of the Rumanian Trade Delegation who visited the City called on the Chief Minister Sri K. Kamaraj at the Secretariat

Do You Know That—

1. Of the three steel plants in the public sector, the first one is situated at Rourkela in Orissa. This is being developed by the Hindustan Steel Company, a predominantly Government-owned concern, working in collaboration with a German Combine. It will specialise only in flat products like plates and sheets, and is expected to come into production in 1959.

2. The second plant will be put up at Bhillai in Madhya Pradesh. It will be designed and supplied by the Soviet Union and will not produce flat products but will concentrate on heavy products like rails and structurals. Production on commercial scale is scheduled to start sometime in 1959.

3. The third steel plant is proposed to be located at Durgapur in West Bengal. A British Steel Mission has recommended this plant which will produce one million tons of ingots to be converted mainly into medium and light sections and 300,000 tons of pig iron for sale. A group of steel interests in Britain has offered to act as the main contractors. The plant is expected to be completed within three years from the date of placing orders for the equipment.

4. Although world trade in cotton textiles declined by 9 per cent during the first half of 1955 as compared with the same period in 1954, India's exports dropped by 6·1 per cent only and she continued to hold the second place in the trade. Japan and United Kingdom lost by higher percentages in their exports.

5. The Community Projects Administration has drawn up a scheme under which village leaders selected from various States will be given practical training by sending them to other project areas to enable them to study the methods adopted there.

The Place of Handicrafts

SRI J. M. LOBO PRABHU, I.C.S., Secretary to Government, Home Department

The All-India Handicraft Week, now being celebrated in Madras, should make us look backwards and forwards. The spell which India exercised on the world, through the ages, was because of her contributions first to the thoughts of men and second to their crafts. Herodotus, Pliny knew India because of the exquisite wares, which trickled by caravan routes to Europe. Venice in the fourteenth, Lisbon in the sixteenth, and London and Amsterdam in eighteenth century became outstanding cities because of the Golden East, they held in trade. Yet little remains now of the handicrafts which once gave India its position and pride. Except in the temples and mosques, there is no evidence of the manual skill, which gave concrete form to the rapturous spirit of our people. In the age of money and machine, we have forgotten the artisan, who was the origin of both.

Place in Civilisation.

The place of the craftsmen in civilisation of the world deserves to be remembered. Even in 280 B.C., a Greek writer said of the craftsmen: "They maintain the fabric of the world; in their handiwork is their prayer." Centuries later, Chesterton wrote: "Look here our dizziest spires are saying what the hands of men did in the sky. How high the hands of men could go." The instinct for self-expression is in all of us.

In the past, it was not overwhelmed by inequalities which money and machines have created. Hands were matched with hands in the ceaseless course of giving shape to better things so that men went to fairs and markets, in the spirit of discovery.

In the Exhibition on Mount Road, something of this atmosphere has been captured. In the numerous stalls, the craftsmen may be seen rendering their

Zoo Centenary—Memorial Tower erected on the occasion

dreams in brass and bronze, in stone and shell, in pith, paper, silk, glass, reeds and countless other materials. Their aim is the same, to transmute their concepts into forms pleasing to them and to others. The results take both the eye and the heart, because of the consistent note of beauty.

The Exhibition is not an end in itself. It is part of the programme of the Government of India to restore handicrafts to the place they once held in the country. Even after it is closed, the Exhibition will continue in the neighbouring Emporium, which is as exciting as the Cave of Ali Baba. Both Exhibition and Emporium should teach us how with a little money, we can acquire objects that can brighten our homes, on one hand, and remove the depression in the homes of the artisans throughout the country, on the other. There is a thought here which must not be missed; that both buyer and producer are blessed, in a coinage useful to both, the first with beauty, he himself cannot shape, the second with money he cannot otherwise make. In buying an object of art, there is a transfer of values which are personal, the possessor and producer becoming bound to each other by a token, important to both.

What I saw in the villages.

Though I was Secretary to Government for the subject, I never became conscious of cottage industries, until I went back, to the villages, as Collector. What I did not see, explained what I saw. From the green fields, the hills with waves of young trees, the sea with its ever new waves, the village habitation looks a heap of disorder and rubbish. While nature has the garment of beauty, the village has the rags of a beggar. The huts, the roads are as unkempt like the people, as if they were some runaway slaves of the lords of the land, who lived far away, in the skies, in the past, perhaps in the future. I found no touches of beauty except perhaps when newly cut hay rose in golden mounds above the mouldering earth of the village.

I searched for the secret of this drabness and dirt. I went back to the past and reconstructed the villages from such fragments as the temples of the Gods, the songs of the people, the delicate gait of the women, the innate courtesy of the men. These had survived while the fabric of daily life had vanished. The men worked in the fields as they did before, but they no longer worked in the village. They took everything from the earth, but they gave very little back to it.

They had lost the use of their hands, their heads and hearts. They worked that they may live, and they lived that they may eat. Except that the heritage of custom and the regimen of law was on them, their existence differed little from that of the animate creation round them.

Decay of Handicrafts.

Whatever reasons economists may give for the atrophy of life in the village, none is more deep or more wide than the decay of handicrafts. In the past, not only did handicrafts employ a good part of the population, but they set men to express and excel themselves. Life was full of the spirit of constant discovery and competitive achievement. In every village, different craftsmen toiled night and day that their wares had new beauty or utility. Their attitude determined the general attitude. Psychology of life derives from the psychology of work. If men pour their souls in what they produce, they also wish to see the soul in what they use. The craftsmen supplied the impulse to develop human capacities to perfection. There was no complacency. In the fields and in the houses, only the best was accepted. A whole line of foreign visitors have testified to the throbbing life in village and town, which accounted for the legend of the Golden Hind.

What destroyed the handicrafts destroyed the purposive spirit of the people. The wares and arts of the country, which lured foreigners, also introduced invasions and wars. Not only was the country looted, but peace and security departed making men indifferent to their capacities and callings, and utlimately imposing a parade of poverty and ugliness as the best defence against the strong and rapacious. The virility and variety of the Vedic age was replaced by a retreat from life, which was euphemistically called simple living. A prince here and there could patronise artists and flaunt his possessions, but the common people found their security in rags and hovels. The unemployed craftsmen, dwindled in numbers and fighting for existence lost the spirit of enterprise. In a defensive attitude, they made secrets of their knowledge, and ultimately consolidated themselves in professional castes.

Machines and Money.

The nineteenth century completed the annihilation of handicrafts by two new factors, machines and money. No doubt machines had the qualities of precision and speed. On what they produced, they could beat the craftsmen by cheapness, standardization, and even finish. If they lacked range in production, they possessed volume. The craftsman, on his part, did not meet the challenge by offering items, which the machines could not duplicate. On the other hand, he became imitative, so that all the disadvantages of the competition became effective against him. This loss of confidence was the fatal stroke on the enfeebled structure of village industries. In other countries, cottage industries survived because they relied on their quality, and took advantage of machines in everything except the basic processes of personalised production. Donegal tweeds, Venetian glass sell more than ever before because science has enabled that they are produced, packed and distributed under conditions equal to any item produced by machines. Our industries, on the other hand, became more isolated from the economy introduced by the industrial revolution, losing not only their distant markets, but also their home markets which science enabled factory production to invade.

Money was destructive of handicrafts for at least two reasons. First the factories commanded it, in a measure impossible for the craftsman. Both for production and distribution, cash and credit were available to manufacturers. The craftsmen on the other hand, who depended for their capital on a quick turnover found that dwindling sales deprived them even of the money required for buying their raw materials. Money was destructive of handicrafts also because it was mostly in the hands of new consuming classes, who had little sense of values. At the same time, old patrons, the privileged classes, with the sense of inherited values, had less and less to spend. Even in the villages, the advent of money ended the system of barter which had assured before some exchange of wares. That the money available in the villages was inconsiderable being barely equal to necessities practically closed that market.

Converting Luxuries into necessities.

The question may be raised if expenditure on items which are not necessities, is socially desirable. The answer is first that civilisation is a process of converting luxuries into necessities, so that the human spirit is cushioned against hardships and can reach for new values. The difference between the thoughts of the caveman and eighteenth century philosopher is that the latter knew comfort for the body and could look at new horizons

(*Continued on page* 15.)

) Zoo Centenary—Enthusiastic visitors at the photo exhibition

Progressive Painters' Exhibition

There are certain manifestations which proclaim the soundness of the health of a nation. Where human minds are free, those minds gradually become creative. Creative minds have a way of flourishing in varied forms and in various directions—literature, music, painting, sculpture, in short all those that bring about "selfless joys that elevate the spirit and taste of the joy of living." Huge chimneys belching smoke, or arrays of 16 inch guns by themselves do not proclaim the health and soundness of a nation. Guns without music halls, without art galleries, without songs, dances and drama would make the minds so captive that humanity would revert to those primitive days—"grab and eat, grab and enjoy".

Sri K. C. S. Pannikker put it in other words: "It is truly the arts that are the crowning glory of a culture and even the civilization the world is aiming at. You need pictures, you need songs, you need the dance and you need a few more of these truly selfless joys to elevate your spirit and taste of the joy of living".

These thoughts sprang to mind when the paintings exhibited at the Twelfth Annual Exhibition of the Progressive Painters' Association began to take hold of you, feasting the eyes and stimulating the minds. The Exhibition was opened at the beautiful hall of the School of Arts and Crafts by Sri Devi Prasad Roy Choudhuri, Principal of the School of Arts and Crafts in the unavoidable absence of Shri Sri Prakasa, Governor. Something is really happening in the art world of Madras. That is evident to one who has visited at least a few of the exhibitions arranged under the auspices of the Progressive Painters' Association and by the senior students of the School of Arts and Crafts over the years.

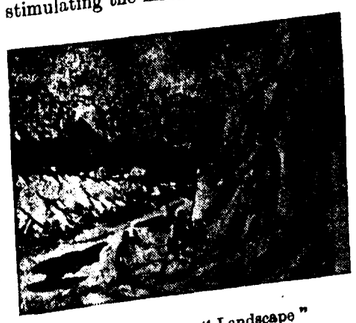
Said Mr. Paniker in his welcome address: "Madras, I have often felt, stands on the threshold of a new era in painting just as the rest of our large country. Our younger painters are slowly learning to free themselves from thoughts which are not helpful. They are keeping in close contact with world trends in art and are at the same time being naturally drawn to their own rich and varied tradition for a fuller expression of their inner selves. People in Madras will be happy to know that the Government of India during their award of scholarships to young artists this year placed three young artists of the Madras School absolutely at the top as first in rank and equal in merit. To those of us who have tended to feel that the best in art can only be from elsewhere, this little bit of news should be encouraging."

Now a word about the paintings and sculptures. Mr. Edgar Albin, Professor of Fine Arts, Arkanaas University of America, was right when he said that there was a dynamic realisation of the power of colour in the Modern Art Movement in India particularly in the Art of the South. There is an array of colourful work in oils, water colour and tempera.

The oil medium seems to assert itself because of its apparent suitability for progressive experimentation.

The present exhibition marks a definite advancement in the concept of creative art compared to previous

S. Dhanapal—"At the Aquarium"



K. P. Ellappan—"Landscape"

R. Krishna Rao—"Village Road"

Henry Daniel—" Pigeons "

exhibitions of the Association. A few transparent water colours exhibited are of high standard comparable to the best anywhere.

Anthony Doss's "*Tiruttani*", Surendranath's "*Kashmir Study*" and Pichai Raj's "*After the rain*" are typical examples.

The tempera medium in landscape has been well exploited by Sri V. D. Govindaraj and Shri Shanti Shah.

Sri A. P. Santhanaraj's vigorous portraeture can be seen at its best in "*Miss Vasantha Balaji*" and "*Portrait of Mrs. Bloncuist*".

Muthuswamy's monochrome sketch "*Portrait*", Krishna Rao's "*Head study in Charcoal*" and Ramamurthy's "*Figure Study*" deserve special mention. Composition in the oil colour medium, such as Sri K. C. S. Panikar's "*Tala Bearers*" and P. K. Prabhkar's "*Infant*" are both Indian and worldwide contemporary.

Figure compositions in tempera with a very Indian and modern flavour are provided in Sri Dhanapal's "*Aquariam*" and Sri P. L. N. Murthy's "*Ram Kishore*". Sri Dhanapal is also represented ably by his portrait of E. G. Rey and a Terracotta "*Dance of Shiva*".

Shri H. V. Ramgopal has a beautiful colour sketch in oils on view titled "*The Circus*", Sri R. Krishna Rao's "*Pachiappa's corner*", Shri Victor's "*Cutting the Grass*" are examples of work in fluid water colours. The notable among the other painters are Ellappan and Muthuswamy. The former's landscapes are naive and delightful. A. C. Mammen and Joseph are also young painters who are making headway. Shri Mammen's "*Huts under the Trees*" and Joseph's "*At the Pond*" show a sensitive use of colour.

"*Kathakali*" by Sri K. M. V. Nambudri is another pleasing work. The artist has successfully captured the subtle nuances of expression so characteristic of Kathakali poses.

There are a few examples of Commercial Art also. Notable among them are Shri Oommen's show cards, Moulana Jan's "*Cover Designs*" and Narayanan's "*Book Cover*".

A few more words have to be added. Regarding encouragement to the Artists and the role of the Government and public bodies in this connection, Sri R. Krishna Rao, Honorary Secretary of the Association, had something to say which deserves consideration.

Said Mr. Krishna Rao: "The main source of encouragement to the artist will be purchase of his paintings. This can be done by the State through the consultation of an Artist Council to be set up by the State. A portion in the Annual State Budget may be set apart for this. At present the State spends a good amount on erection of buildings for educational and public purposes. The municipal councils do similar works. A fair percentage is allocated to practising architects to design and supervise the constructions. We suggest that an one to two per cent of the total expenditure may be allocated to the Artists' Fund for erection of mural, sculpture, etc., Public institutions, insurance companies, factory owners, planters, etc., are to be convinced that it is vital that they earmark a portion of their total budget in the year for artists' work. The Government of India have already started in this direction.

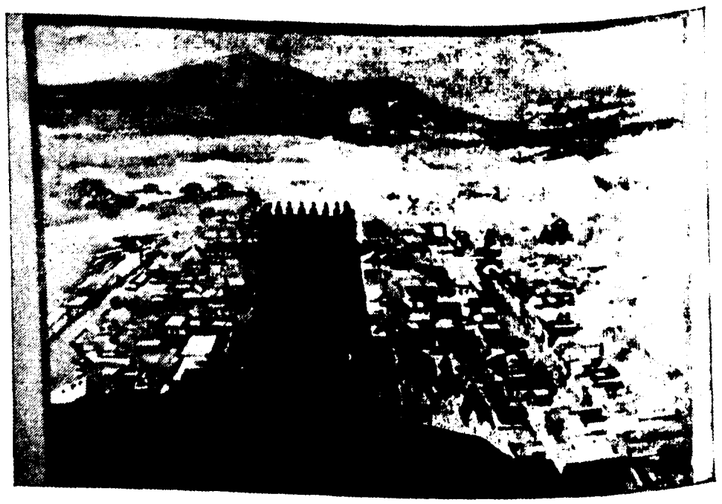
"Further a fair rebate may be allowed to all tax-payers in the Sales Tax and Income-tax departments who have spent a portion of their receipts on giving commissions to artist, by way of purchase of his works or asking him to do a mural or sculpture.

"Compulsory legislation may be made so that the municipal councils, district boards, educational institutions and public bodies allocate works to the artists on these subjects, so that an art gallery will be started in each city as an added attraction, and the artist will be benefited thereby. The State will consult the Artist Council on all matters of art projects, like erecting a mural, sculpture, a portrait, etc.

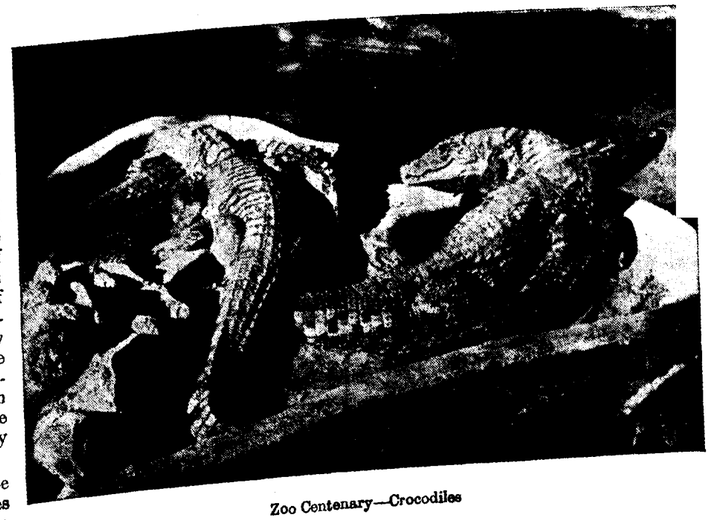
"Lastly in all these matters the co-operation of the Press in giving due publicity to the artists' work is very important. The Press must consider his labours as essential.

"Finally the State should recognize the artists' status in the society. As I have said he is the real ambassador never to be forgotten. He must not be an unknown soldier in the struggle of mankind."

Of course to a great extent this is true. But one fundamental fact should never be forgotten. It will be forgotten only at the peril of true creative art. All true artists, true literary men, true thinkers are in a deep human sense, above all organizations, including the super organization, the state. The creative artists' mind is the forge for shaping civilisation. Let this long-term objective, the judgment of unborn generations, of history, be not forgotten.



R. Krishna Rao—" Aerial view of Tiruparamkunram "



Zoo Centenary—Crocodiles

(*Continued from page* 12)

for the spirit. In the twentieth century, spiritual conquest is not the monopoly of the few, because reasonable standards of living enable masses to partake of the larger life of the mind. Secondly if consumption of luxury gratifies the rich, their production supports the poor. An austerity plan of only necessities would injure the poor more, because the employment of many would be gone. Economic evolution therefore is a continuous conversion of luxuries into necessities, so that there is full employment for the growing population accompanied by steady increase in standards of living.

In the circumstances, the revival of cottage industries, is first a matter of rediscovering old values, second of giving the craftsmen a new confidence in themselves, and third of making science and finance change to the position of freindly allies. The State is now aware that this should be done. The chain of Handicrafts Emporia are teaching people what lovely things human hands can produce. The departments of industries are striving to modernise designs and technique and fix standards and specifications. For creating new confidence, the craftsmen require the as surance of a fair and steady demand. Perhaps State purchase of articles at a declared price for specified standards, could introduce the confidence necessary to make the craftsmen render their best.

Handicrafts are important not only to the craftsmen, but to the villages and the country. At present, the economy of our villages is lopsided and impoverished, being completely dependent on what the earth can produce. As and when village economy becomes more diversified, the entire economy of the country will be enriched. Towns and cities, tradesmen and professional classes progress and culture have their roots in the larger population of the villages. Their efflorescence in towns depends on these roots being nourished, as they only can be, when village life is rich and varied. The craftsmen can not only bring back the spirit of enterprise to the village, but can convert the idle time of the people into new assets the country needs. Every man and women threrefore should think of handicrafts, as agents vital to build a new order, in our times, for our country.

[*Broadcast from the Madras Station of A.I.R. on 28th September* 1955. *By courtesy, A.I.R.*]

The Institute of Veterinary Preventive Medicine and Improved Vaccines for cattle Preservation

SRI V. R. RAJAGOPALAN, G.M.V.C. DIP. BACT. (Manchester), Director of Animal Husbandry, Madras.

Cattle and other animals are subject to attack and death from a number of contagious and infectious diseases. They could be saved by the timely application of vaccines and sera. Some abscure diseases could also be detected by the application of certain extracts. The demand for these protective and diagnostic products collectively called "biological products" has steadily increased with the progressive awakening of the people to the realization of the potentialities of the timely application of these products.

There are any number of paradoxes in our Country. One is the simultaneous worship of the cow with its callous neglect. One can see famished cows eating paper in this country. But now thanks to the all embracing New Life Movement in our country, all that is changing. In this page you read about an Institute doing silent work, which will bring about a new deal to the dumb cattle of our State. Scientific rearing of cattle will bring about a perceptible change, particularly in the rural areas. It will have its effect on agriculture, the health of the people, and their general economic condition. It is time we turned our attention to the working of Institutes like these in our own country.

The Origin of the Institute

All the biological products required for the control of the cattle epidemics in this State were used to be purchased from the Indian Veterinary Research Institute, Mukteswar. But prompt supplies of these products could not be obtained in required quantities in times of need and the distance and transport time reduced the life of fragile biological products to critically narrow margins. The Madras Government therefore decided to open an Institute of their own to ensure prompt supplies of biological products in adequate quantities. The Institute of Veterinary Preventive Medicine was therefore established in April 1932 within the precincts of the Madras Veterinary College and was then called the Madras Serum Institute.

Zoo Centenary—Monkeys

During the early stages due to limited resources, only Rinderpest vaccine and anti-Rinderpest Serum were manufactured at this Institute; this was because Rinderpest was killer-I causing heavy mortality among cattle and also because the vaccine was most fragile and best produced locally. It was thus possible to control outbreaks of Rinderpest promptly with the products manufactured here. Incidentally there was a great saving on what it would have cost had the vaccine been imported from elsewhere.

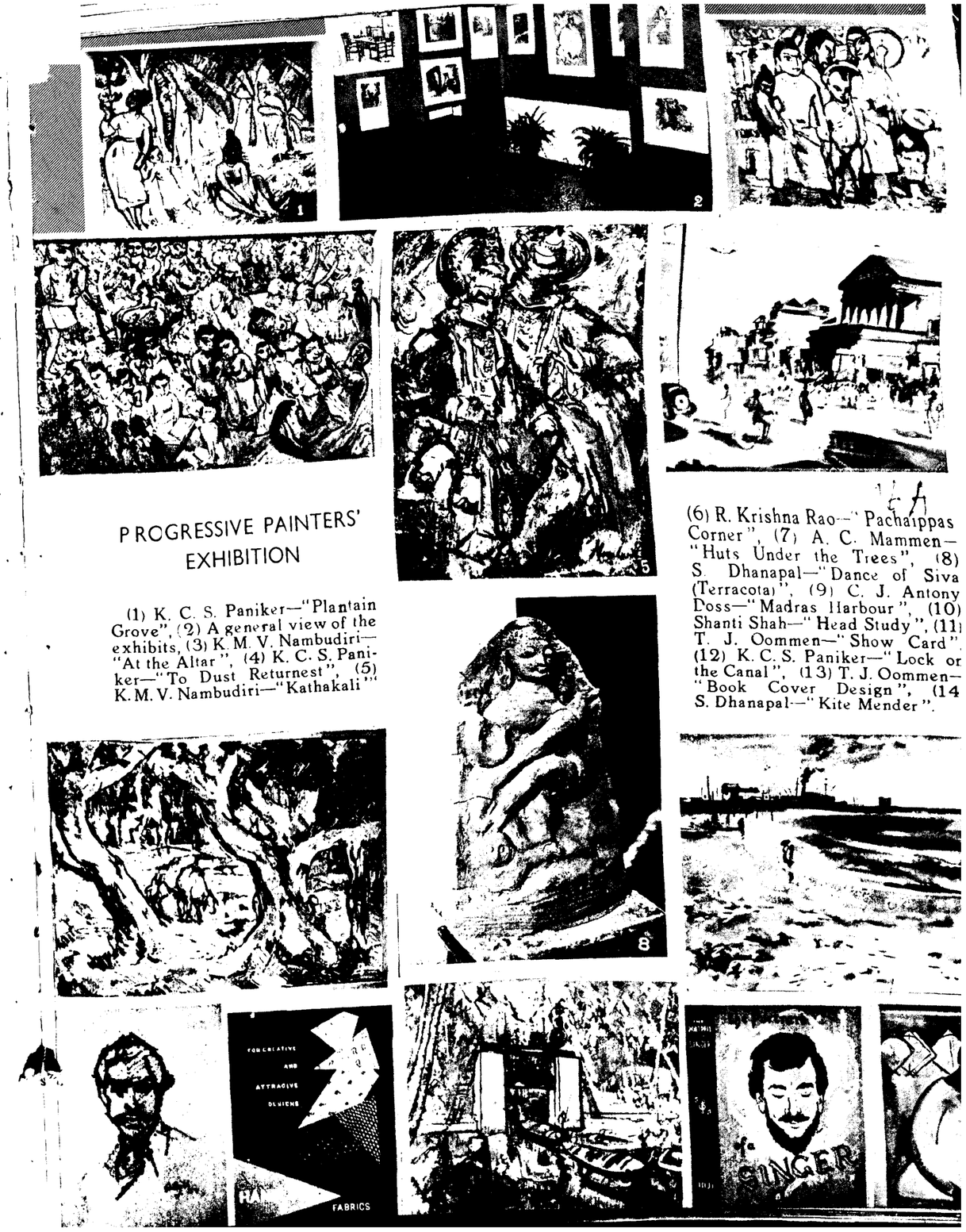
Having realized the economic advantage to this State in maintaining this Institute the Government were pleased to keep the Institute on a permanent basis and manufacture and supply of products for the control of other contagious diseases of livestock was subsequently taken up.

In 1942 due to war conditions the Institute was shifted to the Agricultural College, Coimbatore, where it functioned for six years till March 1948.

When the present buildings at Ranipet became available the Institute was shifted from Coimbatore. Since coming here the activities of the Institute have expanded and in addition to the manufacture of the various biological products required for the control of almost all the important contagious and infectious diseases of the livestock, research on some of the cattle diseases has also been undertaken.

A New Strain Evolved

Experimental study and production of some new biological products such as Lapinised Rinderpest Vaccine, Anti-Anthrax Serum, Anthrax Spore Vaccine and Brucella Abortus Vaccine and Antigens have been in progress at this Institute for some time past. As a result of these studies it has been possible to evolve a new strain of Lapinised Rinderpest Vaccine at this Institute. This has been tested on local breeds of cattle and buffaloes and has been found to be quite safe and potent. This has to be tested on foreign breeds and other breeds of cattle highly susceptible to Rinderpest



PROGRESSIVE PAINTERS' EXHIBITION

(1) K. C. S. Paniker—"Plantain Grove", (2) A general view of the exhibits, (3) K. M. V. Nambudiri—"At the Altar", (4) K. C. S. Paniker—"To Dust Returnest", (5) K. M. V. Nambudiri—"Kathakali" (6) R. Krishna Rao—"Pachaippas Corner", (7) A. C. Mammen—"Huts Under the Trees", (8) S. Dhanapal—"Dance of Siva (Terracota)", (9) C. J. Antony Doss—"Madras Harbour", (10) Shanti Shah—"Head Study", (11) T. J. Oommen—"Show Card", (12) K. C. S. Paniker—"Lock on the Canal", (13) T. J. Oommen—"Book Cover Design", (14 S. Dhanapal—"Kite Mender".

PRESIDENT'S VISIT TO OUR STATE

Dr. Rajendra Prasad, our revered President, visited our State recently. He fulfilled a number of engagements in the City and at Rajapalayam and Karaikudi in Ramanathapuram District. In the City he inaugurated the Employees' State Insurance Scheme, laid the foundation stone of the Mechanical Filters at Kilpauk Water Works, visited the Thakar Bapa Vidyalaya, and participated in the Kambar Day Celebrations at Rajaji Hall. At Rajapalayam, he inaugurated the Gandhi Kalai Manram and at Karaikudi, he laid the foundation for the Alagappa Polytechnic. The President also addressed the people and met children at a Raj Bhavan Party. In this page you see the pictorial record.

SCENES OF NEW LIFE AT ORATHANAD AND THAMBIKOTTAI

Sri M. Bhaktavatsalam, Minister for Agriculture, recently visited Orathanad and Thambikottai in Pattukkottai Agricultural Division of Tanjore District. He addressed public meetings, planted seedlings and inaugurated the exchange of seeds for grains for village seed farms. There was also a meeting of the State Livestock Board. The dances of the young show the joy of living slowly replacing gloom in our Country side.

after which it may be used for protecting cattle highly susceptible to Rinderpest. Anti-Anthrax Serum manufactured at this Institute is now being successfully used in the field for control of Anthrax in livestock. Anthrax Spore Vaccine and Brucella Abortus Vaccine and Antigens are now being manufactured and supplied to the staff on an experimental basis and these products have been used in the field with encouraging results.

Adjuvant vaccines for Haemorrhagic Septicaemia with different adjuvants like liquid paraffin and lanolin, Shell ondina oil and Alum have been manufactured and tested at this Institute and the results are encouraging.

Experiments to find out the efficacy of Sulphamezathine, I.C.I. 33-1/3 per cent solution in the treatment of Haemorrhagic Septicaemia in cattle have been conducted at this Institute and the drug has been found to be efficient in specific doses if the treatment is given sufficiently early before the disease becomes septicaemic.

An anaculture of Cl. Welchii is being prepared in this Institute and supplied to the staff for control of Enterotoxaemia in sheep. This vaccine is found to be very efficient and encouraging results about the same have been received from the field staff.

A vaccine for the control of Johne's disease in cattle is under production and awaits application on a large scale in the field.

F.A.O.'s Help

A Veterinary expert of the Food and Agriculture Organization of the United Nations was working at this Institute for more than a year giving necessary training to the members of the staff of this Institute in the manufacture of biological products in a freeze dried form. The Food and Agriculture Organization has also supplied this Institute with some modern equipments consisting of a Centrifugal Freeze Drying machine and other apparatus which are very useful and essential for manufacturing products in a freeze dried form for improving their efficiency and keeping qualities. With the help of these equipments, vaccines against Rinderpest, Ranikhet Disease, Sheep Pox and Fowl Pox are now being freeze-dried and stocked in deep freeze cabinets at 20°C and supplied to the field staff in powder form in vacuum sealed ampoules. The normal period of viability of these vaccines particularly that for Rinderpest and Ranikhet disease is very short, e.g., seven days for Rinderpest and two days for Ranikhet disease. Even to maintain this short life, special precaution had to be taken. The Ranikhet vaccine for instance had to be transported in ice by special messenger. But now through the new process the period of viability has been increased to over two years. The bulk has been reduced and they could be transported over long distance by ordinary post and at very much lesser cost.

Two new schemes for (1) improving the technique and method used in the manufacture of virus vaccines and (2) improving the Haemorrhagic Septicaemia and a mixed vaccine for Haemorrhagic Septicaemia and Black Quarter, partly financed by the Indian Council of Agricultural Research have been sanctioned for being worked at this Institute.

In addition to the supply of all the biological products required for the control of contagious and infectious diseases of livestock in the Andhra State, this Institute is supplying as and when possible products to Coorg, Travancore-Cochin, Kutch, Bombay and former French Indian Territories.

Rinderpest Controlled

Madras State has been free from Rinderpest for the last so many years and this is not a little due to the prompt and timely supply of the necessary biological products from this Institute. The Institute will be one of the laboratories which will contribute vaccine for the successful implementation of the All-India Plan for Rinderpest eradication.

Financially, the establishment of this Institute has proved to be a sound one as all the products required for use in this State are being manufactured here at a cheaper cost than what the Government would have had to pay if these products were obtained from elsewhere.

Due to the economic manufacture of the various biological products in the most modern methods at this Institute it has been possible for the Animal Husbandry Department to effectively control the various contagious diseases that have been taking a very heavy toll of livestock in the State annually and thus contribute substantially to the ultimate noble goal of peace and plenty envisaged in our national development plans. The Institute is to be raised to the status of a full fledged Regional Research Institute during the Second Five-Year Plan and it is mature enough to undertake this high responsibility.

Zoo Centenary—Rhinoceros 'Kushal'

District Livestock Farm, Malabar

A Livestock Breeding Farm has been opened at Thiruvazhamkunnu Village of Walluvanad Taluk of Malabar District. The farm is styled as District Livestock Farm, Malabar, and is under the Animal Husbandry Department of Government of Madras. The farm is in charge of a Superintendent and all communications intented to the farm should be addressed to the Superintendent, District Livestock Farm, Thiruvazhamkunnu (Post) (via) Mannarghat, South Malabar.

Brief Description

The Farm presents a panoramic view, situated right at the foot of the Western Ghats. The area was originally Revenue Forest and has since been reclaimed and still a good portion of the Farm area remains as forest. The total area of the Farm is about 380 acres, the area is uneven with many mounds simulating miniature hillocks alternated with valleys. The area receives about 116 inches of rainfall which are received mostly under the influence of the south-west moonsoon and early north-east monsoon. Thus, about five months in a year are rainy months followed by a short winter of about a couple of months and hot climate prevails for the remaining about five months.

Objects

As the cattle and buffaloes found in Malabar district are poor specimens, the main object of this Farm is to study the behaviour of buffaloes and cattle of standard breeds under the peculiar climatic conditions of the district and to issue pedigreed bulls of acclamatised strains of standard breeds of buffaloes and cattle for the improvement of the buffaloes and cattle in the district. For this purpose, Murrah breed and Dharwar breed of buffaloes and Scindhi breed of cattle are being maintained.

The district of Malabar is singularly lucky in having a better type of goats as compared to other districts of this State. This Farm, therefore, has taken up goat breeding also so as to study the behaviour and potentialities of the goats now found in the district and to formulate plans for further improvement by evolving a distinct breed which will breed true.

The farm also aims in studying Crop Husbandry, including pasture management, with a view in main to meet the requirements of the stock maintained on the Farm.

Achievements

The farm was started during the year 1950-51 but the actual stocking of livestock was done only at the close of that year. Thus the farm has completed four full years of existence with the official year ending 31st March 1955. The following data will be of interest.

Serial number and particulars. (1)	1951-52. (2)	1952-53. (3)	1953-54. (4)	1954-55. (5)
I. Cattle and Buffaloes.				
1 Total number of cattle and buffaloes maintained during the year.	104	130	163	145
2 Total number of bulls issued for breeding.	3	..	9	10
3 Total number of cattle auctioned.	..	2	10	3
4 Total quantity of milk produced.	70,975 lb.	84,640 lb.	96,428 lb.	101,831 lb.
5 Total quantity of milk sold to the public.	52,838 lb.	52,459 lb.	66,800 lb.	67,900 lb.
6 Total quantity of ghee sold to the public.	..	50 lb.	..	728 lb.
7 Number of outside buffaloes and cows served by Farm bulls at the Farm site.	4	45	33	10

Remarks.—Item numbers 3 and 6 are only incidental items and will, therefore, be available only occasionally, while 2, 5 and 7 are always available to the public.

II. Goats.				
1 Total number of goats maintained during the year.	45	71	109	129
2 Total number of bucks issued for breeding.	5	1	3	13
3 Total number of goats auctioned.	..	17	21	15
4 Total quantity of milk produced.	3,591 lb.	4,601 lb.	10,524 lb.	12,026 lb.

Remarks.—Item No. 3 is only occasional and the milk also is only occasionally available for sale.

III. Fodder.				
1 Quantity of green fodder ensiled.	149,390 lb.	116,960 lb.	260,877 lb.	327,450 lb.
2 Total quantity of hay produced.	70,200 lb.	100,000 lb.	93,135 lb.	178,660 lb.

The Madras Co-operatives and the Silk Handloom Industry

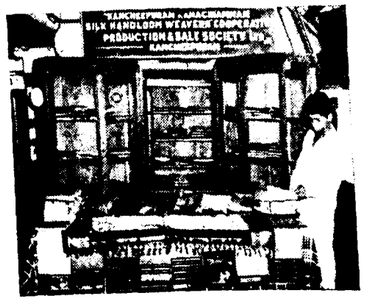
SRI A. PALANIAPPA MUDALIAR, Registrar of Co-operative Societies

The silk handloom industry is an important cottage industry of India. Silk has its votaries in all sections of the people. No festive occasion—a wedding or some other occasion of revelry—is celebrated without the use of silk in some form or other and even the poorer sections of the population make it a point to purchase some piece of silk for use on festive occasions. The relatively high cost of the silk fabric and the sense of dignity and charm which it imparts to its wearer, make silk the favourite of the richer classes of society. It may be said that generally a person attired in silk assumes—though perhaps unconsciously—an air of importance and impresses the observer as one "well-bred."

An Old Occupation

Silk weaving is as old as cotton weaving in this country. A large number of handlooms were weaving silk fabrics all over the country especially in Bengal, the Punjab, Assam, Uttar Pradesh, Bihar and Madras and the former princely States of Mysore and Kashmir. Bengal alone employed one million persons in this industry before 1915. The industry was little affected by the Industrial Revolution and the cheap imports from Lancashire in the nineteenth Century. But it suffered a severe setback after the Great War (1914—1918) on account of several reasons. There was a large import of artificial silk into this country. This set up a serious competitor to pure silk especially in point of price. There was a definite shift of tastes and dress habits of the people and the public welcomes plain laundered garments. Arising as a result of the low level of income, a craze for simplicity was also in evidence. The silk industry thus faced a steady decline and centres of silk weaving like Poona, Kornad, etc., were hard hit by the development of these unfavourable conditions.

In the Madras State, the silk handloom industry thrives in isolated pockets in several centres like Kancheepuram in the Chingleput District, Kumbakonam and Mayuram in the Tanjore District, Tiruchirappalli, Madurai, North Arcot, Coimbatore and Salem Districts. The pattern of employment of weavers obtaining in the industry closely follows that which is prevalent in the cotton handloom industry. Broadly, there are two categories of silk handloom weavers, viz., the independent handloom weaver and the weaver working under a master-weaver. Due to the poor condition of the average silk weaver and the need for a large outlay to carry on production, it may be safely assumed that the number of independent handloom weavers in the silk industry is not large, the bulk of the weavers is therefore working under master weavers. A master-weaver provides raw material to the cooly weaver, sets patterns for production and takes up the responsibility for marketing the goods thus produced. He pays wages at rates which will bring in maximum profits to him and does not give the actual producer a share in the profits. The "master-weaver-Cooly weaver" system has not been conducive—but positively detrimental—to the permanent betterment of the poor silk handloom weavers. The profits in silk trade are larger than in the cotton handloom trade, and the workers rightly feel that they are denied a fair share of the fruits of their toil.



Emporium of Kancheepuram Silk Weavers' Co-operative Society

Kancheepuram Weavers

In Kancheepuram there are about 5,000 silk handloom weavers. One hundred and twenty merchants trade in silk in that place and its neighbourhood. About 1,500 of the weavers ply their profession independently. They purchase raw silk out of their own sources or with funds borrowed at perhaps high rates of interest, convert it into finished goods and sell them to merchants at rates dictated by the latter. More than three thousand weavers work for master-weavers and merchants and earn wages which are often not adequate. Steps were therefore taken to organize them on a co-operative basis so that they might enjoy the benefits of co-operative efforts and be freed from the stranglehold of the master-weavers. The steps taken are indicated elsewhere in this article.

The Governments—Centre and as well as the State—have been pleased to realize the importance of the silk handloom industry and are taking steps to rehabilitate the workers engaged in it. The Government of India constituted a body called the Central Silk Board and made it responsible for the development of this cottage

industry. The resou rcesavailable with this body were, however, limited. It was therefore suggested that assistance from the cess fund constituted for the development of the handloon industry should be made available for fostering the silk industry as well. The Standing Committee of the All-India Handloom Board considered this matter and recommended to Government that the Central Silk Board might be made responsible for the development of silk up to the stage of weaving and the All-India Handloom Board for all aspects from the stage of weaving. This recommendation has been accepted by the Government. Assistance from the Cess Fund has, therefore, been made available for the silk handloom industry broadly on the lines of the general principles applicable for the cotton handloom industry. Weavers organized into co-operatives will be eligible for assistance. Interest-free advances may be given from the Fund to weavers to enable them to pay their share capital and join the societies. The silk weavers co-operatives are also eligible for loans towards their working capital. Assistance may also be sought from the fund for the supply of accessories connected with silk weaving.

External Marketing

In order to stimulate the sale of silk, the All-India Handloom Board resolved that the marketing of silk handloom fabrics overseas should be dovetailed with the external marketing scheme for cotton handloom fabrics and that a sum of Rs. 50,000 should be initially sanctioned to enable samples of silk fabrics being bought and sent to the Handloom cloth marketing officers appointed under the external marketing scheme so that they might explore the possibilities of marketing such fabrics. Government accepted this recommendation and promised to sanction a sum of Rs. 25,000 for this purpose in 1955–56.

In the Madras State, schemes have been formulated for forming co-operative societies for the benefit of silk handloom weavers and are under the consideration of Government. A scheme for the formation of a co-operative production and sales ociety for the silk handloom weavers at Kancheepuram under the Cess Fund Schemes has been approved by Government. To start with, a provision was made for the admission of 120 members. The value of each share is Rs. 100. Twenty-five per cent of this amount should be contributed from the weavers' own resources and the balance will be contributed by the Government as interest free advance from the Cess Fund recoverable within two years. Provision has also been made to give working capital at the rate of Rs. 500 per loom. The scheme envisages supply of looms and accessories, charkas, warping frames, reeds, healds, etc., to the members. Its total cost amounts to Rs. 69,700 under loans and Rs. 22,338 under grants. The society formed under the scheme was started on 6th March 1955.

Kancheepuram Society

The area of operations of the society extends to the municipal limits of the Kancheepuram town and Thirukalimedu Sevilimedu, Orikkai and Vaiyavoor villages. There are 124 members on the rolls of the society with a paid up share capital of Rs. ,465. Seventy-five silk handlooms are working for the society. Government have sanctioned a loan of Rs. 60,000 to the institution towards its working capital. The society purchased materials like raw silk, processed silk, warp, gold thread, dyes and chemicals to the value of Rs. 12,040 for distribution to its members. It produces sarees of 6 to 9 yards length, pavadais and blouse pieces. The total value of goods produced and sold upto the end of August 1955 (four months' accounts) amounted to Rs. 21,429 and Rs. 16,404 respectively. The value of stock on hand was Rs. 7,569. Theaverage earning of a member of the society ranges from Rs. 40 to Rs. 45 per month. Government have sanctioned a Co-operative Sub-Registrar and two Senior Inspectors free of cost for work connected with the society. The society produces cloth of good quality. The purchasers of its products include the Madras State Handloom Weavers' Co-operative Society, the Handicrafts Emporium and the All-India Handloom Board.

There is a proposal to extend the activities of the Kancheepuram Silk Weavers' Co-operativeSociety by admitting 100 more looms and establishing a pattern weaving unit as an adjunct to it. One other proposal to benefit independent weavers in that town relates to the formation of a marketing co-operative society. The function of this society will be to arrange for the sale of finished goods of independent weavers on an agency basis. One hundred independent weavers will be admitted as members. Provision will be made for advancing up to 75 per cent of the value of the shares as interest-free loan from the Cess Fund to the members.

Schemes for more Societies

Schemes for the starting of silk weavers' co-operative societies in Kumbakonam, Thirubhuvanam and some other places are under the consideration of the Government of India.

Silk Handloom Weavers at work.

Control of Cattle Diseases: Students' Part

Dr. R. KRISHNAMURTHI, G.M.V.C.

Prompt attendance and timely adoption of preventive measures are necessary for efficient control of contagious diseases. Hæmorrhagic Septicæmia of cattle, popularly known as Malignant Sore-throat or "தொண்டை அடைப்பான்" in Tamil, is one of the scourges causing heavy losses particularly amongst buffaloes, but can be controlled quickly and efficiently if prompt measures are taken by immunising healthy stock against the disease through Preventive Inoculation. This disease broke out recently in Tambaram of Saidapet taluk and by the time the report on its prevalence was made, some deaths had occurred and therefore timely action to protect the animals in and around the area was necessary. The Principal and students of the Madras Veterinary College jumped at the idea of their taking control of the situation and accordingly a team of 25 students led by the Professor of Medicine and the District Veterinary Officer marched to the scene. The college van was handy and enabled the party to visit a large number of villages and hamlets. They divided themselves into three groups and covered the entire area. The vaccination was done from house to house as all the animals could not be gathered at a central place. A few hours of concentrated team work of the students resulted in a good number of animals being protected against the disease much to the relief and immense satisfaction of the villagers and the village panchayat boards.

The team of final year B.V.Sc. students of the Madras Veterinary College engaged in mass vaccination against cattle disease in Tambaram area on 3rd October 1955.

A batch of students engaged in vaccination

Our Literary Heritage

Tamil Literature: The Modern Period

SRI T. S. AVANASHILINGAM CHETTIAR, M.P.

Tamil is perhaps the most ancient among the spoken languages of the world. Tamil has also a very ancient literature and culture of which any people can be justly proud. The earliest extant work Tolkappian dates back to about 500 B.C., earlier books having been lost. In the course of the last 2,500 years, the Tamil language has produced some of the most outstanding literary works, the well known among them being *Kural*, which belongs to the second century B.C., which is perhaps one of the greatest codes of ethics of all times and has been translated into many of the great languages of the world, and *Kamba Ramayanam* which is majestically conceived and exquisitely furnished. There are other works, many of them devotional, leading up to Subramania Bharati, the poet of modern renaissance. But mere wealth of ancient and medieval literature is not enough in modern times. A language is a living expression of the progress of the thought and life of a people and as such Tamil should also grow in richness and variety according to the needs of the times.

Vitality and Growth

The growth of a language or its richness can be measured in various ways. The number of newspapers, magazines in a language, the variety of subjects that they cover as well as the extent of their circulation is one yard-stick for measuring the growth of a language. The number of books published and the variety of subjects it covers is another way of measurement. The number of great writers, poets, short-story writers, essayists and scientists that it produces, as well as the spiritual awareness that it develops in a people are more vital, though difficult to assess in terms of statistics. But measured by any yardstick, Tamil seems to show signs of vitality and growth in every sphere, and with the present changed circumstances, bids fair to become one of the greatest languages in India. Giving a few statistics as collected by the Press Commission recently appointed by the Government of India, there are ten dailies, one of them with a circulation of over 64 thousand, and others with a lesser number. There are 79 weeklies, 42 fortnightlies and 148 monthlies covering all sorts of subjects such as religion, literature, social uplift, market reports, film, education, medicine, social welfare and uplift, labour, agriculture. Of the weeklies *Dinamani Kathir* is supposed to have the largest circulation reaching to a lakh with *Kalki* and *Ananda Vikadan* coming to about sixty and fifty thousand. Of the monthlies, *Kalai Magal*, *Kummudam*, etc., have circulation over twenty thousand.

Cultural Awakening

All these magazines, monthlies, weeklies, bi-weeklies and fortnightlies represent certain trends existing in the minds of the people. With political awakening has come naturally a cultural awakening, a certain pride in our past greatness and with it a revival of our religion and a greater appreciation of the richness of our ancient heritage in literature. Much of our literary output naturally gives expression to this revival. Along with it also has come a new consciousness that our ancient literature, great as it is, is insufficient for the modern times and in addition we must develop knowledge of modern science, technology, etc. The first current of thought is represented by many magazines like *Sri Ramakrishna Vijayam*, *Siddhantam*, etc. The later idea, though largely accepted, form for it has been given by the Tamil Valarchi Kazhagam, called in English the Tamil Academy. This institution which came in the wake of independence in 1947, has taken upon itself the task of bringing out a comprehensive encyclopædia in Tamil, on the lines of the Encyclopædia Brittanica in ten volumes. Its contents will comprise of all subjects ancient and modern, such as agriculture, anatomy, biology, botany, geography, geology, mathematics, medicine, physics, psychology, statistics and surgery. About two thousand persons, experts in their own field, will contribute articles on various topics. It is expected to cost about nine lakhs of rupees. In order to bring this monumental work within the reach of a large number of institutions and individuals, the price has been fixed at Rs. 250 per set, though this will result in a net loss of about six lakhs of rupees. To make it easily readable it will also be largely illustrated. The first volume has been published and it has been very well received and other volumes are expected to follow. This is perhaps one of the largest attempts in the development of our Indian languages.

There is also another current in the field of literature which may be considered protestant or negative. I refer here to the type of literature termed somewhat loosely as self-respect literature. This mainly consists of negative ideas aimed at creating differences between the higher and lower castes between north and south and also aims at creating contempt for religion. The people who read this literature may not be many, but yet form a vociferous minority. There is also another negative current, which the State must hasten to counteract, namely pornographic and cheap sex literature in magazines, pictures, etc. There is another kind, usually intended for children and young minds in which usually excitement based on violence, crime and sex is the objective. These are disturbing features which unless counteracted early, will result in giving a wrong turn to the growth of our children. Enlightened public opinion as well as the State should devise ways and means of weaning our young from this very dangerous influence.

Tamil Academy.

It will be useful to study broadly the subjects and the number of books that have been published in each of them. The Tamil Academy in order to encourage publication of books in various subjects, offers prizes of Rs. 500 each and certificates to the best books in Tamil in the various subjects. For this purpose the subjects have been grouped under 12 heads, namely, short stories, novels and dramas, essays, poetry and musical compositions, physics and chemistry, social sciences such as economics and history, mathematics, astronomy and engineering, children's literature, medicine and health, education, philosophy and psychology and botany, zoology and agriculture. Prizes are offered alternatively for six groups each year. In these eight years during which these prizes have been given, 768 books have been received. It should not be misunderstood that these were the only books published in these years. Hundreds of books which the writers did not think fit to compete or for other reasons might not have sent to the Academy. But a classification of these books might give a rough indication of the kind of books that were published in Tamil. In the above classification it may be observed the first five are mainly literary, while the others refer to science and arts subjects. Of the 768 books received, 570 were literary, 86 on science subjects, 67 on subjects like economics, etc., considered as arts subjects and 45 books classified as children's literature. This leads us to the conlcusion that the large number of books continue to be literary and science subjects are yet to get their proper place in Tamil.

Modern History.

It may be interesting to know a little of the history of modern Tamil literature. In a land's antiquity many of our art coming from ancient times seems to go into oblivion, some into the earth, some destroyed by other means. In the same manner most of our old literature had disappeared. Much of the credit of unearthing this should go to the late Sri U. Ve. Swaminatha Aiyar. He was a Tamil Pandit early in the century. With rare knowledge and persistence, he went from village to village, collected huge masses of cudgen leaves, large portions of which were destroyed by white ants and the weather and with extraordinary patience deciphered them and published them, at a time when such work was not very much appreciated. But for him the best of our ancient classics, which are now with us, would have been permanently lost. His work also gave us, a knowledge of the colossal amount of literature of the highest quality, which has been treasured in later works, which could not be traced or found. At a time when statues were erected only for Viceroys, Governors and such others it is edifying to see that the Tamil people have shown their gratitude of 'Viduthalai', under Rajaji and later on also courted imprisonment in the freedom movement. It was under his leadership that Ananda Vikatan first forged ahead and when he later left it and started his own weekly magazine called 'Kalki' which was his own pen name. It went up to a circulation of nearly 60 thousand eagerly looked forward to by women and children in all parts of the country where the Tamil people lived. He also wrote brilliant historical novels and for that purpose took great pains to visit ancient places of interest—the most famous of his novels being 'Sivakamiyin Sabatham' and 'Parthipan Kanavu'. His recent demise has been a great loss to Tamil literature.

Among essayists, Sri M. Varadarajan Sri Ki. Va. Jagannadhan and many others can be mentioned. Among the writers of modern scientific subjects Messrs. R. K. Viswanathan and P. N. Appaswamy can be mentioned. Miss E. T. Rajeswari produced very fine books in science and psychology and her recent demise is a great loss to the Tamil language.

I must confess that the writings on modern scientific subjects are not as many as may be desired. But it is a good sign of the time that people are coming to know of this need and authors and publishers are coming forward to fulfil them. There are a few magazines, like 'Kalai Kathir' published by Sri G. R. Damodaran, who have for their objective publication of scientific articles. These are by no means profitable by way of circulation; but still these attempts are being continued and I hope will have a permanent place in our literature. In economic and politics more books are being published. The Tamil newspapers have done a great service in finding suitable expressions for technical terms especially in these two fields. Adult suffrage, elections and propaganda of the various political parties have brought into the field a large number of books, big and small, in this direction, though it is very difficult to say which of them will be permanent and lasting. But I must say that some standard works have come out like the work on our Constitution by Sri A. N. Sivaraman.

One of the great difficulties in the publication of these specialised fields has been the want of a good market. With improvement of our literacy and the coming into existence of a chain of libraries, envisaged in the Madras Library Act, there may come into existence an assured market, which will provide the requisite encouragement for the publication of these books.

Mahatma's Works in Tamil

I would like to refer hereto one other project which the Gandhi Smarak Nidhi of Tamil Nad has in view. It has been resolved to bring the complete works of Mahatma Gandhi in Tamil in ten volumes. This work of bringing out the complete works of the Father of the Nation has not yet been done even in English, though many of his works have been separately published by the Navjiwan Publications. This will mean not only bringing them together in a single compass but also providing a historical background as well as a good index which will make reference and study possible. I hope the complete works of Gandhiji in Tamil will come to shape and be published in the next few years.

The next field is the field of research. This is by no means a popular field. As people connected with it are aware it is both costly and uncertain. A research publication can rarely be sold at a profit. Normally it does not cover its cost by sale. But in spite of it, it is a good sign of the times that individuals and associations have, out of mere devotion to the language, come forward to do it. The "Peria Puranam" consisting of the lives of the Saivite Saints, written in the 11th century is a huge volume. The

commentaries of it brought out by Sri C. K. Subramania Mudaliar is the result of his continuous labour for nearly eighteen years. Sri Mahamaho Upadhyaya Kathiresan Chettiar has brought out his research commentaries on Thiruvachakam, though the size is not to be compared with the work of Peria Puranam. The Dharmapure Athinam has done a great service by collecting all the available ancient commentaries on Thirukkural and bringing it comprehensively in three volumes. The Sri Ramakrishna Mission Vidyalaya has undertaken the great task of finding concordances for Thirukkural, the age of which is supposed to be the second century B.C., from that to the modern times, cutting across the whole field of that literature for the last two thousand years. Sri Ki. Va. Jagannathan is in charge of the work and our President, Dr. Rajendra Prasad, inaugurated it a couple of years back. It is expected to be published in the near future.

All over India we find a new ferment, a new ideology and a new attempt to strive and progress. Our languages are the expressions of this new Dynamic drive. Our languages are yet to come to their own. One of the reasons as to why they have not reached their proper stature is that the medium of instruction in colleges and in administration continues to be a foreign language. The Universities and the State have a great responsibility in this matter. While efficiency should not be sacrificed, it is necessary that the change-over should come, so that millions of our countrymen and women who may not have had the opportunity of English education shall take their proper place in the cultural and intellectual life of the country. The state of a language affects the mind and mental development of a people. I see the spirit of the times in the new re-awakening of our people. And in the near future this spirit is bound to assert itself and result in the greater development of all our languages.

(*Courtesy, A.I.R.*)

Facts and figures

Up to the end of 1954–55, the total amount spent by the Government of India for the propagation of the Japanese method of rice cultivation is Rs. 2,30,141.

(*Continued from page* 23)

Papanasam System.

Name of Village.	Taluk.	District.
Thailakulam	.. Nangunori ..	.. Tirunelveli.
Panboly	.. Tenkasi ..	.. Do.
Poovanuthapuram ..	.. Sathur ..	.. Ramanathapuram.

Madras System.

Vellavadu	.. Sriperambathur	.. Chingleput.
Nemaru	.. Do.	.. Do.
Harasingapuram ..	.. Do.	.. Do.
Nochimedu	.. Do.	.. Do.
Kuttambakkam ..	.. Do.	.. Do.
Korattur-Padi ..	.. Saidapet ..	.. Do.
Wollambur-Vadapakkam ..	.. Do. ..	.. Do.
Arani	.. Ponneri ..	.. Do.
Adigathur-Egathur ..	.. Tiruvellore	.. Do.
Mahabalipuram ..	.. Chingleput	.. Do.

Work over large number of rural extension schemes spread over the entire State was progressing. The following are the particulars of length of new lines constructed and energised during the month in the various systems.

	Length of lines in miles.	
	H.T.	L.T.
Pykara System	7·71	27·62
Mettur System	8·41	30·95
Papanasam System	5·30	10·58
Madras System	5·05	6·13
Total ..	26·47	75·28

In the Madras System a total number of 276 services with an approximate onnected load of 423 K.W. were changed over from D.C. to A.C. supply on c voluntary basis.

During the month 68 extensions were sanctioned by the Chief Engineer for Electricity and Chief Operation Engineers at a total estimated cost of Rs. 33·71 lakhs.

Kannada Drama

Kannada poetry has seldom lacked dramatic element. Poetical works, particularly in Satpadi contained much material for dramatic production. A few years ago, a modern Kannada writer and scholar made a stage version of a Kavya of the 10th century. With a few minor changes in the text the entire piece could be produced on the stage as an effective play.

As in other parts of India rural drama in Kannada has been a composite art in which are blended elements of dance, music and prose drama. These rural plays are woven mostly around stories from the epics and mythology or sometimes of local heroes. At the folk level the Kannada speaking people have a long established tradition of rural drama of which *Yakshagana and the Bayalata are* the inheritors.

Traditional Stage

The traditional stage was simple but effective. A raised platform served as the stage. There were no curtains. Entrances and exists were made by getting on or off the raised platform. Gods and demons made their entrances ceremoniously from a distance, often walking through the audience. There were no scripts as such. Either the village bard or the quick-witted artist provided the " script ". The earliest extant drama is " Mitravinda-Govinda ".

The village plays were organized not by professional troupes but the villagers themselves. There were no professionals living entirely on earnings from the stage. In the last century, however, professional troupes made their appearance on the Kannada stage. In 1848 a Kannada play was performed at Sangli and this might well be said to have been the point from which developed the modern Marathi stage.

But the professional troupes did not have much influence on the traditional village drama. On the other hand when the new educated classes in the cities wanted a 'new' drama, at first all that the professional companies did to meet the demand was to add new songs and take to the rolling curtains and all the other stage paraphernalia. They travelled from city to city and fair to fair. But they helped to keep the Kannada stage alive.

Literary Ferment

In recent times, however, Kannada drama has seen many ups and downs and the ferment in the literary world since the last century has led to a number of developments in the field of drama. Many an illustrious name in the history of Kannada stage may be found in the bill-boards of these professional troupes. Names like those of Varadachar, Gubbi Veeranna, Garud Sadashiv Rao and Master Vaman Rao are even now household words. " Tiger " Varadachar, as he was popularly known, was the first artist who raised the status of the professional stage and inspired educated men to work on and for the stage and helped the public cultivate a keen appreciation of histrionics.

With the spread of English education, English plays had attracted a number of educated Indians. English plays were translated into Kannada but were never extensively staged. They did, however, mark a new turn in so far as they helped to evolve a particular style of writing plays. At about the same time Kannada writers, under the patronage of the Mysore Court, were encouraged to translate plays from Sanskrit. Kalidasa's " Shakuntalam " and Shri Harsa's " Ratnavali " were translated and several such plays were staged by the Amateur Dramatic Association of Bangalore.

During the last 30 years a new type of Kannada drama has, however, come into existence. In addition to the translations of classical Sanskrit plays, adaptations and translations of Wester plays started appearing in Kannada. The success of " Pativashikarana ", an adaptation by Vasudevachar Kerur of Oliver Goldsmith's " She stoops to Conquer " paved the way for a new type of play, reflecting the problems of contemporary Kannada society. New plays were written and new ideals inspired their production. One of the pioneers of the new movement was Shri Narayan Rao who wrote " Stree Dharmarahasya " and thus helped forward a movement that had already been placed on a firm footing by Kailasham, the author of " Telugatti." There was too Shri K. Sivaram Karanth who, in addition to writing social plays, wrote and produced operas in Kannada. The movement gathered momentum and the second quarter of this century may be said to be the golden age of modern Kannada Drama. Drama was now regarded as a mirror of contemporary society. Great plays have been written in the last 30 years and Kannada dramatists rank with some of the best in the world. Bendre, A. N. Krishna Rao, Krishna Kumar, " Shriranga," the late " Samsa " and C. K. Venkataramayya are but a few of the dramatists who have inspired the modern Kannada stage.

Significant Experiment

One of the most significant experiments in the writing of Kannada plays has been the development of verse plays. Govind Pai, K. V. Puttappa, V. K. Gokak, R.S. Mugali and P. T. Narasimhachar are some of the votaries of this style. Leading poets have written verse plays and a majority of these have been produced successfully. Operatas too proved effective on the stage. But the dominant movement in Kannada drama continues to be in the direction of the social play which is as effective for reading as for production. This is invariably in prose that is pure but is also very like the spoken dialect. The plays of Kshirasagar and Parvatavani are typical illustrations. There are now well-established amateur troupes who have successfully taken such plays—with no music and no dance—to the rural areas. The increasing success of amateur troupes with new types of

(*Continued on page* 29)

The Amoor Health Co-operative Society, Tiruchirappalli District

A plan on Co-operative basis has been evolved to tackle the problem of providing adequate and timely medical aid on modern lines to the rural folk in the State. A special type of co-operative society, called the Health Co-operative Society has been designed for the purpose.

Thanks to the endeavours of the public-spirited gentlemen of Amoor and surrounding villages, the first Health Society in the Madras State has recently been organized in Amoor village, Musiri taluk, Tiruchirappalli district. Amoor is a key village in the Musiri National Extension Service Block. The objects of the society are to promote the welfare of the villagers by improving public health and providing cheap medical relief and thereby prevent economic wastage and loss of efficiency among the people. The society was registered on limited liability basis on 26th July 1955, and it started its work on 31st August 1955. The area of operations of the society extends to eight villages in and around Amoor. The society is intended to serve the population of about 15,000 in these villages. Membership is open to all persons over 18 years of age living in the area on payment of a subscription of Rs. 6 per year. The society is managed by a Board of Directors consisting of seven members.

Medical aid is rendered through the dispensary attached to the society. The Minister for Public Health and Co-operation inaugurated the Dispensary on 25th September 1955. The Dispensary is in charge of qualified Doctor. A midwife will be appointed shortly. Consultation for members at the premises of the society will be free of cost. Members will have to pay only the actual cost of the medicines supplied to them. But the members will have to pay fees if the Doctor is to attend on them at their residence. Non-members too will be treated at the dispensary on payment of market rates for the medicines supplied and fees for consultation as is fixed by the Board of Directors. Persons who are too poor to pay anything will be treated free of cost. Thus service is the motto of the society.

One hundred and forty-four members have so far joined the society. The subscriptions, entrance fees and donations collected amount to Rs. 1,010 The Block Advisory Committee has sanctioned a subsidy of Rs. 4,000 towards the equipment and establishment charges of the society.

Opening the dispensary, the Minister for Public Health and Co-operation observed that the society was the first institution of its kind in the State and congratulated the promoters on their pioneering venture. He exhorted the co-operators to put forth their best efforts in working the novel scheme and assured them of Government help in promoting such schemes. The Minister further observed that there had been a great awakening in rural parts with regard to medical relief, protected water-supply, drainage facilities and housing, that Government realised the needs of the villagers and set apart for the current year alone one crore of rupees for rural water-supply. Sri T. M. Narayanaswamy Pillai, Vice-Chancellor, Annamalai University and Dr. P. Natesan, General Secretary, the Madras State Co-operative Union, who were present at the function, exhorted the villagers to make the best use of the society.

It is hoped that the example set up by the villagers of Amoor will be emulated by the rural folk all over the State.

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(Agricultural Research Station, Koilpatti).

The tract comprising Madurai, Ramanathapuram and Tirunelveli Districts is predominantly a black soil area and this type of soil occupies an area of nearly ten lakhs of acres. The major crops of this tract are Karunganni cotton (money crop), Cumbu (staple food) and Irungu cholam (fodder crop). Usually cotton is rotated with Cumbu. Irungu cholam is normally grown year after year in poor soils. In some places, cotton after cotton, and Cumbu after Cumbu are also found.

Results of research achieved at the Agricultural Research Station, Koilpatti, for the past fifty years have brought out the following :—

1. Continuous cropping of cotton reduces the yield of cotton by 25 per cent. This can be remedied by applying ammonium sulphate at the rate of 100 lb. per acre to the field just prior to sowing. Best result is obtained by drilling in the manure.

2. Cumbu after Cumbu has given very interesting results. The yield of Cumbu is maintained at a high level. The cultivator has known this and is growing cumbu in fertile soils near the village year after year for several hundreds of years which is popularly known as '*Cumbadi Cumbu.*'

Combating Cholam Effect

Irungu grown year after year is also a common practice in poor lands. It is found that this Irungu cholam depresses the yield of the succeeding crop by nearly 14 per cent. This is popularly known as *Cholam Effect*. This bad effect can be neutralised by one of the following two methods. In the first method, the Irungu cholam is mixed and sown with indigo at 12 lb. seed rate.

The hardy indigo seedlings linger within the thickly sown fodder cholam crop and pull-up after the irungu cholam is harvested. They are ploughed in with the early rains. This ploughing-in of the green manure neutralises the bad after-effect of the cholam.

The second method is to apply 150 lb. of super phosphate per acre to the Irungu cholam crop and 100 lb. of ammonium sulphate to the succeeding cotton crop. Between these two methods the second is easy to adopt as the effect of the first method depends upon seasonal condition, viz., good rains after the harvest of irungu.

Cotton and Cumbu

Cotton, cumbu rotation is the best as fair yields of cotton and cumbu are obtained by this system. By calculating money value also, this is the ideal In case the cotton is manured with 100 lb. ammonium sulphate per acre the yield of cotton is further increased by 20 per cent and the residual effect of manure is felt in the cumbu crop in increasing its yield by 18 per cent.

Cotton grown after a pulse crop like horsegram and blackgram records higher yield of cotton than even cotton after cumbu. Since the yields of pulse crops are not high, this method of cropping is not economic.

Rotations Advocated

From the above results the following economic rotation has been advocated. The cotton crop should be rotated only with cumbu. In case it has to be rotated with irungu cholam, this crop should be manured with super phosphate at 150 lb. per acre and succeding cotton crop is to be manured with ammonium sulphate at 100 lb. per acre.

In case cotton is proposed to be grown year after year it has to be manured with ammonium sulphate at 100 lb. per acre. Cumbu can be grown year after year on the same field if needed.

Border Crop

A new method of increasing the yield of crops has been evolved by Sri M. S. Sivaraman, Director of Agriculture, Madras. A good green-leaf producing crop is grown along the borders of fields and the green-leaf obtained is composted and returned to the soil. By this method practically very little space is lost and the soil gets more and more fertile.

Trials conducted at the Agricultural Research Station, Koilpatti have shown that for the rainfed black soils, the perennial crop, Ipomoea carnea is found to be best. This plant is propagated by cuttings. It establishes easily and is able to give nearly 5,000 lb. of green matter from the border crop raised from an acre of land.

The compost obtained from this green matter when applied to the field increases the yield of any crop grown on it by 10 per cent. Along with the suggested rotation, border cropping of Ipomoea carnea is advocated for increasing production.

(*Continued from page* 27.)

plays has encouraged enlightened professional troupes to experiment with the new style, though music and dance are still smuggled in. Perhaps with the long overdue patronage that a people passing through a cultural renaissance are bound to provide, the professional stage may take up the new movement in Kannada drama.

The Kannada theatre may take pride not only in the tradition of its folk drama, but equally in the glorious modern movement. There is no doubt that the extension of broadcasting facilities in the Kannada speaking area through the setting up of the powerful new station at Bangalore will provide an encouragement to the writing of plays and help the development of the radio-play in Kannada.

Rural Broadcasts for December 1955

Thursday, 1st December 1955—
Farm Forum : Discussion ;
Musical bouquet ;
Market rates and water-level readings ;
Topical discussion and weather report.

Friday, 2nd December 1955—
Grama Kalakshepa Mandapathil : Kulasekhara Azhwar Kathai ;
Market rates and water-level readings ;
Topical discussion and weather report.

Saturday, 3rd December 1955—
'Increasing Rice Production'— Talk in Tamil arranged by the Department of Agriculture, Government of Madras.
Tunbam iladha—Song ;
Adult Literacy Class : Tirukural—Piranil Vizhaiyamai (Kural Nos. 147 and 148) ;
Weekly review of market rates and water-level readings ;
Topical discussion ; weather report.

Sunday, 4th December 1955—
Green Peas and Velvet Peas—Discussion ;
Sentamizh Nadu—Song ;
The Village Welfare Association ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Monday, 5th December 1955—
Fish farming in villages—Discussion ;
Sathiya Jothiyai—Song ;
Irulil Oli—Feature ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Tuesday, 6th December 1955—
Farm Forum—Discussion ;
Folk Arts ; Ottan Thullal (A.I.R. Records).
Market rates and water-level readings ;
Topical discussiou ; weather report.

Wednesday, 7th December 1955—
Family Planning—Discussion ;
Thannai Marandu—Song ;
Listeners' letters ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Thursday, 8th December 1955—
Farm Forum—Discussion ;
Pattaikelungal—Songs specially composed on Five-Year Plan.
Market rates and water-level readings ;
Topical discussion ; weather report.

Friday, 9th December 1955—
Lavani ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Saturday, 10th December 1955—
Cottage Industries—Mixed Silk : Discussion ;
Kadaigal Solli—Song ;

Saturday, 10th December 1955—*cont.*
Adult Literacy Class—Tirukkural : Piranil Vizhaiyamai (Kural Nos. 149 and 150).
Weekly review of market rates ; water-level readings ;
Topical discussion ; weather report.

Sunday, 11th December 1955—
The Elephant comes into farming—Discussion.
Uyariya Kalaigal—Song.
Kodikkal Kumaraswami—Play ;
Market rates and water-level readings ;
Topical discussion ; weather report

Monday, 12th December 1955—
Hides and Skins—Discussion.
Folk Songs Lesson ;
Market rates and water-level readings ;
Topical discussion ; weather report

The Malabar Co-operative Training Institute at Kozhikode was opened by Sri A. B. Shetty, Minister for Co-operation.

Tuesday, 13th December 1955—
Farm Forum—Discussion ;
Grama Patasalaiyil—The Village School ;
Asukavirayarin Harischandra Puranam ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Wednesday, 14th December 1955—
Tobacco Habit—Discussion ;
Solluvom—Song ;
Social Education under Five-Year Plan ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Thursday, 15th December 1955—
Farm Forum—Discussion ;
Have you heard this song ?
Market rates and water-level readings ;
Topical discussion ; weather report.

Friday, 16th December 1955—
Grama Nataka Sabaiyil—Sadangai Oli : Play ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Saturday, 17th December 1955—
Talk in Tamil arranged by the Director of Rural Welfare, Government of Madras.
Malaippozhudil—Song ;
Adult Literacy Class : Tirukkural (Poraiyudaimai-Kural Nos. 151 and 152).
Weekly review of market rates ; water-level readings ;
Topical discussion ; weather report.

Sunday, 18th December 1955—
Tapioca Cultivation ;
Meyyaka Vazhvilum—Song ;
The Pial School of Political Science ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Monday, 19th December 1955—
Bee-keeping—Discussion ;
Sathiya Jothiyai—Song ;
Irulil Oli : Feature ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Tuesday, 20th December 1955—
Farm Forum—Discussion ;
Folk songs ;
Maganwadi Choolai : Discussion ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Wednesday, 21st December 1955—
Cleanliness of Wells ; Discussion ;
Nalla Kalam—Song ;
Listeners' letters ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Thursday, 22nd December 1955—
Farm Forum : Discussion ;
Vasanai Kalanjiam—(6) Vasanai Soppu—A serial feature.
Market rates and water-level readings ;
Topical discussion ; weather report.

Friday, 23rd December 1955—
Tayum Seyum ; Musical feature on Maternity Welfare under the Five-Year Plan ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Saturday, 24th December 1955—
Kashmir : Handicrafts—Discussion
Marunthillai—Song.
Adult Literacy Class ; Tirukkural : Poraiudaimai (Kural Nos. 153 and 154).
Weekly review of market rates water-level readings ;
Topical discussion ; weather report.

Sunday, 25th December 1955—
Karthar Jananam—Kathakalakshepam ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Monday, 26th December 1955—
Improving Fish ponds ; Discussion ;
Vedam Padum Jyothi ; Song :
Kaichilambu Katcheri ;
Market rates and water-level ; readings ;
Topical discussion ; weather report.

Tuesday, 27th December 1955—
Farm Forum—Discussion ;
Akkarai Pachai—Play ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Wednesday, 28th December 1955—
Sore-eyes : Discussion ;
Vellai Kalai Uduthi—Song ;
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Topical discussion ; weather report.

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Thursday, 29th December 1955—

Farm Forum—Discussion ;
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Topical discussion ; weather report.

Friday, 30th December 1955—

Onre Kulam : Feature ;
Kalla Part—Songs ;
Market rates and water-level readings ;
Topical discussion ; weather report.

Saturday, 31st December 1955—

Adult Literacy Class : Tirukural—Poraiudaimai (Koral Nos. 151 and 156).
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Weekly review of market rates water-level readings ;
Topical discussion ; weather report

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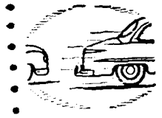

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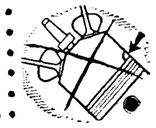

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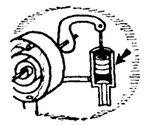

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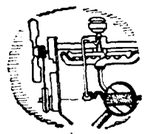

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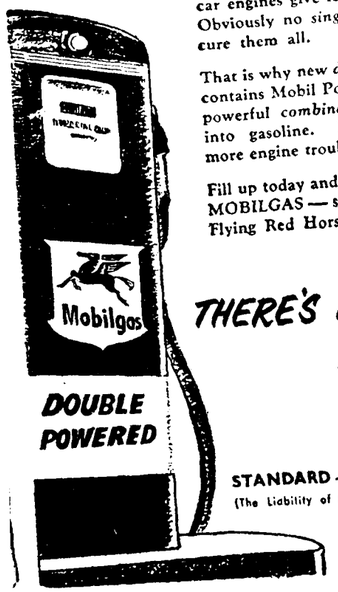

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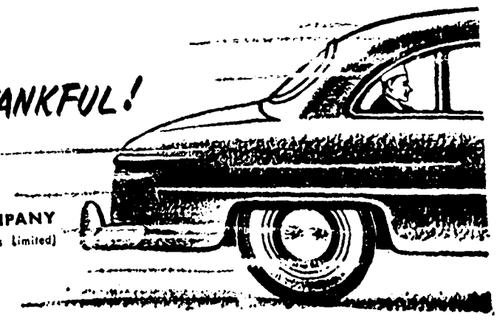

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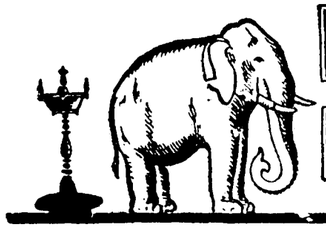

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